



Addis Ababa University
College of Law and Governance Studies
Center for Human Rights

**An Assessment of the Human Rights Implications of Climate Change Policy
Action in Ethiopia: *The Case of Humbo Afforestation /Reforestation (A/R) Clean
Development Mechanism (CDM) Mitigation Measure.***

Dagim Melese Tafese

**A Thesis Submitted to the Center for Human Rights of the College of Law and
Governance Studies of Addis Ababa University in the Partial Fulfillment of the
Requirements for the Degree of Doctor of Philosophy in Human Rights**

Addis Ababa, Ethiopia

October, 2023

Addis Ababa University
College of Law and Governance Studies
Center for Human Rights

This is to certify that the thesis prepared by Dagim Melese, entitled: An Assessment of the Human Rights Implications of Climate Change Policy Action in Ethiopia: *The Case of Humbo Afforestation /Reforestation (A/R) Clean Development Mechanism (CDM) Mitigation Measure* and submitted in partial fulfillment of the requirements for the Degree of Doctor of Philosophy in Human Rights complies with the regulations of the University and meets the accepted standards with respect to originality and quality.

Signed by the examining committee:

Prof. Tomaso Ferrando Signature _____ Date 07/09/2023

Advisor

Dr. Kidanemariam Paulos Signature  Date 07 September 2023

Advisor

Signature _____ Date _____

Examiner

Signature _____ Date _____

Examiner

Chair of the Center for Human Rights

DECLARATION

I, Dagim Melese, hereby declare that the thesis entitled: An Assessment of the Human Rights Implications of Climate Change Policy Action in Ethiopia: *The Case of Humbo Afforestation /Reforestation (A/R) Clean Development Mechanism (CDM) Mitigation Measure* submitted by me for the award of the Degree of Doctor of Philosophy in Human Rights is my own original work, which has not been submitted for a degree or examination in any other university, and that all the sources I have used or quoted have been indicated and acknowledged by means of complete references.

Dagim Melese

Signature _____

Addis Ababa University, Addis Ababa

Date.....

Acknowledgement

At this point I am thankful to the almighty God for making this possible.

I am enormously thankful to Prof. Tomasso Ferrando for his relentless support, encouragement and appreciation throughout writing the dissertation. My thankfulness also extends to Dr. Kidanemariam Paulos for his guidance and support all the way through the completion of this work.

My indebtedness extends to my wife and children. They had to endure the loss of the time of attention, care, engagement, plays and togetherness I would have given them had I not been preoccupied with the PhD study work. My mother, W/ro Yeshe Tessema, and my father, Ato Melese Tafese, without whom reaching this point would have been impossible, deserve the sincerest of gratefulness. Thanks also go to Dr. Eyob Eshetu for his important support during the field research work, Ato Amenu Goa (Humbo *Wereda* administration leader), Birhanu Chuma (Wolayita Sodo EPA Directorate Director), Ato Beyene Angebo (previous leader of Abela *Longena Kebele* and the Forest Development and Rehabilitation Union and other agricultural and rural development experts in *Bosa Wanche*, *Abela Longena* and *Hobbicha Bada Kebeles*.

I would like to express my deepest gratitude to the World Vision Ethiopia liaison officer in Wolayita Sodo Zone, previous project coordinator of *Humbo A/R CDM* project in World Vision Ethiopia and a current project coordinator of *Humbo A/R CDM* project of World Vision Ethiopia for being supportive in providing information as regards the project. Finally, I feel compelled to extend my heartfelt gratitude to Dr. Meron Zeleke and Dr. Marshet Tadesse for their encouragement (sharing experiences and understanding) during the course of the study. They have been important in helping understand my situations as a PhD student and nurtured the impetus needed to reach to this point in the course of the completion of the program.

Abstract

This study dealt with the climate justice concerns and associated human rights questions of local people particularly in a third world country like Ethiopia. It engages with the status of human rights of local people directly affected by *Humbo* Afforestation/Reforestation CDM project in the Southern Region of Ethiopia. Being guided by the question of what is a just way of responding to the climate crisis from the perspective of a state like Ethiopia that played an insignificant role in the production of the problem but is experiencing its disproportionate impacts, the study shows how an unjustly devised international climate mitigation policy that is not adequately shaped by the needs and experiences of local population and the ecological dynamics of the territories where it is implemented, can lead to violations of both procedural and substantive human rights of local people. Being reliant on a combination between desk-based legal research and a qualitative approach, this dissertation is built around survey questionnaires, in-depth individual interviews, FGDs, field research notes, document analysis and Key Informant Interviews and analysis of relevant laws, policies and strategies. Through the use of such multi-method and multi-disciplinary approach, the study concludes that the implementation of *Humbo* A/R CDM project in *Humbo Wereda*, animated by the global climate mitigation regime, did not respect such procedural human rights as the right to Free, Prior and Informed Consent (FPIC), the right to seek and receive information, the right to participation in environmental decision making and the right to seek remedy or redress of violations of rights of local people of *Bosa Wanche*, *Abela Longena* and *Hobbicha Bada Kebeles of Humbo Wereda*. Furthermore, it is found out that the project violates such substantive human rights of local people as the right to adequate standard of living, the right to education, the right to means of subsistence, the right to property, the right to health, and the right to development. The alternative livelihood strategies that the project designed were found to be exclusively provided to some selected members of the primary cooperatives involved in the project and even these were inadequate and unsustainable. Neither were the payments (which have not been paid, now, for more than three years) for carbon credits the project generates enough to compensate for the means of livelihoods foregone due to enclosure of the 2,728 hectares of land. Moreover, the implementation of the climate policy tool is found to disregard the human rights of particularly vulnerable groups of people such as women, children and the elderly. The government (its representative agencies) appear to have failed to competently assume their primary duties of ensuring respect and protection of the rights of local people in *Humbo Wereda* in the context of the implementation of the climate policy in question. While this being the case, it has been revealed that the relevant domestic legal, policy and strategic frameworks are compatible, except for the domestic policy and strategic translations of carbon offsetting, with the fundamental socio-economic transformations necessary to move societies to a less carbon intensive economy, despite the fact that the resources (financial and technological) needed to put this to practice are subjected to the contingently available support from the Global North which has been shown to be guided by the interests and influences of powerful states instead of being driven by the international obligations of the states arising from Global North countries' primary contribution to the climate crisis.

Key Words: Climate Justice, Human Rights, Kyoto Protocol, the Paris Agreement, *Humbo* A/R CDM Project, the Right to Development, Rights –Based Approach

Declaration

Acknowledgment

Abstract

Table of Contents

Acronyms

List of Tables

List of Figures

List of Maps

Table of Contents	Page No.
1. Chapter One - Introduction	16
1.1. Background and Factual Context	16
1.2. Statement of the Problem	20
1.3. General Objective	23
1.4. Research Questions	23
1.5. Research Methodology, Design and Method	24
1.6. Data Type and Sources	25
1.7.The Empirical Case	26
1.8.The Scope of the Study	31
1.9. The Significance of the Study	32
1.10. Limitation of the research	32
1.11. Organization of the Research	33
2. Chapter Two – The HRBA to Climate Change and Development.....	35
2.1.What Characterizes the HRBA to Climate Change and Development?	35
2.2.Governments’ Obligations to Address Rights Implications of Climate Change	40
2.3.Obligations of Non-State Actors under International Human Rights Law	56
2.4. The Right to Development as a Theoretical Framework for Addressing the Climate Crisis	57
3. Chapter Three- Global Climate Mitigation Policies: the CDM and REED+	57
3.1. The Clean Development Mechanism (CDM)	58
3.1.1. Eligible Projects	65
3.1.2. Actors in the Implementation of CDM Policy.....	66
3.1.3. The CDM Project Cycle	70

3.2. What is REDD+?	
3.2.1. What is REDD+?	74
3.2.2. The Scope of REDD+	76
3.2.3. A Phased Approach to REDD+ Implementation	79
3.2.4. The Elements of REDD+ Implementation	86
3.3. CDM and REDD+ Implementation: Technical Uncertainties and Rights Implications	
3.3.1. Baseline	94
3.3.2. Additionality.....	96
3.3.3. Permanence	97
3.3.4. Leakage	98
3.3.5. Quantification and Uncertainty.....	99
4. Chapter Four - International Climate Mitigation Regime: A Critical Look at Its Human Rights Implications	102
4.1. Rights and Obligations in the Anthropocene	102
4.2. Climate Mitigation Projects as Carbon Colonialism	111
4.3. Rights and Market –based climate mitigation regime.....	118
5. Chapter Five - The Status of Human Rights in CDM and REDD+ Projects: Regional and Global Experiences	123
5.1. Rights Implications of CDM Projects: Global Experiences	124
5.1.1. Alto Maipo in Chile	125
5.1.2. Baro Blanco in Panama	128
5.1.3. Bajo Aguan in Honduras	130
5.1. 4.Timarpun –Okhla Waste to Energy project in Okhala Delhihi	133
5.1. 5.Xacbal Hydroelectric Project in Guatemala	134
5.2. Rights Implications of CDM projects: Experiences in Africa	135
5.6. Bujagali Hydroelectric power project in Uganda	135
5.7. Olkaria Geothermal Power Project	138
5.3. Rights Implications of REDD+ Projects: Global Experiences.....	140

5.4. Rights Implications of REDD+ Projects: Experiences in Africa ..	143
Chapter Six - Rights Implications of Relevant Laws, Policies and Strategies...	204
6.1. Rights Implications of FDREs Constitution	160
6.2. Rights Implications of the Environmental Policy of Ethiopia	176
6.3. Rights Implications of CRGE and the National REDD+ Strategy.....	186
6.4. Rights Implications of Forest Development, Conservation and Utilization	
Proclamation No. 1065/2018	196
6.5 Rights Implications of Ethiopia's Rural Land Use and Administration	
Proclamation No. 456/2005	199
6.6. Rights Implications of Cooperative Societies Establishment	
Proclamation No. 985/2016	202
7. Chapter Seven- Human Rights Implications of <i>Humbo</i> A/R CDM Project.	
7.1. Description, Location and Actors of the Project	207
7.2. Rights Implications of <i>Humbo</i> A/R CDM projects: Findings	207
7. 2.1. Implications for Procedural Human Rights	210
7. 2.2. Implications for Substantive Human Rights	227
7. 2. 3. Implications for the rights of Women, Children and the Elderlies	247
6.1.3.1 Implications for the Rights of Women	247
6.1.3.2. Implications of the Rights of Children	252
6.1.3.3. Implications for the Rights of the Elderlies	254
7.3. The Roles of World Vision Ethiopia, Local Government and the Forest Development Union.	
7.3.1. The Role of World Vision Ethiopia	255
7.3.2. The Roles of Federal and Regional Governments	258
7.3.3. The Role of Forest Rehabilitation and Development Union	260
Conclusion	
Bibliography	
Appendices	

ACRONYMS

AAUs –	Assigned Amount Units
ABAU –	Animal Biodiversity Amount Unit
ACHPR –	The African Charter on Human and Peoples Rights
ACRWC –	African Charter on the Rights and Welfare of the Child
AfDB –	African Development Bank
AOSIS –	Alliance of Small Island States
AP -	Action Plan
A/R –	Afforestation / Reforestation
BAU -	Business as Usual
BEL -	Bujagali Energy Limited
BUR –	Biennial Update Report
CBDR –	Common but Differentiated Responsibilities
CCBA –	Climate Community Biodiversity Alliance
C&C –	Contraction and Convergence
CDM –	Clean Development Mechanism
CEDAW –	Convention on the Elimination of All forms of Discrimination against Women
CER –	Certified Emissions Reductions
CfRN –	Coalition for Rainforest Nations
CH ₄ -	Methane
CIR -	Carbon Investment Right
CO ₂ e –	Carbon dioxide equivalent
COP -	Conference of Parties
CP –	Conference of Parties
CRGE -	Climate Resilient Green Economic Strategy
CRMU -	Compliance Review and Mediation Unit
CSE –	Center for Science and Environment
DNA –	Designated National Authority

DOE –	Designated Operational Entity
DP -	Donor Party
DRC -	Democratic Republic of Congo
EB –	Executive Board
EIA –	Environmental Impact Assessment
EIB-CM –	European Investment Bank Complaint Mechanism
EPA –	Environmental Protection Authority
EQ –	Environmental Qualification
ERC –	Emissions Reductions Credits
ETS -	European Trading System
EU –	European Union
FAU –	Forest Amount Unit
FBAU –	Flora Biodiversity Amount Unit
FCPF –	Forest Carbon Partnership Facility
FDPC –	Forest Development and Protection Cooperatives
FDRE –	Federal Democratic Republic of Ethiopia
FDRU –	Forest Development and Rehabilitation Union
FEPA –	Federal Environmental Protection Authority
FGDs –	Focus Group Discussions
FMNRF–	Farmers Managed Natural Regeneration Forestry
FPIC –	Free, Prior, Informed Consent
FREL -	Forest Reference Emission Level
FRL -	Forest Reference Level
GCI –	Global Commons Institute
GDR –	Greenhouse Development Right
GERD –	Grand Ethiopian Renaissance Dam
GHGs -	Greenhouse Gases
GTS –	Geological Time Scale

HFCs –	Hydrofluorocarbons
HP –	Host Party
HRBA-CMP –	Human Rights- Based Approach to Climate Mitigation Policy
HRC –	Human Rights Council
IACHR –	Inter –American Commission for Human Rights
ICA –	International Consultation and Analysis
ICCPR –	International Covenant on Civil and Political Rights
ICESCR –	International Covenant on Economic Social and Cultural Rights
ILO –	International Labor Organization
INDCs –	Intended Nationally Determined Contributions
IPCC -	Intergovernmental Panel on Climate Change
IPPF –	Indigenous People Planning Framework
JICA –	Japanese International Cooperation Agency
JI -	Joint Implementation
KEEP -	Kenya Electricity Expansion Project
KII –	Key Informant Interview
1 CER -	Long- term Certified Emission Reduction
LDC –	Least Developed Countries
LULUCF –	Land Use Land Use Change and Forestry
MEAs –	Multilateral Environmental Agreements
MOP –	Meeting of the Parties
MRI -	Mutual Reliance Initiative
MRV –	Monitoring Reporting and Verification
Mt CO ₂ e -	Metric ton of Carbon Dioxide Equivalent
MW –	Mega Watt
NAP- ETH -	National Adaptation Plan of Ethiopia
NDCs –	Nationally Determined Contributions
NFMS –	National Forest Monitoring System

NGO –	Non –governmental Organization
N ₂ O -	Nitrous Oxide
NS -	National Strategy
OHCHR –	Office of the High Commissioner for Human Rights
PC –	Per Capita
PDD –	Project Design Document
PFCs –	Perfluorocarbons
PLRs –	Policies, Laws and Regulations
PNG -	Papua New Guinea
PNRE –	Protection of Natural Resource Endowments
POME –	Palm Oil Mill Effluent
PPMV –	Parts Per Million by Volume
PRA –	Rural Appraisal Report
RAPIC –	Resettlement Action Plan Implementing Committee
RBF –	Result Based Finance
RBP –	Result Based Payments
RED –	Reducing Emissions from Deforestation
REDD+ -	Reducing Emission from Deforestation and Forest Degradation, Conservation, Sustainable Management of Forest Resources and Enhancement of Carbon Sinks
RIT -	Registration and Issuance Team
RTE –	Right to Emit
SBSTA –	Subsidiary Body for Scientific and Technological Advice
SDM –	Sustainable Development Mechanism
SF ₆ -	Sulfurhexafluoride
SES-	Social and Environmental Safeguards
SNNPR –	Southern Nations, Nationalities and Peoples Region
SQU –	Soil Quality Unit
t CER -	Temporary Certified Emission Reduction
TWAIL –	Third World Approach to International Law

UNEP – United Nations Environment Program

UNDRIP – United Nations Declarations on THE Rights of Indigenous People

UNEP – United Nations Environment Program

UNFCCC – United Nations Framework Convention on Climate Change

UNGA- United Nations General Assembly

UDHR – Universal Declaration on Human Rights

UN- REDD – United Nations Program for Reducing Emission from Deforestation and Forest Degradation Projects

WAU – Water Amount Unit

WVAU – World Vision Australia

WVE - World Vision Ethiopia

WRI – World Resource Institute

List of Tables	Page No.
Table -1. Population and Sampled Respondents of the <i>Kebeles</i> the study covers ...	29
Table -2. Indigeneity of Local People in <i>Bosa Wanche Kebele</i> of <i>Humbo Wereda</i> ...	153
Table -3. Information Communication about the Plan of the Project in <i>Bosa Wanche Kebele</i> of <i>Humbo Wereda</i>	155
Table – 4. Local Peoples Participation in granting their consent to the plans of the Project in <i>Bosa Wanche Kebele</i>	159
Table – 5. Total Amount of Money Accrued to Each of the <i>Kebele</i> Cooperatives Annually over Nine Consecutive Years in Ethiopian <i>Birr</i>	166
Table -6. Local Peoples Reliance on the Resources of the Enclosed Project Site in <i>Bosa Wanche Kebele</i>	169
Table 7. Choices Local People were compelled to resort to in getting grazing field due to Enclosure of land in <i>Bosa Wanche Kebele</i>	171
Table – 8. Choices Local People were compelled to make in getting fuel Woods after enclosure of the land in <i>Bosa Wanche Kebele</i>	172
Table -9. Local Peoples Assessment of the adequacy of Utilization of Forest Based Resources from the enclosed project site in <i>Bosa Wanche Kebele</i>	175
Table – 10. Beneficiaries of Alternative Livelihoods under the Project in <i>Bosa Wanche Kebele</i>	177
Table -11. Assessment of the adequacy of income generated as a result of engagement in the project activities in <i>Bosa Wanche</i>	179
Table – 12. Assessment of Women’s Participation in <i>Humbo A/R CDM</i> project	187
Table – 13. Participatory Approach in Community Decision Making	190.

List of Figures	Page No.
Figure -1. Project Cycle of a CDM project	73
Figure -2. Description of the Three Phases of REDD+ project Implementation.....	80

List of Maps	Page No.
Map- 1. Map of Humbo Assisted Natural Regeneration of Forestry Project Site	27
Map- 2. Location of Ethiopia in Africa, Southern Region in Ethiopia and <i>Humbo in Wolyita Zone</i>	148

Chapter One

Introduction

1.1. Background and Factual Context

It is now unequivocally ascertained that the Earth is warming and that it is caused by the increase in the concentrations of greenhouse gases, mainly carbon dioxide, in the atmosphere from anthropogenic sources¹. Recently, the Intergovernmental Panel on Climate Change (IPCC) reported that anthropogenic global warming is currently increasing at the rate of 0.2°C per decade due to the past and ongoing emissions.² Consequences of global warming are being observed everywhere around the world in the forms of, inter alia, the rise in the mean sea level, increases in the frequencies of extreme weather events, the melting of both continental and arctic glaciers, alteration of temperature and precipitation patterns, the intensification of both intensity and frequency of extreme weather events, changes in the geographic distributions of ecosystems, and species loss and extinction.³ These significant changes have, in turn, either directly or indirectly threatened the full and effective enjoyment of a range of human rights by people throughout the world including the rights to life, water and sanitation, food, health, housing, self –determination, adequate standard of living, culture and development.⁴

Although it is often stated that climate change affects the planet, it is documented that the adverse impacts of climate change disproportionately affected and continue to affect territories and people in the so-called Global South, mostly countries in Sub-Saharan Region of Africa. In Ethiopia, climate change has already adversely affected the environment, biodiversity, socio-economic systems, water availability and supply, human health and such vulnerable groups of

¹ IPCC, 'Climate Change 2014: Synthesis Report. Contributions of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change', (IPCC, 2014)

² IPCC, 'Global Warming of 1.5°C: An IPCC Special Report on the Impacts of global warming of 1.5°C above pre – industrial levels and related global greenhouse gas emission pathways in the context of strengthening the global response to the threat of climate change , sustainable development and efforts to eradicate poverty' (World Meteorological Organization 2018).

³ Ibid. p.9.

⁴ HRC, Report of the Office of The United Nations High Commissioner for Human Rights on the relationship between Climate Change and Human Rights , A/HRC/10/61 , 15 Jan.2009 ; S. McInerney –Lankford , M. Darrow,& L. Rajamani, *Human Rights and Climate Change : A Review of International Legal Dimensions*, (The World Bank, 2011) ; A. Schapper, 'Climate Justice and Human Rights' (2018) Vol.32 (3) , International Relations , Available online at: https://dspace.stir.ac.uk/bitstream/1893/27619/1/Climate%20Justice%20and%20Human%20Rights_accepted%20version.pdf > accessed on 7 July 2022.

people as women, children, the elderly and the disabled.⁵ And it will continue to do so. As a result of climate change, Ethiopia has witnessed increases in the frequencies of extreme weather events, expansion of desertification, loss of wetlands, and decline in the riches of biodiversity.⁶ Impacts felt in the area of socio-economic systems include decreased crop and livestock production, increased soil erosion, shifts in sowing and harvesting dates on the one hand and shortage of pasture and water on the other hampering the productivity in both sectors⁷. Moreover, climate change is expected to alter the hydrology of water resources, thereby, affecting the spatial and temporal availability as well as the productivity of water resources. A number of countries in sub-Saharan Africa including Ethiopia have already experienced considerable water stress as a result of climate change. Consequently, climate change will cause shortage of water for domestic, industrial and agricultural/irrigation purposes, fishery and aquaculture, hydroelectric power generation, transportation, water based recreation and ecosystem health.⁸ Need also be emphasized that since, in Ethiopia, almost all of the electricity is generated from hydropower sources, the country's energy sector is highly vulnerable to the impacts of climate change.

Apart from these, Ethiopia is also expected to witness increases in the frequency and severity of pests and diseases, the prevalence of various tropical diseases (malaria, cholera, yellow fever, meningitis) which are sensitive to changes in temperature, rainfall and humidity⁹. Warmer temperatures and variations in rainfall patterns associated with climate change are already altering the transmission mechanisms of water – and vector – borne diseases. Incidence of malaria, dengue fever, and water –borne diseases (e.g. cholera, dysentery) is likely to become more prevalent, while food insecurity related to extreme weather events is also threatening the

⁵ H. Zegeye. 'Climate Change in Ethiopia: Impacts, Mitigation and Adaptation' (2018) Vol.5 *International Journal of Research in Environmental Studies*, available online at <http://www.bluepenjournals.org/ijres/abstract/2018/May/Zegeye.php> > accessed on 20 Feb.2020; T. Gisila and others, *Ethiopian Panel on Climate Change. First Assessment Report :Working Group I Report on Climate Change over Ethiopia , I, The Physical Science Basis* (Seyoum Mengistu ed. , Ethiopian Academy of Sciences , 2015)

⁶ Ibid, p.22.

⁷ A. Muluneh et al., 'Adapting to Climate Change for Food Security in the Rift Valley Dry Lands of Ethiopia : Supplemental Irrigation, Plant Density and Sowing Dates' (2016) 155(05) *The Journal of Agricultural Sciences* available online at : https://www.researchgate.net/publication/309658005_Adapting_to_climate_change_for_food_security_in_the_Rift_Valley_dry_land_of_Ethiopia_supplemental_irrigation_plant_density_and_sowing_date > accessed on 27 Feb.2020.

⁸ HRC, n.4, p.24

⁹ A. Adem & W. Bewket, 'Assessment of Selected Development Policies and Strategies of Ethiopia from a Climate Change Perspective ', (Policy Brief # 5, Epsilon International R&D ,2011)

lives and livelihoods of millions of Ethiopians¹⁰. In this regard, women, children and the elderly could be more vulnerable not only to the health impacts but also to the overall impacts of climate change.¹¹

Having recognized the adverse impacts of climate change both on human and natural systems, the international community tried to address the problem by way of The United Nation Framework Convention on Climate Change (UNFCCC) which aimed at stabilizing the concentration of greenhouse gases, in the atmosphere, at the level that would prevent dangerous anthropogenic interference with the climate system.¹² Over the past decades, scientific studies and policy considerations have converged towards a threshold for dangerous climate change of a maximum rise in global average temperature of 2°C above the pre –industrial level.¹³ Subsequently, bent on the ultimate objective of the UNFCCC and obliged under the Kyoto protocol and later the Paris Agreement, states have been required to implement policies and strategies of mitigating the adverse impacts of climate change. In some contexts, they collaborate or delegate private actors, including corporations and non-governmental organizations.

Accordingly, with the intent of meeting its international obligations, under the UNFCCC and subsequent negotiations, Ethiopia has developed both its national mitigation and adaptation policies and measures. The Climate Change Resilient Green Economic Strategy (CRGE) developed in 2011¹⁴ and the National Adaptation Plan of Ethiopia issued in 2019¹⁵ constitute the government's responses to mitigate and adapt to the adverse impacts of climate change respectively. The government of Ethiopia initiated the CRGE initiative to protect the country from the adverse impacts of climate change and build a green economy that will help realize its ambition of reaching middle-income status before 2025.¹⁶ The CRGE follows a sectorial approach and has so far identified and prioritized more than 60 initiatives which could help the country achieve its development goals while limiting the 2030 GHG emissions to around today's

¹⁰ National Meteorological Agency, *Climate Change National Adaptation Program of Action (NAPA) of Ethiopia* (National Meteorological Services Agency, 2007) p. 25.

¹¹ IPCC, *Climate Change 2014: Impacts, Adaptations and Vulnerability, Summary for Policy Makers*, (Cambridge University Press, 2014), p.6.

¹² Art.2 of the UNFCCC which further states that such a level of concentration of greenhouse gases should be attained within a time frame that would sufficiently allow ecosystems to naturally adapt to climate change, ensure that food production is not threatened and enable economic development to proceed in a sustainable manner.

¹³ See IPCC AR4 Working Group III (WGIII) Report, pp. 99-100

¹⁴ Federal Democratic Republic of Ethiopia, *Ethiopia's Climate –Resilient Green Economy: Green Economic Strategy*. (FDRE, 2011).

¹⁵ Federal Democratic Republic of Ethiopia, *National Adaptation Plan*, (FDRE's Government, 2019).

¹⁶ Ibid, p. 7

150 Mt CO₂ e - around 250 Mt CO₂ e less than estimated under a conventional development path.¹⁷ The national adaptation plan of Ethiopia (NAP-ETH), on the other hand, sets the reduction of vulnerability to the impacts of climate change through building adaptive capacity and resilience as its goal. It also aims to strengthen holistic integration of climate change adaptation in Ethiopia's long- term development pathway, supported by effective institutions and governance structures, finance for implementation and capacity development and strengthened systems for disaster risk management and integration among different sectors¹⁸.

When it comes to the realization of the strategies and the implementation of climate change mitigation measures in the country, questions still remain on the impact that they may have on the human rights of the people directly affected by them and of the people who may indirectly benefit from them. From the top-down perspective of the public authority, the adequacy, effectiveness and efficient orchestration of mitigation measures across sectors is believed to contribute to stabilizing global greenhouse gas emissions and help prevent the adverse impacts of climate change. However, it is equally important to consider and learn from the bottom up experiences of local communities' livelihoods, resources, and culture and development aspirations. Important concerns relate to how the implementation of climate change mitigation actions address the human rights of vulnerable groups of people including women, children, poor households, the elderly and people with various kinds of disability. In this regard, inquiries about the roles of non-State actors such as NGOs in terms of helping protect the human rights of people in the context of the implementation of climate change actions such as Clean Development Mechanism (CDM) and Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (REDD+) by the government and/or private actors is important.

This dissertation seeks to investigate Ethiopia's fulfillment of its obligations to respect, protect and fulfill the human rights of its people when allowing the implementation of a CDM project. In so doing, the research starts with an analysis of the existing relevant legal frameworks, policies and strategies related to CDM and REDD+ project implementation from the perspective of the human rights based approach to undertaking climate change actions. Secondly, it purports to assess how the human rights of vulnerable groups of people are addressed in the context of the

¹⁷ Ibid

¹⁸ Federal Democratic Republic of Ethiopia, n.15 p.i.

implementation of the project in the study site where a CDM scheme has been developed. Thirdly, the research purports to examine and analyze the roles of non-State actors, such as NGOs, local cooperatives, and local government in preventing human rights violations, helping protect and fulfill the human rights of people in the implementation of the CDM project under investigation. Fourthly, the thesis undertakes to look into the human rights implications of the implementations of the *Humbo* Ethiopia Assisted Natural Forest Regeneration of Forests (A/R CDM project).

1.2. Statement of the Problem

Despite its insignificant contribution to global climate change and in the context of experiencing disproportionate impacts of it, Ethiopia has taken part in the global efforts of mitigating the adverse impacts of climate change and strengthening efforts to limit the global temperature rise to 1.5 °C above the pre –industrial times. Having ratified the Kyoto protocol on the 14th of April 2005 and the Paris agreement on the 9th of March 2017 respectively, the country developed an overarching framework of climate resilient green-economic strategy within which such mitigation action as A/R CDM and REDD+ could integrally be undertaken. This seems to follow from strategizing in the Kyoto protocol of carbon offsetting mechanisms involving tropical forests and the affirmation through the Paris Agreement that climate strategy is foundationally concerned not only with the reduction of greenhouse gas emissions but also the intensifications of carbon sequestration via forests and other carbon sinks. However, issues of climate justice and human rights arise as one contemplates on responsibilities for causes and distributions of obligations to mitigate the adverse consequences of climate change on one hand and the state's obligations of fulfilling the human rights of its people on the other.

The climate justice issues of global warming emerge out of the fact that states are not equally responsible for the problem but experience the disproportionate impacts of its consequences. And yet, poor states like Ethiopia are obliged to mitigate the problem by implementing climate strategies (i.e. A/R CDM, REDD+) that have been criticized as legitimizing the ongoing extraction of fossil fuels by the developed countries thereby facilitating the evasion of deeper structural transformation necessary to move to a low carbon society.¹⁹ So not only do poor countries have to cope with the adverse impacts of climate change but also meet their

¹⁹ S. Bullock, M. Childs and T. Picken, *A Dangerous Distraction: Why Offsetting is failing the Climate and People: The Evidence* (2009) available at: <https://www.foei.org> accessed on 3 June 2020.

obligations of mitigating the problem within the framework of a form of environmental governance rife with climate injustice concerns and associated with adverse human rights implications²⁰. Stated differently, given that states exist at different levels of economic development, the global climate change governance strategies are such that it is not clear how the costs of climate change responses in general and climate change mitigation, in particular, are distributed among states. More importantly, it is not clear what human rights costs (the costs of, for example, rights to development, adequate standard of living, property, access to the use of land, participation in environmental decision making and the like) do climate change mitigation measures bring about in poor countries.

Furthermore, there still remain concerns as regards the human rights implications of the legal and policy frameworks of CDM and REDD+ governance in developing countries like Ethiopia as there are international and transnational sites of law associated with the implementations of CDM and REDD+ projects that do not necessarily require compliance with international human rights norms and instruments. The sites of law for the implementation of CDM and REDD+ projects, in the international arena, have been the UNFCCC COP decisions, the World Bank's (Forest Carbon Partnership Facility) FCPF, the UN REDD Program and other transnational sites of law such as the REDD+ (Social and Environmental Safeguards) SES and the standards of Climate Community Biodiversity Alliances (CCBA). While these sites require various schemes of "social and environmental safeguards and principles " to be complied with in the design, implementation, monitoring and evaluation of CDM and REDD+ projects, they are either not binding upon the participant developing country or do not have proper mandates to ascertain human rights compliance of implementation of the projects in participant developing countries.

Moreover, CDM and REDD+ projects actually being implemented in developing countries have been documented to have resulted in land grabs, marginalization of forest peoples and dwellers, increased poverty, disruption of forest based lifestyles, social conflict and violence and violation of customary land rights.²¹ In Ethiopia, research shows that CDM and REDD+ projects failed to

²⁰ S. Bohm & S. Dahbi (ed.), *Upsetting the Offset: The Political Economy of Carbon Markets* (Zed Books, 2010); P. Newell & M. Paterson, *Climate Capitalism: Global Warming and the Transformation of the Global Economy*. (Cambridge University Press, 2010).

²¹ See M. Raftopoulos, 'REDD+ and Human Rights: Addressing the urgent need for a full community –based human rights impact assessment', (2016), Vol.20 Issue 4 The International Journal of Human Rights. Available online at: < <https://vbn.aau.dk/en/publications/redd-and-human-rights-addressing-the-urgent-need-for-a-full-commu> > 23 May

substitute for agricultural outputs, maintain secured funding, and effect sharing of benefits inclusively.²² Though, it is true that CDM and REDD+ projects may adversely affect indigenous people, forest dwellers or local communities whose lives are built on accessibility of forest resources, the impact, needless to say, is hugely felt among such vulnerable groups of people as women, children, female headed households, poor households, the elderly and people with various kinds of disabilities. This is particularly true of individuals who do not own either grazing or agricultural lands but use forests for collecting fuel wood as in poor households, households who are not members of community –based associations or people who lead their lives making charcoal out of burnt woods in the forest.

Linked with CDM and REDD+ governance and the rights of local communities including the rights of vulnerable groups of people is the important roles of non-state actors, particularly NGOs, in preventing and helping protect rights violation in the implementation of CDM and REDD+ projects. Of the multilateral partnership arrangements developed to effectuate implementations of CDM and REDD+ projects include those that involve NGOs which play important roles at the different phases of the projects. However, challenges remain as regards the functioning of NGOs in the context of CDM and REDD+ governance architecture in which the NGOs play their roles under the governance frameworks of international and transnational sites of law which is not necessarily matched with international human rights law and relevant domestic legal frameworks. Hence, questions linger as regards the roles of NGOs in terms of preventing rights violations associated with the implementation of such kinds of projects.

In this dissertation an attempt will be made to understand the human rights implications of the governance and implementation of an A/R CDM project: the *Humbo* Ethiopia Assisted Natural Forest Regeneration project in the SNNPR region of Ethiopia. In so doing, the research critically examines the human rights implications of the legal and policy frameworks of A/R CDM and REDD+ governance in Ethiopia bent upon the human rights based approach to climate change governance. In addition, the study also tries to assess how the human rights protection of vulnerable groups of people is addressed in the context of the implementation of the projects.

2020; J. Dehm, 'Authorizing Appropriation? : Law in Contested Forested Spaces.' (2018) Vol.28 No.4 the European Journal of International Law. Available online at: < <https://academic.oup.com/ejil/article/28/4/1379/4866328> > accessed on 29 May 2020.

²² A. Duker et al., 'The implications of ignoring smallholder agriculture in climate –financed forestry projects: empirical evidence from two REDD+ pilot projects' (2019) Vol.19 No.51 *Climate Policy*. Available online at: < <https://www.tandfonline.com/doi/full/10.1080/14693062.2018.1532389> > accessed on 4 June 2020.

Furthermore, the research also engages in examining the roles of NGOs in both preventing human rights infringements happening in the context of the implementation of the projects and helping ensure their protection.

1.3. General Objective of the Study

- The study aims to assess the human rights implications of the implementation of *Humbo Afforestation /Reforestation (A/R) Clean Development Mechanism (CDM)* climate mitigation action in *Humbo, Abela and Hobbicha Weredas* of *Welayita Sodo* zonal administration of the SNNPR region of Ethiopia.

Specific Objectives

The research purports to;

- examine the human rights implications of the legal and policy frameworks governing the implementation of CDM and REDD+ projects in the study sites.
- assess how the human rights protection of specifically vulnerable groups of people is addressed in the implementation of the projects;
- investigate into the roles of NGO, local cooperatives and local government in preventing human rights infringements and ensuring the protections of human rights of local people in the context of implementation of the project;and
- examine the implications, on both procedural and substantive human rights of the local people, of the approval and implementation of the projects in the study site.

1.4. Research Questions

1. What are the human rights implications of the legal frameworks,policies and strategies governing the implementations of CDM and REDD+ projects in the study sites?
2. How are the human rights of specifically vulnerable groups of people addressed in the context of the implementation of the projects?
3. What are the roles of non-state actors, particularly NGOs and local cooperatives and local government, in the prevention of human rights violations of people and helping ensure their protection in the context of the implementation of the project in the study site?

4. What are the implications, on the substantive and procedural rights of the local people, of the approval and implementations of the projects in the study site?

1.5. Research Paradigm, Methodology, and Research Design.

This research is about how the causes of the reality of global warming are understood and solutions devised and implemented to ameliorate the problem in a manner that safeguards human rights. Hence, while the phenomena of global warming, it causes (emissions of GHGs and diminishing availability of sinks and reservoirs) and consequences are intelligible within the realist ontological position, how the relative responsibilities of states understood, settlements of issues as regards “the better” climate policy alternative reached and possible outcomes envisaged and evaluative reflections on their efficacy is made is discerned within the ambit of the interpretivist paradigm.

As has been discussed in the foregoing sections, this dissertation seeks to achieve the major goal of investigating into the human rights implications of government responses to combat the adverse impacts of global climate change with particular emphasis placed on climate change mitigation efforts and their implications on the rights of local peoples and communities. To this end, doctrinal and mixed methods research will be employed in the design of research methods and analysis of data obtained through the research tools. Hence, the research methodology adopted involves both qualitative and quantitative approaches.

The body of this research is conceived to be constituted with sequentially organized objects of investigation each of which requiring different types of research techniques. It also encompasses both a macro and micro level of investigation. So at the general level of research the doctrinal research method will be employed to investigate into relevant international and domestic laws in the context of the threats of climate change impacts against the enjoyment of basic human rights and the human rights implications of measures taken by the government to mitigate climate change. Moreover, effort will also be exerted in assessing the human rights implications of legal instruments and tools which are being developed in the domestic sphere for the purposes of directly contributing to the climate change mitigation governance endeavors in Ethiopia.

Following the delineation of and critical examination of international and domestic laws governing the human rights of people in the context of the threats of climate change impacts and

of responses to combat the adverse impacts of climate change, the relevant domestic policies and strategies will be analyzed from the frame of reference of the human rights based approach to climate change mitigation. In so doing, the study will use policy and document analysis and key informant interviews as methods of research.

Secondly, the study delves into how the governance of climate change mitigation project in the study site addressed the prevention of human rights infringements, on the one hand and the protection and fulfillment of the human rights of vulnerable groups of people including women, children, the poor, and the elderly in the context of the implementation of the project on the other. To achieve this, the study puts to use such research methods as document analysis, in-depth interviews, key informant interviews, questionnaires and focus group discussions. Thirdly, this research purports to investigate into the roles of non-state actors particularly an NGO, local cooperatives and union in the governance of climate change mitigation project with particular emphasis on their roles in preventing human rights violations and protection of the human rights of local communities. To this end such research tools as key informant interviews, semi-structured interviews, FGDs and critical reviews of reports will be put to use.

Fourthly, the implications, on the rights to adequate standard of living, the right to education, the right to health, the right to property, the right to development and exercise of procedural rights of local communities, of the implementation of the project will be investigated into under the framework of a case study design. So the research adopts a case study design with the intent of richly and deeply learning about the situations of the human rights of people in the context of the implementation of *Humbo A/R CDM* climate policy action. Furthermore, within the framework of a case study design, a survey will be conducted with the purpose of, primarily learning about the implications on the sustainability and adequacy of alternative livelihoods of local communities which the project provides and the respect for procedural rights of local people before and during the implementation of the climate mitigation activities. The climate mitigation policy action case under investigation is the *Humbo A/R Clean Development Mechanism* policy action: *Humbo Ethiopia Assisted Natural Regeneration Project*.

1.6. Data Type and Sources

Primary Data Sources

The primary data sources that this dissertation is planned to rely on include publications of pertinent government policies, strategies, reports, relevant legislations (including proclamations,

regulations, and directives), field notes, monitoring and evaluation tools and instruments, and projects design document. The research also draws on such primary data sources as Key Informant Interviews(KIIs), Focus Group Discussions (FGDs),Individual Interviews and Survey Questionnaires.The respondents for the Key Informant Interviews (KII) included the national REDD+ coordinator, zonal level EPA directorate director, high level social and environmental safeguards experts at the national, regional and local levels of the governance of CDM and REDD+ projects, NGO coordinators of the CDM project,and leaders of local level associations participating in the project implementation.

Secondary Data Sources

This dissertation also relied on such secondary data sources as published books, scientific journals (both print and electronic),unpublished theses, websites, published reports, newsletter articles, government documentations, electronic books, and compendium of pertinent legal regimes. In addition, this dissertation also made use of secondary data sources obtained from national communications, declarations of professional associations or groups, and various documentations of proceedings and fora.

1.7. The Empirical Case

The *Humbo* Community Managed Reforestation and Natural Regeneration of Forestry Development Project

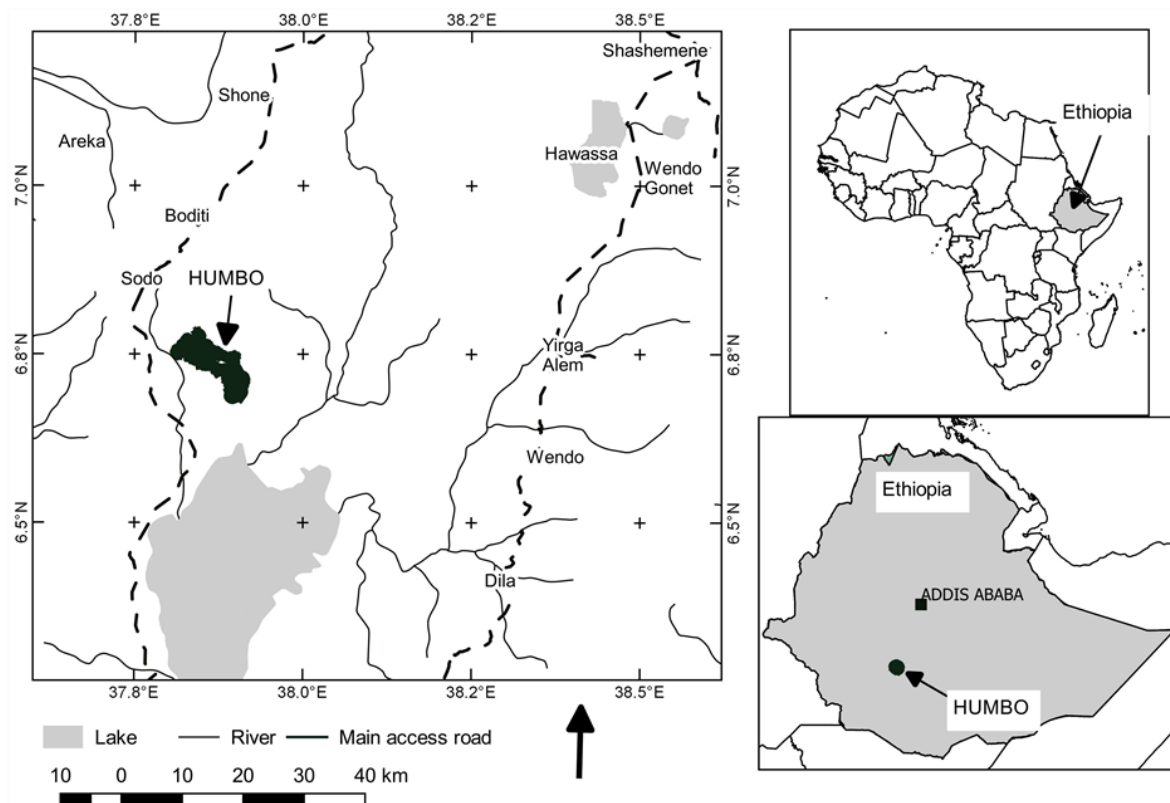
*Humbo Wereda*²³ is one of the 12 *Weredas* in *Wolayita* administrative zone of the Southern Nations, Nationalities and Peoples Regional State of Ethiopia (SNNPR.).The *Wereda* is bordered by *Kindo Kosha Wereda* in the East, *Sodo Zuria Wereda* in the North and *Boloso Bombe Wereda* in the South. The district is located 25kms from the zonal capital *Sodo*, 195kms from the regional state capital, *Hawassa*, and about 430 kms from Addis Ababa. Astronomically, the district is located between 6°46” 48.47N to 6° 41”04.28 N latitudes and from 37° 48” 35.44 to 37° 55” 14.51E longitudes²⁴.

²³ What was previously defined as the *Humbo Wereda* is currently split into three *weredas* one of which being *Humbo* itself, and the others are *Abela* and *Hobicha weredas*. *Abela* and *Hobicha Weredas* were previously *Kebele* administrations of *Humbo Wereda* that used to incorporate them.

²⁴ Project Design Document of *Humbo* A/R CDM project

The *Humbo* Community Managed Reforestation and Natural Regeneration of Forestry Development Project is located in *Humbo* district, some 5-10kms southeast of *Tebella* town, the capital of the *Humbo* district and lies surrounded by seven (7) rural *Kebele* administrations which are *Abella Longena*, *Hobicha Badda*, *Bosa Wanche*, *Bolla Wanche*, *Hobicha Bongota*, *Abella Gefeta* and *Abella Shoya* .The following map shows the location of the *Humbo* project site.

Map 1. Map of *Humbo* Assisted Natural Regeneration of Forests Project Site.



Source: (Adopted from W. Amanuel, 2020)²⁵

The enclosed forested area of the project spreads over the area of 2,728 ha. Massive Mountain and chains of hills interspersed with small valleys, gullies, rocks and flat plains characterize the topography of the project area. In terms of agro-ecological zone, 11.11% of the *Wereda* falls under the Highland (*Dega*) agro-ecological zone, 28% falls under mid-highland (*Woigna Dega*), and the remaining 61% of the *Wereda* falls under lowland or what is locally described as *Kolla*

²⁵ W. Amanuel , ‘The Role of Clean Development Mechanism on Social and Ecological Resilience in *Humbo* , Southern Ethiopia’, (2020), Vol. 4 , Issue 14 , Annals of Ecology and Environmental Science , available online at< <https://www.researchgate.net/publication/350756370>> accessed on 15 August 2022.

agro-ecological zone²⁶. The forest rehabilitation project is designated as a carbon sequestration project where its day-to-day management is entrusted to the local community living in the seven (7) *Kebeles*. The government is charged with the responsibility of providing technical assistance and financial support from the fund secured from World Bank to facilitate the forest rehabilitation program. Communities living in the seven *Kebeles* have established Forest Development and Protection Cooperatives (FDPCs) and membership is on voluntary basis. The cooperatives have formulated their forest management bylaws that should be observed by all members.

Implementation of the forest activities were meant to contribute to sustainable development by ways of;

- i) regeneration of native forest, utilizing the farmer managed natural regeneration (FMNR) and traditional forest establishment technique;
- ii) enhancement of GHG removals by sinks in the project area;
- iii) promotion of native vegetation and biodiversity in the project area which can be utilized as a refuge for local and migratory species and to improve the connectivity of fragmented forest resources;
- iv) reduction in soil erosion and flooding and help maintain the supply of the subterranean streams to support the region's water supply; and
- v) provision of income stream for communities through sustainable harvesting of forest resources²⁷.

To materialize the above mentioned goals the project undertook activities, inter alia, to restore approximately 2,728 hectares of bio-diverse natural forest in the *Humbo Wereda*²⁸ using indigenous and naturalized species, community management of public land with multiple objectives of promoting natural resource management, poverty alleviation and biodiversity enhancement and establishment of institutional structure with the right to Certified Emission Reductions (CERs) generated from the site.

²⁶ Ibid

²⁷ Project Design Document (PDD) of *Humbo* A/R Clean Development Mechanism (CDM) Project

Sampling Procedures

Sample *Kebeles* were purposively chosen from *Humbo*, *Abela* and *Hobicha Weredas* bent primarily on their geographic proximity to the project site as it is evident that residents or households who are located closer to the site are likely to have traditionally been reliant on the forest based resources of the mountainous site. Sampling from residents in the vicinity of the project site also allows to see how the mitigation policy action addressed the alternative livelihood strategies needs that the implementation of forest restoration activities necessitate. It also enables to examine how the climate mitigation measure addressed leakage management issues. The other criterion that guided the selection of the *Kebeles* in the respective *Weredas* was the relative socio-economic statuses of households along the fringes of the chain of mountain spreading over an area of 2,728 hectares. Accordingly, bent upon these considerations three (3) *Kebeles* have been sampled, using purposive sampling technique of the seven (7) *Kebeles* that surround the project site. These *Kebeles* are *Hobicha Bada*, *Abela Longena*, and *Bosa Wanche*. Below is shown the distribution of sampled respondents in each of the *Kebeles* that the study covers.

Table 1. Population and Sampled Respondents of the *Kebeles* the study covers²⁹.

No.	Kebeles	Pop. No.	HH No.	Av.HH Size	Sample Size
1.	<i>Abela Longena</i>	7,006	1367	5.13	70
2.	<i>Bossa Wanche</i>	5,042	1150	4.38	70
3.	<i>Hobicha Beda</i>	4,549	2115	5.6	70

Accordingly, survey questionnaires were distributed to a total of 210 sampled respondents based on random sampling technique and putting to use the sampling frame (list of household numbers of *Kebele* residents) for randomly identifying the participants of the study. This was done when sampling 70 households from each of the *Kebeles* purposively selected from the three (3) *Weredas*. The size of the sample was determined bent on the widely held assertion that sample size should at least be thirty (30) units particularly if statistically significant relations

²⁹ Information as regards the total population of each of the *Kebeles*, number of households and average household size have been obtained from documents available at *Humbo Wereda* Administration Office and were also verified with the documentations held at each of the *Kebele* administration during the field researches conducted.

between or among variables is meant to be generalized as regards the characteristics of the study population from which the sample is drawn.³⁰ Moreover, the sample size is believed to be reasonable as the purpose of the survey is merely to elicit descriptive information as regards means of livelihoods of the local people, the extent to which the local people used to depend on the forest based resources of the site, respondents' evaluation of the adequacy and sustainability of alternative livelihood strategies, respondents awareness about the project and their level of participation in planning and implementation of the forest development and rehabilitation scheme and its administration.

So the purpose is not to make statistically significant claims as regards relationships between or among relevant variables which requires determination of sample size in stricter reference to respective population size of residents of each of the three *Kebeles* purposively chosen³¹. The questionnaire covers such issues as households' demographic and socio-economic data, level of participation of the residents in decision making processes, challenges associated with alternative livelihood strategies, respondents' evaluation of project activities and their sustainability and respondents awareness about the nature of the project.

The data amassed via the questionnaire is analyzed and summarized statistically using descriptive statistics such as frequencies and percentages. Furthermore, with the purpose of supporting fuller understanding of the issues, triangulation of data, and obtaining supplementary data, six (6) FGDs were carried out in the three (3) *Kebeles*. So in each of the three (3) *Kebeles* there were conducted 2 FGDs where each FGD involved 6 -9 people. While sampling of the members of the FGDs held were made conveniently, an attempt was made to make sure that members represent the different segments of the local people in the three *Kebeles* including women, children, the youth, students, members and leaders of cooperatives, residents who are not-members of cooperatives. However, convenience was considered after a decision is made to

³⁰ L. Cohen, L. Manion and K. Morrison, *Research Methods in Education* (5th Edition, Rutledge Flamer, 2000); See also A. Delice, 'The Sampling Issues in Quantitative Research' (2010) Vol.10(4) Educational Sciences : Theory and Practice available online at : <https://files.eric.ed.gov/fulltext/EJ919871.pdf> accessed on 8 August 2022.

³¹ For discussion about considerations while determining sample size see R.S. Davis, D.D. Williams & S. Yanchar, 'The Use of Randomization in Educational Research and Evaluation : A Critical Analysis of Underlying Assumptions', (2008) Vol.21. Issue 4, Evaluation and Research in Education available online at : <https://www.tandfonline.com/doi/abs/10.1080/09500790802307837> accessed on 17 August 2022; see also M. D. Gall, J.P. Gall & W.R. Borg, *Educational Research: An Introduction* (Arnis E. Burvikovs ed. Seventh Edition, Pearson Education, Inc. 2003)

generally include residents who are located in closer proximity to the fringes of the mountainous land where activities of climate mitigation measures were carried out.

There were also conducted in-depth individual interviews as these would complement the shallower data that the survey questionnaire elicited by enabling the attainment of deeper and richer understanding of the objects of this investigation. The in-depth interviews were also conducted to enable the triangulation of data generated from the survey and the FGDs held. While the number of in-depth interviews that were actually conducted depended on data saturation which was reached before the 13th in-depth interview held, there were conducted 20 individual in-depth interviews in all of the sampled *Kebeles* enabling the researcher verify that saturation is reached in such a manner that no additional themes is crept in while existing issues or themes have already been fully documented. Furthermore, there were also conducted six (6) key informant interviews that involved different experts within the government offices and NGOs involved.

1.8. The Scope of the Study

This study aims to investigate into the implications on the right to adequate standard of living, the right to education, the right to health, the right to property, the right to development and procedural rights of the implementation of a CDM project namely the *Humbo* Ethiopia Assisted Natural Forest Regeneration Project in *Humbo, Abela, and Hobicha Weredas* of *Welayita* zone of the SNNPR of Ethiopia. The study analyzes the impacts on established livelihood strategies and land resource utilizations of the implementations of the A/R CDM project and discusses, inter alia, the implications of the project on the security of sustainable livelihood strategies, right to education of children, the right to property of residents, the right to health, the right to development, and resources governance entitlements of local communities.

The empirical analysis of the implications of implementing the CDM project upon livelihood and procedural rights of local communities in the study sites will be preceded by the analysis and discussions of the human rights implications of the domestic legal and policy frameworks of the governance of climate change mitigation projects in Ethiopia. The analysis of national policies, laws and strategies will involve FDRE's Constitution, The Environmental Policy of the Country, the CRGE (Climate Resilient Green Economic Strategy of Ethiopia), National REDD+ Strategy, Forest Development, Conservation and Utilization Proclamation (2007), Ethiopia's Rural Land Use and Administration Proclamation No. 456/2005, Cooperative Societies

Establishment Proclamation No. 985/2016 and the bylaw of Forest Development and Rehabilitation Union of *Humbo* A/R CDM project.

Moreover, the study is particularly focused on the governance of the CDM project and its implications on the rights to adequate standard of living, the right to education, property, development, and procedural rights (the rights to access to information, participation in environmental decision making, and access to administrative, judicial and other remedies) of local communities and people in the study site. The study is also limited to analyzing and examining how the governance of the CDM project addresses the projects' implications on the rights of particularly vulnerable groups of people in the communities.

1.9. The Significance of the Study

One major importance of this study will be helping force the thinking of the issue of climate change governance be exercised from the bottom –up perspective of the human rights of affected people: it will be making climate change governance not a simple issue but a human rights issue. The fact that climate change is primarily explained in terms of anthropogenic sources in which the developed world takes the larger share of the contribution while adverse impacts, consequent upon climate change, disproportionately affect poor and hence vulnerable countries meant that there should be put to use mechanisms of accountability and devices of rectifying climate injustice. However, there remains concerns as regards the efficacy and adequacy of these mechanisms in terms of rectifying climate injustice while at the same time ensuring the sustainability of existing socio-economic systems and safeguarding the protection of human rights.

The contribution of this research lies, therefore, in the translations of the implications, on livelihood sustainability and resource governance entitlements, of government measures taken to combat climate change into the extent to which government fulfills its human rights obligations while taking actions geared at combating climate change in Ethiopia. The empirical contribution of the study is, moreover, believed to incite other researchers to undertake a deeper and wider study covering aspects or dimensions not addressed by the present study. The other contribution or significance of the study will be in signifying possibility of using productive synergies of theoretical perspectives from an interdisciplinary sources with the purpose of making sense of the human rights conditions of local peoples and communities in the context of climate change

governance effectuated by actors in the supra-national, national, sub-national and local levels of administrative governance.

1.10. Limitations of the Study

This study was initially planned to include the *Bale –Mountain Eco –region REDD+* project, a large scale project being implemented over 500,000 hectares of land in *Bale* zone of the *Oromia* region of Ethiopia. The plan was to document the issue of what learnings and experiences from the implementation of *Humbo A/R CDM* project have been taken by the government to inform the implementation of the REDD+ activities as regards the observance and compliance with its human rights obligations concerning the rights of local people in *Bale* and conduct a sort of comparative analysis as regards human rights safeguards and observance of the government. But due to security risks the researcher was not able to conduct field research works at the time during which the *Oromia* regional government was in a military mission of fighting against what it called “terrorists” in the peripheries of its region where the *Bale –mountain eco –region REDD+* projects were being implemented. As the result, the study is limited to a case study of *Humbo A/R CDM* project in *Welayita Sodo* zone of the *SNNPR* region of Ethiopia. The other limitation is related to financial resources.

In addition, due to limited funding of the field research, the researcher was able only to learn about rights implications of implementation of the project and hence, did not learn much about rights related issues that have to do with governance and administrative issues as there only were limited span of field research work in the *Kebeles* and *Weredas* involved and the attempts to obtain information from World Vision Australia, the World Bank and even World Vision Ethiopia were limited. In this regard, repeated attempts to conduct interviews with the project coordinating team of *Humbo A/R CDM* project, at World Vision Ethiopia in Addis Ababa, didn’t succeed as the researcher was told that the existing leadership is in the process of leaving office for the new leadership and on other occasions continued attempt of having project coordinating staff, at World Vision Ethiopia, respond to inquiries were met with the response that the NGOs came up with a new policy that does not, as previously been the case, allow student researchers enter in the compound for inquiries.

This has limited the NGO from surfacing its perspectives on such important issues as the lack of transparency as regards administration of revenues from the sale of carbon credits, unfair

appropriation of land as a compensation for the loss of forested space due to the construction of roads via the project site and due to deliberately set fire and associated destruction of forested space. Furthermore, the analysis on the management of the forest based resources by the primary cooperatives would have been more nuanced and rigorous had the researcher also captured the World Vision Ethiopia side of the story about the actual and practical translation of sustainable management of forest – based resources by local communities, issues why the revenue from the sale of carbon credits was abated, who took part in the decision and also how a decision was reached to shift to a voluntary market for the sale of carbon credit which still continues being generated in spite of halted payments.

1.11. Organization of the Research

This study is organized in such a way that chapter –one introduces the subject of the research, the particular problems it sets out to investigate, the objectives and the methodology of the study which will be proceeded by the second chapter that tries to discuss the different theoretical frames of references or perspectives in which the global governance of climate mitigation action is ought to be conducted and also explicates the theoretical perspective that this research adopts in this regard. The third chapter introduces the dominant global climate mitigation strategies or mechanisms: the CDM (Clean Development Mechanism) and REDD+ (Reducing Emissions from Deforestation and Forest Degradation, Conservation, Sustainable Management of Forests and enhancement of Forest Carbon Sinks). The chapter also takes up the tasks of highlighting technical uncertainties linked with these climate mitigation strategies and discusses associated human rights implications.

The fourth chapter reviews the critiques against the international climate regime under the headings of rights and obligations in the anthropocene, human rights implications of market – based climate mitigation mechanisms and climate mitigation as carbon colonialism which will be followed by the fifth chapter which shows the global nature of rights violations associated with the CDM policy tool. And the most important chapter : chapter six presents the empirical case that this dissertation is concerned with in which the human rights implications of *Humbo A/R* CDM project is analyzed and explicated. The last chapter discusses the human rights implications of domestic legal frameworks, relevant policies and strategies which will be followed by a part of the dissertation that concludes the work.

Chapter –Two

The Human Rights Based Approach (HRBA) to Climate Change and Development

Initial efforts to link the adverse effects of climate change to human rights could be illustrated by the Inuit petition to the Inter-American Commission on Human Rights in 2005 where the Inuit accused the United States of having violated their human rights including, inter alia, their right to life, food, and housing as a result of failure on the part of the US of adequately regulating GHGs within its territories.³² Though the IACHR was not able to rule in favour of the petitioners, the petition is thought to be one of the important attempts by the Indigenous Peoples to bring to attention that the climate crisis does have human rights implications. On a different note, though not in human rights terms, the Maldives had long tried to address the adverse effects of the climate crisis against the full and effective enjoyment of human rights – the right to the very existence of the state of Maldives in this case, by urging stricter measures of reducing GHGs in the international negotiations since 1989.³³ In its later attempts of urging States, in the UNFCCC fora, to consider the international human rights law framework in guiding their negotiations for agreement on a new post-Kyoto climate policy development, the Maldives convened a meeting of representatives of Small Island States which adopted the Male' Declaration on the Human Dimension of Climate Change.³⁴

The Male' Declaration on the Human Dimension of Climate Change stated explicitly and for the first time in an international agreement that “climate change has clear and immediate implications for the full enjoyment of human rights” and called on the UN Human Rights System to address the issue as a matter of urgency.³⁵ The Male' Declaration was taken to the 13th Conference of the Parties to the UNFCCC, in Bali, where it was underlined that the climate crisis does not only adversely affect natural systems but bears also grave consequences to lives, and wellbeing of human beings. Recognizing and “echoing” this sentiment Kyang-wha Kang, Deputy UN High Commissioner for Human Rights said “any strategy to deal with climate change,

³² John H. Knox, Linking Human Rights and Climate Change at the United Nations, Vol.33, Harvard Environmental Law Review, 2009, available online at : < https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1457793 > accessed on 22 June 2024.

³³ Ibid

³⁴ Male' Declaration on the Human Dimension of Global Climate Change, Nov. 14, 2007, available at <http://www.ciel.org/Publications/MaleDeclarationNov07.pdf>.

³⁵ Small Island States Conference, Male, Maldives, Nov. 13-14, 2007, Male Declaration on the Human Dimension of Global Climate Change, at 2 (Nov. 14, 2007), available at <http://www.ciel.org/Publications/MaleDeclarationNov07.pdf>.

whether in terms of adaptation or mitigation, must incorporate the consequences for humans, as individuals and communities, and the human rights framework is the most effective way to do so.³⁶

Concurrently aligned with these initiatives were the efforts of other actors including the International Council on Human Rights Policy (ICHRP), the Organization of American States, Oxfam International, Marry Robinson's Realizing Rights, Kofi Anan's Global Humanitarian Forum and the United Nations Development Program (UNDP) in exploring the connections between climate change and human rights.³⁷ The Male Declaration envisioned that first the OHCHR made available the analytical report on the relationship between human rights and climate change which would be proceeded with gaining political support from the government representatives of the UN Human Rights Council for the climate negotiators to look into the OHCHR and the UNHRC for guidance on the issue. Accordingly, the Maldives proposed to the UNHRC to adopt a resolution that requested the OHCHR to carry out a detailed analytical study on the relationship between climate change and human rights to be considered in its 2008 session which gained support from 78 other sponsors and adopted by consensus as Council Resolution 7/23. On January 15, 2009, the OHCHR published an advanced unedited version of the analytical study requested under Resolution 7/23. The report marks the first attempt by the UN Human Rights "machinery" to undertake a comprehensive assessment of the complex and multi-faceted inter-linkages between climate, environmental degradation, and human rights.³⁸

But before the analytical report, the UNHRC adopted a very important resolution, in 2008, which recognized that climate change 'poses an immediate and far reaching threat to people and communities around the world and has implications for the full enjoyment of human rights. It has subsequently adopted that more resolutions on climate change that have underlined, inter alia, the importance of adopting a rights-based approach to climate policy – making, the role of international cooperation for protecting human rights in a changing climate, and the disproportionate impacts of climate change on marginalized groups such as children, women,

³⁶ Kyung-wha Kang, Deputy High Comm'r for Human Rights, Office of the U.N. High Comm'r for Human Rights, Address at the Conference of the Parties to the UNFCCC and its Kyoto Protocol (Dec. 14, 2007), available at : <http://www.maldivesmission.ch/fileadmin/Pdf/Environment/DHCStatementBaliFinal.pdf>. >

³⁷ Marc Limon , Human Rights and Climate Change : Constructing a Case for Political Action , Harvard Environmental Law Review , Vol. 33, 2009, available online at ; https://www.academia.edu/7734145/Human_Rights_and_Climate_Change_Constructing_a_Case_for_Political_Action >

³⁸ Ibid

persons with disabilities in the context of climate action.³⁹ It has also been the case that at the request of the UNHRC, the Office of High Commissioner for Human Rights (OHCHR) and other mandate holders have prepared a rich corpus of studies, reports and statements on various themes that relate to climate change and human rights. Furthermore, the treaty bodies established under specific international human rights conventions have also clarified the human rights obligations of States in relation to climate change in their authoritative commentaries on different human rights provisions and their review of state compliance.

The human rights language has also gained increasing currency in the climate regime. In this regard, the Cancun Agreement, adopted in 2010, is the first decision under the UNFCCC to refer to human rights and most notably integrate references to the rights of Indigenous Peoples and local communities in a decision on safeguards that should be respected by governments in the context of their efforts to reduce emissions from deforestation and forest degradation.⁴⁰ Furthermore, the preamble of the Paris Agreement acknowledges that “parties should, when taking action to address climate change, respect, promote and consider their respective obligation on human rights, the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity”.

Illustrations of use of the human rights –based approach in multilateral climate change governance are also seen in two important developments after the Paris Agreement: i) parties to the Paris Agreement established a Local Communities and Indigenous Peoples Platform (LCIPP) to strengthen the climate efforts of local communities and Indigenous Peoples, identify and share best practices for doing so and enhance their engagement in UNFCCC processes and ii) the adoption, in 2017, of a Gender Action Plan which aims to understand gender –responsive approaches to climate action, promote gender mainstreaming in the development and implementation of climate policies and to ensure the full, equal, and meaningful participation of women in the UNFCCC process as well as in national and local climate process.⁴¹ Beyond the

³⁹ United Nation Human Rights Council, Resolution 7/23. Human Rights and Climate Change. UN Doc. A/HRC/RES/7/23, 2008 . available online at : < https://ap.ohchr.org/documents/e/hrc/resolutions/a_hrc_res_7_23.pdf >

⁴⁰ UNFCCC COP: Report of the Conference of Parties on its Sixteenth Session, Held in Cancun from 29 November to 10 December 2010. Available on line at : < <https://unfccc.int/documents/6525> > accessed on 22 July 2024.

⁴¹ Sebastien Jodoin, Annalisa Savaresi. & Margaretha Wewerinke – Singh, Rights – Based Approaches to Climate Decision Making, Vol. 52, 2021, Current Opinion in Environmental Sustainability. Available online at : < https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3888616 > accessed on 22 June 2024.

climate regime, the human rights –based approach to climate change policy response has informed the works of multilateral, bilateral and non-governmental organizations in supporting, funding, guiding, and certifying the development of and implementation of climate mitigation activities which is reflected in their operational rules and safeguards. The importance of the rights –based approach to the climate crisis has also been underlined via the proliferation of litigations involving the adverse impacts of climate change and its threats to the full and effective enjoyment of a range of human rights. Following will section clarifies what the human rights –based approach to climate change entails.

2.1. What Characterizes the Human Rights –Based Approach to Climate Change and Development?

In accord with the definition of the OHCHR, the human rights-based approach is “a conceptual framework that is normatively based on international human rights standards and operationally directed to promoting and protecting human rights.”⁴² The rights –based approach primarily aims at “analyzing obligations, inequalities and vulnerabilities, and redresses discriminatory practices and unjust distributions of power that impeded progress and undercut human rights”⁴³. The “authoritative” statements that the OHCHR made as regards the structure and importance of the Human Rights –Based Approach states that “under a Human Rights –Based Approach, plans, policies and programs are anchored in a system of rights and corresponding obligations established by international law”⁴⁴. This, in turn, promotes sustainability, empowering people themselves (right-holders) especially the most marginalized, to participate in policy formulation and hold accountable those who have a duty to act (duty –bearers)”⁴⁵.

The essential attributes of the human rights-based approach to climate change as agreed on by the UN agencies are;

- i) as policies and programs are formulated, the main objective should be to fulfill human rights; ii) a human rights –based approach identifies right-holders and their entitlements and the corresponding

⁴² OHCHR, Applying a human rights-based approach to climate change negotiations, policies and measures, Available online at : < <https://www.ohchr.org/documents/issues/climatechange/infonotehrba.pdf> > accessed on 22 June 2024.

⁴³ Ibid

⁴⁴ Ibid

⁴⁵ Ibid

duty bearers and their obligations, and works towards strengthening the capacities of right –holders to make their claims and of duty bearers to meet their obligations and; iii) principles and standards derived from international human rights treaties should guide all policies and programming in all sectors and in all phases of the process.⁴⁶

Furthermore, it needs to be underscored that the human rights –based approach to climate change recognizes that certain communities and segments of populations such as women, children, the elderly, indigenous peoples, persons with disabilities, the poor, displaced persons and refugees are disproportionately affected by climate change and its consequences.⁴⁷ Cognizant of such existing circumstances, therefore, the rights –based approach emphasizes the distributive consequences of climate change and focuses attention on its implications for the pursuit of social and environmental justice.⁴⁸ Apart from this, the rights –based approach to climate change emphasizes that states and private actors have significant human rights obligations in the context of climate change which, inter alia, include preventing human rights infringements from the adverse effects of the crisis via mitigation activities, taking measures to strengthen adaptive capacities of their respective citizens, and cooperating with other states to support global effort to combat climate change.⁴⁹

In a similar vein, the human –rights based approach also seeks to ascertain that climate policies and programs comply with all relevant international and domestic obligations and standards and do not, in and of themselves, interfere with the enjoyment of the rights of communities where they are implemented. The approach emphasizes the importance of public

⁴⁶ Ibid

⁴⁷ L. Bendlin, *Womens Human Rights in a Changing Climate : Highlighting the Distributive Effects of Climate Policies* , Vol.27, 2014, *Cambridge Review of International Affairs* ; K. Arts, *Childrens Rights and Climate Change in Childrens Rights in International Sustainable Development Law* (Fenton-Glynn C. (ed.) Cambridge University Press, 2019); SH Lustig et al, *Klima Seniorinnen : Lessons from the Swiss Senior Womens Case for Future Climate Litigation*, Vol.9, 2018, *Journal of Human Rights and the Environment* ; B. Lewis , *Climate Change and Human Rights : Perspectives of Environmental and Indigenous Rights* , Vol.1 , 2008, *Journal of Australia Law Teaching Association* ; N. Ananthamoorthy et al , *A disability rights approach to climate governance* , Vol.47, 2020, *Ecology Law Quarterly* .

⁴⁸ Andrea Schapper, *Climate Justice and Human Rights*, Vol. 32,(3), 2018 , *International Relations*, available online at; < <https://journals.sagepub.com/doi/full/10.1177/0047117818782595> > accessed on 22 June 2024.

⁴⁹ UNHRC, *Report of the Special Rapporteur on the Issue of Human Rights Obligations Relating to the enjoyment of a Safe, Clean, Healthy and Sustainable Environment* Note . 2016.

participation, access to information, access to justice to ensure that climate governance processes are fair, transparent and inclusive.⁵⁰

2.2. Government Obligations to Address the Human Rights Implications of Climate Change.

Three (3) types of duties are entailed as regards governments' international human rights obligations in the context of climate change which include i); the duty to respect human rights representing a negative obligation in accord with which states are required to refrain from taking actions that would interfere with the exercise of human rights ii); the duty to protect human rights against violations by third parties and; iii) the duty to fulfill human rights which is a positive obligation requiring states to undertake measures to ensure the realization of rights for all members of the society.⁵¹ The duty to "promote" is also mentioned in some literatures where it is seen as related but is a different obligation to "promote universal respect for, observance and protection of all human rights".

Governments' duties, in the context of the climate crisis, are, otherwise, conceptualized by the familiar ways of; a) procedural obligations; b) substantive obligations and c) obligations in relation to individuals who are members of specific groups.⁵² So here each of the categories of governments' human rights obligations in the context of the climate crisis is tried to be dwelt on as follows.

A. Procedural Obligations

Governments have procedural duties or obligations, under international human rights law, as regards the environmental impacts of their activities in general and the effects of their activities to the stability of the climate in particular. These obligations include the duty to gather and disseminate information about the environmental and climatic effects of their activities, to

⁵⁰ M. Wewerinke-Singh, Remedies for Human Rights Violations caused by climate change, Vol.9, 2019, Climate Law. Available online at : < https://brill.com/view/journals/clla/9/3/article-p224_224.xml?language=en > accessed on July 3, 2024 ; J. Setzer, & L. C. Vanhala, Climate Change Litigation : A review of research on courts and litigants on climate governance, Vol.10, 2019, Wiley Interdisciplinary Review of Climate Change .available online at : <https://wires.onlinelibrary.wiley.com/doi/abs/10.1002/wcc.580> accessed on July 3, 2024 .

⁵¹ OHCHR, International Human Rights Law, <http://www.ohchr.org/EN/ProfessionalInterest/Pages/InternationalLaw.aspx> last visited on 26 June 2024); John H. Knox, Linking Human Rights and Climate Change at the United Nations, Vo.33, Harvard Environmental Law Review, 2009. Available online at : < https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1457793 > accessed on 14 of July 2024 .

⁵² John H Knox, Human Rights Principles and Climate change in (Cinnamon Carlarne, Kevin R. Gray and Richard Tarasofsky (eds.), *Oxford Handbook of International Climate Change Law*, 2015) ; UNEP, *Climate Change and Human Rights* (UNOP Publishing Service, Nairobi, 2015).

facilitate public participation in environmental decision making processes and to provide access to remedies for environmental harm.⁵³ While these obligations are rooted in the international covenant on civil and political rights, they have been elaborated in environmental and climate crisis context in the situations of actual risks from the effects of the climate crisis against a range of human rights. It is also true that governments have “unique” set of obligations in the context of making decisions that affect the lands and resources of Indigenous Peoples which, inter alia, includes the duty to secure the free, prior and informed consent (FPIC) of indigenous people before making decisions that would adversely affect their lands and /or resources that they traditionally used to own⁵⁴.The specific procedural obligations of governments related to the environmental harm of their actions and in the context of their policy responses geared at mitigating environmental problems including the climate crisis are discussed as follows.

1) Ensuring Access to Information and Conducting Environmental Impact Assessment.

The right of all persons to “seek, receive and impart information” is recognized under art.19 of both the UDHR and the ICCPR⁵⁵.The least required of governments, under the UDHR and ICCPR, is for governments to provide public access to any kind of information of public interest. As regards governments’ duties to ensure public access to any kind of information, the Human Rights Committee (HRC) has not discussed explicitly that the right to get access to information entailed corresponding obligations on the part of governments to conduct environmental impact assessments (EIA) and disclose information about environmental impacts of their actions. Customary international law, however, has it that when a proposed program or project is found to pose assessed environmental risk for other countries in a transboundary context and the risk is found to be against a “shared resource” such as climate, states have an obligation in relation to other states to communicate the information from the EIA for other state/s at risk.⁵⁶ Accordingly, states should assess how activities within their jurisdiction will adversely affect the climate (a shared resource) and provide adequate notice to the international community. For example, states should conduct GHG assessments for activities that are likely to have significant GHG impacts—such as programmatic decisions about fossil fuel development,

⁵³ UNEP, Climate Change and Human Rights (UNON Publishing Services, 2015)

⁵⁴ Art.19 of the UDHR ;

⁵⁵ Art. 19 of the UDHR; Art. 19 of ICCPR

⁵⁶ Ibid

large fossil fuel-fired power plants, and fuel economy standards—and make the results publicly available.⁵⁷

The right of access to information is generally viewed as a prerequisite to the exercise of other procedural rights relating to public participation and access to remedies, and these procedural rights have been interpreted as critical to the exercise of substantive human rights, such as the rights to life, health, and privacy⁵⁸. As such, many regional human rights courts have held that states have an obligation to assess and disclose foreseeable environmental risks as part of their positive duties to protect, respect, and fulfill various human rights.⁵⁹ This includes any environmental risks caused by government activity, as well as other environmental risks that threaten the exercise of human rights since states have an obligation to protect rights against harms caused by third parties.

The UNFCCC outlines similar obligations with respect to assessing and disclosing information related to climate change. Specifically, Art. 4(1) (h) requires states to “promote and cooperate in the full, open and prompt exchange of relevant scientific, technological, technical, socio-economic and legal information related to the climate system and climate change, and to the economic and social consequences of various response strategies.”⁶⁰ Art. 6 also direct the Parties to promote and facilitate at the national and, as appropriate, subregional and regional levels, “public access to information on climate change and its effects.”⁶¹ Several other provisions direct the Parties to provide information on national GHG emissions and measures taken to address climate change and its effects. The right to information and corresponding obligation to provide information through environmental impact assessments (EIA) and other mechanisms, and to communicate that information to the public, are also included in the Rio Declaration⁶², the Aarhus Convention⁶³, and the Espoo Convention on EIA in a Transboundary

⁵⁷ Ibid

⁵⁸ Ibid; Michael Riegner, Access to Information as a Human Right and Constitutional Guarantee: A Comparative Perspective, Vol. 50, No.4, 2017, Law and Politics in Africa, Asia and Latin America. Available online at: <https://www.jstor.org/stable/26540817?seq=3> accessed on 8 July 2024.

⁵⁹ See *Klima Seniorinnen Vs Swiss Government* (ECtHR) Available online at : < <https://climatecasechart.com/non-us-case/union-of-swiss-senior-women-for-climate-protection-v-swiss-federal-council-and-others/> >

⁶⁰ Art. 4 (1) (h) of the UNFCCC

⁶¹ Art.6 (a) (i) (ii) of the UNFCCC

⁶² Rio Declaration on Environment and Development (1992), Principles 10 and 17.

⁶³ Though the Aarhus Convention is meant to govern European States and may not be relevant in terms of entailing binding obligations for countries like Ethiopia it is important to note that it outlines a comprehensive set of obligations relating to access to information, public participation in decision-making, and access to justice in

Context, the Kyiv (SEA) Protocol, and a variety of other Multilateral Environmental Agreements (MEAs) including, inter alia, the Convention on Biological Diversity (CBD)⁶⁴, UN Convention on the Law of the Sea (UNCLOS)⁶⁵. The domestic laws of numerous states also contain such requirements.

Several expert bodies have explicitly directed states to account for climate change when fulfilling their obligations to evaluate environmental risks and disclose environmental information to the public. For example, in Resolution 65/178 (2011), the UN General Assembly called for urgent international, regional and national efforts to address the impacts of climate change on food security⁶⁶. And regarding the right to water, the Committee on Economic, Social and Cultural Rights (CESCR) has determined that State parties should establish mechanisms for assessing the impacts of climate change, desertification and other environmental harms on watersheds.

2) Public Participation in Environmental Decision Making Processes

The UDHR (Art.21) and ICCPR (Art.25) both recognize the fundamental right of everyone to take part in the government of their country and in the conduct of public affairs. In addition, a variety of human rights treaty bodies have determined that governments have an obligation to facilitate public participation in environmental decision-making in order to protect human rights against environmental harm.⁶⁷ The UNFCCC also directs states to promote and facilitate “public participation in addressing climate change and its effects and developing adequate responses.”⁶⁸ Other multilateral environmental instruments similarly provide for public participation.⁶⁹

General Assembly Resolution 67/210 (2013) recognizes the “need to engage a broad range of stakeholders at the global, regional, national and local levels, including national, subnational and local governments, private businesses and civil society, and including youth and persons with disabilities, and that gender equality and the effective participation of women and

environmental matters, and provides a useful gauge for a country’s compliance with obligations under other treaties which include the ICCPR.

⁶⁴ Art. 13 of the Convention on Biological Diversity

⁶⁵ Art. 244 of the UN Convention on the Law of the Sea (UNCLOS)

⁶⁶ UNGA, Resolution 65/178, Agriculture Development and Food Security. A/RES/65/178, 24 March 2011.

Available online at: <

<https://documents.un.org/doc/undoc/gen/n10/523/22/pdf/n1052322.pdf?token=1Xb8XwHcdCdXBp3got&fe=true> > accessed on 8 July 2024.

⁶⁷ See, e.g., CESCR General Comment No. 15, p. 56, UN Doc. E/C.12/2002/11 (Jan. 20, 2003)

⁶⁸ Art. 6 of the UNFCCC

⁶⁹ See for example Art. 14 (1) of the Convention on Biological Diversity.

indigenous peoples are important for effective action on all aspects of climate change.”⁷⁰ The precise standard of what constitutes “adequate” or “effective” public participation is not always clear. Terms such as “full and informed participation” and “meaningful consultation” are often used to describe this requirement.⁷¹ At a minimum, this requires: (1) assessment and disclosure of environmental impacts, as discussed above; (2) effective communication of those impacts—e.g., in a language and venue that is accessible to the persons who will be affected; and (3) an opportunity for affected persons to “voice their concerns.”⁷² It is particularly important to invite and facilitate public participation in decisions that affect vulnerable groups, and for decisions concerning the displacement or resettlement of certain groups.⁷³

3. Access to Administrative, Judicial and Other Remedies.

The UDHR⁷⁴, ICCPR⁷⁵, and ICESCR⁷⁶ all recognize that states should provide an “effective remedy” for human rights violations. The respective human rights bodies for these treaties have clarified that such remedies extend to human rights violations caused by environmental harms. The obligation to provide access to justice and/or an effective remedy is also enshrined in the Rio Declaration, the Aarhus Convention, and a variety of other multilateral environmental and human rights agreements.⁷⁷

There is both a procedural and a substantive dimension to this obligation.⁷⁸ First, states must provide access to administrative and judicial proceedings to adjudicate claims of human rights violation (the procedural element). But various expert bodies have asserted that states must also ensure that compensation or other forms of redress are available when violations do occur (the substantive dimension). The CESCR, for example, has noted that states should ensure that adequate compensation, alternative accommodation, and resettlement opportunities are provided

⁷⁰ UN General Assembly Resolution 67/210, Protection of Global Climate for Present and Future Generation of Human Kind, A/RES/67/210, 12 March 2013. Available online at: < <https://documents.un.org/doc/undoc/gen/n12/491/20/pdf/n1249120.pdf?token=1FQVim1RWda47Sv33p&fe=true> > accessed on 14 of July 2024.

⁷¹ UNEP, n. 53.

⁷² Ibid

⁷³ Ibid

⁷⁴ Art. 8 of the UDHR

⁷⁵ Art. 2 (3) (a) & (b) of the ICCPR

⁷⁶ General Comment -3 of ICESCR on the nature of obligations of State Parties. available online at : < <https://humanrights.gov.au/our-work/rights-and-freedoms/nature-obligations-regarding-economic-social-and-cultural-rights> >

⁷⁷ See for eg. Principle 10 of the Rio Declaration, Art. 9 of the Aarhus Convention and Art.10(b) of the Convention on Biological Diversity

⁷⁸ UNEP, n.53, p. 18

to indigenous communities and other groups who are displaced by large infrastructure projects and deforestation.

The UNFCCC does not explicitly recognize a right of access to justice or remedies for individuals. Article 14 outlines a procedure for the settlement of disputes between countries concerning the interpretation or application of the Convention. More notably, Paragraph 92 of the Cancun Agreements describes the need to consider “information from those affected, and evidence of actual impacts” of response measures (adaptation and mitigation). But the COP has yet to establish any clear mandate for countries, climate finance mechanisms, or other entities to ensure access to a grievance mechanism for those who are harmed by the impacts of or responses to climate change.

B. Substantive Obligations

Both the ICESCR and ICCPR contain substantive rights, such as the rights to life, health, and an adequate standard of living, accompanied by a combination of: (i) negative obligations for states to refrain from taking action that would interfere with rights, (i.e., a duty to respect rights); and (ii) positive obligations for states to protect and fulfill rights. As noted by the UN General Assembly: “Each state has a prime responsibility and duty to protect, promote and implement all human rights and fundamental freedoms, inter alia, by adopting such steps as may be necessary to create all conditions necessary in the social, economic, political, and other fields, as well as the legal guarantees required to ensure that all persons under its jurisdiction, individually and in association with others, are able to enjoy all those rights and freedoms in practice.”⁷⁹

Based on these obligations, the CESCR, regional courts, and UN special rapporteurs have concluded that states have a general duty to “adopt legal and institutional frameworks that protect against, and respond to, environmental harm that may or does interfere with the enjoyment of human rights.”⁸⁰ The framework must ensure that the state will respect human rights in all of its activities and decisions, and include protections to prevent third parties from creating environmental harms that interfere with the exercise of human rights. In addition, the

⁷⁹ G.A. Res. 53/144, Art. 2, p. 1, UN Doc. A/RES/53/144 (March 8, 1999).

⁸⁰ See, e.g., CESCR, General Comment No. 14, pp. 4, 15, 36, UN Doc. E/C.12/2000/4 (Aug. 11, 2000).

European Court of Human Rights (ECtHR) has held that states must also take reasonable measures to protect citizens against the reasonably foreseeable effects of natural disasters.⁸¹

The adverse impacts of climate change clearly qualify as “environmental harms” that can interfere with the exercise of human rights. Thus, states must enact legal and institutional frameworks to protect against and respond to those impacts. More specifically, there are at least five types of obligations that may arise in this context: (1) adaptation obligations, requiring states to enact frameworks for protecting people against the effects of climate change; (2) domestic mitigation obligations, requiring states to regulate the sources of GHG emissions; (3) international cooperation obligations, requiring states to participate in international negotiations for an effective global climate agreement; (4) transboundary mitigation obligations, requiring states to mitigate the effect of their activities on the human rights of persons outside of their jurisdiction; and (5) an obligation to ensure that mitigation and adaptation activities do not themselves contribute to human rights violations.⁸²

There are at least three overarching principles which apply to all of these obligations. First, states are “obliged to take measures towards the full realization of economic, social, and cultural rights to the maximum extent of their available resources.”⁸³ This means that states “must take deliberate, concrete and targeted measures, making the most efficient use of available resources, to move as expeditiously and effectively as possible towards the full realization of rights.” Second, although international human rights law generally requires the “progressive realization” of economic, social, and cultural rights, there are some obligations which require immediate implementation. For example, states must guarantee non-discrimination in access to economic, social and cultural rights, irrespective of resource constraints.⁸⁴ States also have an immediate obligation to ensure, at the very least, “minimum essential levels” of each right that is enshrined in the ICESCR.⁸⁵ In addition, states have an immediate obligation to refrain from undertaking actions that cause a violation of any human rights. Third, states have an obligation to protect all

⁸¹See, e.g., *Budayeva and Others v. Russia*, App. Nos. 15339/02, 21155/02, 20058/02, 11673/02 and 1543/02, Eur. Ct. H.R. (March 20, 2008) cited in UNEP, 2015, *Climate Change and Human Rights*, UNOP Publishing, Nairobi. Available online at : < <https://www.unep.org/resources/report/climate-change-and-human-rights> > accessed on July 20, 2024.

⁸² UNEP, n.53. p.19

⁸³ Daniel Bodansky, *Climate Change and Human Rights: Unpacking the Issues*, Vol.38, No.3, *Georgia Journal of International and Comparative Law*. Available online at : < https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1581555 > accessed on 20 July 2024.

⁸⁴ CESCR General Comment No. 3, pp. 1-2, UN Doc. E/1991/23 (Dec. 14, 1990).

⁸⁵ Ibid

rights against third party abuses. As interpreted by the HR Committee, this means that states must “take appropriate measures or to exercise due diligence to prevent, punish, investigate or redress” any human rights violations caused by third parties⁸⁶.

i) States’ Obligations to Protect Human Rights against Climate Related Harms (Adaptation Obligation)

Article 6 of the ICCPR recognizes that “every human being has the inherent right to life” and that no person “shall be arbitrarily deprived of life.”⁸⁷ The HR Committee has noted that the right to life “should not be interpreted narrowly” and that “the protection of this right requires that States adopt positive measures” to protect life. The ICESCR contains a number of additional rights—such as the rights to health and an adequate standard of living—which also require positive action from the state for their implementation.⁸⁸

The effects of climate change will continue threatening the lives, health, well-being, and livelihoods of hundreds of millions if not billions of people. States have an obligation to enact legal and institutional frameworks to protect human rights against these effects. This is true regardless of whether the state is responsible for those effects because, as noted above, the ICCPR and ICESCR both include obligations to protect human rights from harms caused by third parties. Presumably, this would encompass a more pressing obligation to protect citizens from imminent, life-threatening harms as well as an ongoing obligation to implement adaptation measures to alleviate the projected impacts of climate change on people and their livelihoods.⁸⁹

The UNFCCC does not recognize a right to adaptation, but it does call upon all parties to “cooperate in preparing for adaptation to the impacts of climate change; develop and elaborate appropriate and integrated plans for coastal zone management, water resources and agriculture, and for the protection and rehabilitation of areas, particularly in Africa, affected by drought and desertification, as well as floods.”⁹⁰ In addition, it calls upon developed countries to provide assistance to developing countries to address the adverse effects of climate change in those countries.⁹¹ These directives complement the human rights obligations noted above.

⁸⁶ HRC General Comment No. 31, p.8, UN Doc. CCPR/C/21/Rev.1/Add.13 (2004). See also CESCR, General Comment No. 12, p. 15; UN Doc. E/C.12/1999/5 (May 12, 1999); Andrew Clapham, *Human Rights Obligations of Non-State Actors*, (Oxford University Press, 2006)

⁸⁷ Art.6 of the ICCPR

⁸⁸ ICESCR Arts. 11, 12.

⁸⁹ UNEP, n.53.

⁹⁰ UNFCCC, Art. 4(1) (e)

⁹¹ UNFCCC, Art.4(4)

The Hyogo Framework for Action (2005-2015) and the Sendai Framework for Disaster Risk Reduction (2015 - 2030), endorsed by the United Nations General Assembly, also outline a set of obligations for countries to build resilience of their citizens to disasters. The Sendai Framework explicitly recognizes that “managing the risks of disasters is aimed at protecting persons and their property, health, livelihoods and productive assets, as well as cultural and environmental assets, while promoting and protecting all human rights, including the right to development.”⁹² It also recognizes that each state has the “primary responsibility” to take “effective measures to reduce disaster risk” within its jurisdiction.⁹³ States can refer to the principles and directives outlined in the Sendai Framework in order to implement their human rights obligations with respect to climate-related disaster planning and risk reduction.

Finally, OHCHR notes that states are “legally bound to address climate-related vulnerabilities in accordance with the principle of equality and non-discrimination.”⁹⁴ Specifically, the non-discrimination principle requires that states “identify marginalized or vulnerable individuals and groups; address specific needs through ‘targeted and differentiated interventions;’ and tackle underlying power imbalances and structural cases of ‘differential vulnerability’ within and between households while building the ecological resilience necessary to reduce vulnerability and achieve threshold needs.”⁹⁵

Although states have discretion to decide how to protect human rights against climate-related effects, taking into account their resource constraints and national contexts, there may be some minimum measures that would be required as a matter of international, regional, or domestic human rights law.⁹⁶ These might include measures that are necessary to protect lives from imminent threats, such as early-warning systems and risk notification, which tie into the obligation to disclose information; improvements to physical infrastructure to reduce the risk of floods or other hazards; emergency response plans; and the provision of disaster relief and humanitarian assistance in times of emergency.⁹⁷

⁹² Sendai Framework for Disaster Risk Reduction (2015-2030), Part III, p. 19(c).

⁹³ Ibid, part III, p.13 (b).

⁹⁴ UNEP, n.53, p. 21

⁹⁵ Ibid

⁹⁶ OHCHR, Report of the Office of High Commissioner for Human Rights on the Relationship between Climate Change and Human Rights, A/HRC/10/61, 17 January 2009. Available online at : < <https://www.refworld.org/reference/themreport/unhrc/2009/en/65384> > accessed on 20 July 2024.

⁹⁷ UNEP, n.53, p.13

ii) Governments Human Rights Obligations to mitigate the adverse impacts of Climate Change (Obligations to Mitigate the Climate Crisis)

States may also have an obligation to respond to the major causes of climate change – anthropogenic emissions of GHGs and the accumulation of GHGs in the atmosphere. The CESCR, for example, has stated that State Parties to the ICESCR should mitigate the effects of climate change in order to safeguard the economic, social and cultural rights of their citizens in spite of the fact that this has not been characterized as an obligation⁹⁸. The former Special Rapporteur on Adequate Housing has also asserted that “Human rights standards require all countries to seek to reduce their harmful emissions to the global atmosphere, with a view to reducing their negative effect on the enjoyment of human rights.”⁹⁹ The international human rights courts have increasingly begun addressing the nature of a state’s obligations to mitigate GHG emissions with a number of domestic and ECtHR cases requiring a national government to accelerate its emission reduction efforts in order to fulfill a duty of care to its citizens, and another requiring the government to implement its national climate change policy (which included mitigation objectives) in order to protect the fundamental rights of its citizens.¹⁰⁰ In addition, cases alleging a violation of fundamental rights as a result of governmental inaction on climate change have been filed in the United States and Belgium.¹⁰¹

Here, it is important to note that the climate crisis is unequally caused and that its adverse consequences disproportionately affect states and the human rights of their citizens. So while the GHGs reduction efforts of those States with insignificant current and historical responsibility may not result in meaningful contribution in climate stabilization, the mitigation efforts of States like the US, Japan, China, Canada and other big emitters matters a lot. And in this connection, the UNFCCC provides a useful framework for distributing obligations for climate mitigation given that the framework of “ common and differentiated responsibilities and respective capacities to address the climate crisis ” has its “ differentiation ” defined authentically based on historical and

⁹⁸ The CESCR, for instance, pressed upon states, in its Statement on the World Food Crisis that they adopt strategies to combat global climate change that do not negatively affect the right to adequate food and freedom from hunger but rather promote sustainable agriculture as required under Art. 2 of the UNFCCC.

⁹⁹ UNEP, n.53, p.23

¹⁰⁰ Climate Action Network (CAN) , Using Human Rights as a weapon to hold governments and corporations accountable on climate change, A Report. Available online at : < <https://caneurope.org/report-using-human-rights-as-a-weapon-to-hold-governments-and-corporations-accountable-on-climate-change/> > accessed on 17 July 2024.

¹⁰¹ John Letzing & Minji Sung, Is Climate Inaction a Human Rights Violation? , World Economic Forum, 6 April 2024. Available online at : < <https://www.weforum.org/agenda/2024/04/climate-progress-human-rights-violation/> > accessed on July 17, 2024.; UNEP , n.53 , p. 23

current responsibility of emitting the GHGs instead of capability as argued for by Julia Dehm. She argues that those with historical and current responsibilities should support the ones with insignificant contributions and high levels of vulnerability, out of “obligation” and “out of culpability” not out of “capacity” and conflation with the already existing provision of international development aid.¹⁰²

iii) International Cooperation Obligation

The ICESCR requires parties to “take steps, individually and through international assistance and co-operation, especially economic and technical, to the maximum of its available resources, with a view to achieving progressively the full realization of the rights recognized in the present Covenant by all appropriate means.”¹⁰³ The UDHR and ICCPR also recognize an obligation of states to “promote universal respect for, and observance of” human rights and freedoms.¹⁰⁴ Finally, in the UN Charter, all UN member states “pledge themselves to take joint and separate action in co-operation with the Organization for the achievement of, among other things, universal respect for, and observance of, human rights and fundamental freedoms for all.”¹⁰⁵

Drawing on such antecedents, both the CESCR and the OHCHR have concluded that states have an obligation to address the extraterritorial impacts of environmental harm caused by activities within their jurisdiction.¹⁰⁶ These have been framed as “obligations of international cooperation,” and they require that states:

- Refrain from interfering with the enjoyment of human rights in other countries
- Take measures to prevent third parties (e.g. private companies) over which they hold influence from interfering with the enjoyment of human rights in other countries
- Take steps through international assistance and cooperation, depending on the availability of resources, to facilitate fulfillment of human rights in other countries,

¹⁰² Julia Dehm, Carbon Colonialism or Climate Justice? Interrogating the International Climate Regime from a TWAIL perspective, Vol.33, 2016, Windsor Yearbook of Access to Justice. Available online at : < <https://wyaj.uwindsor.ca/index.php/wyaj/article/view/4893> > accessed on July 17, 2024.

¹⁰³ Art.2 of the ICESCR

¹⁰⁴ UDHR Preamble; ICCPR Preamble. See also Vienna Declaration and Programme of Action, Adopted by the World Conference on Human Rights in Vienna, June 25, 1993, Art. 1.

¹⁰⁵ UN Charter, p.85

¹⁰⁶ OHCHR, Report of the Office of the United Nations High Commissioner for Human Rights on the Relationship between Climate Change and Human Rights, A/HRC/ 10/61, 15 January 2009. Available online at : < <https://documents.un.org/doc/undoc/gen/g09/103/44/pdf/g0910344.pdf?token=Gbv8dbouH4MoswcrVM&fe=true> > accessed on 17 July 2024.

including disaster relief, emergency assistance, and assistance to refugees and displaced persons

- Ensure that human rights are given due attention in international agreements and that such agreements do not adversely impact upon human rights.¹⁰⁷

The OHCHR has noted that these standards and principles are “consistent with and further emphasize” the principle of “common but differentiated responsibilities” contained in the UNFCCC, and the various provisions of the UNFCCC which call for international cooperation and financial and technical assistance between countries.¹⁰⁸

The obligation of international cooperation, in accord with an author, would likely require the following actions from countries with respect to climate change: (i) setting mitigation targets that are consistent with the full enjoyment of human rights and implementing those targets; (ii) funding adaptation measures in vulnerable countries; and (iii) crafting international agreements that do not adversely affect human rights.¹⁰⁹ Other components of this obligation may include the provision of financial assistance and/or technology transfer for climate change mitigation measures in countries that lack resources to implement those measures, and compensating people for harm incurred as a result of climate change.¹¹⁰

iv) Safeguarding Human Rights in Mitigation and Adaptation Activities

Finally, international law requires states and other governmental actors to ensure that the actions they undertake to mitigate or adapt to climate change do not violate human rights, as part of their duty to respect human rights. This obligation applies to both specific projects and broader policy decisions. For example, in the CESCR Statement on the World Food Crisis, the Committee “urged State parties to address the structural causes at the national and international levels, including by . . . implementing strategies to combat global climate change that do not negatively affect the right to adequate food and freedom from hunger, but rather promote sustainable agriculture, as required by Article 2 of the United Nations Framework Convention on Climate Change.”¹¹¹ The UNFCCC COP also explicitly recognized this issue in Art.8 of the Cancun

¹⁰⁷ Ibid , p. 86 (citing CESCR General Comments No. 12, No. 13, No. 14, No. 15).

¹⁰⁸ Art.3 (5), Art.4 (1) (c) of the UNFCCC.

¹⁰⁹ Marc Limon, Human Rights and Climate Change: Constructing a Case for Political Action, Vol.33, 2009, Harvard Environmental Law Review. Available online at : < https://www.academia.edu/7734145/Human_Rights_and_Climate_Change_Constructing_a_Case_for_Political_Action > accessed on July 17, 2024.

¹¹⁰ UNEP, n.53, p.25

¹¹¹ CESCR Statement on the World Food Crisis, pp. 12-13, UN Doc. E/C.12/2008/1 (May 18, 2008).

Agreements, which recognize that the Parties “should, in all climate change-related actions, fully respect human rights as enunciated in the outcome of the sixteenth session of the Conference of the Parties to the Convention.”¹¹² UNHRC Resolutions 18/22 and 26/27 include similar language.¹¹³

The Cancun Agreements also include several paragraphs outlining principles for how Parties should address and mitigate the “economic and social consequences of response measures” on vulnerable groups and developing countries. For example, paragraph 89 urges developed country Parties to:

“strive to implement policies and measures to respond to climate change in such a way as to avoid negative social and economic consequences for developing country Parties, taking into account Article 3 of the Convention, and to assist these Parties to address such consequences by providing support, including financial resources, transfer of technology and capacity-building, in accordance with Article 4 of the Convention, to build up the resilience of societies and economies negatively affected by response measures.”¹¹⁴

The Paris Agreement of 2015 also acknowledges in its preambular paragraph that “...parties should, when taking climate action to address climate change, respect, promote and consider their respective obligations on human rights, the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development as well as gender equality, empowerment of women, and intergenerational equity.”¹¹⁵

C. Obligations to Specific Groups

The principle of non-discrimination is included in the UDHR, the ICCPR, and the ICESCR.¹¹⁶ In accordance with this principle, countries must ensure that the measures they take to address climate change (and the measures they take to respect, protect, and fulfill human rights) are

¹¹² Art. 8 of the Cancun Agreement.

¹¹³ UNHRC Res. 18/22, Human Rights and Climate Change, A/HRC/RES/18/22; UNHRC Res. 26/27, Human Rights and Climate Change, A/HRC/Res./26/27

¹¹⁴ Para. 89 of the Cancun Agreement, 2010.

¹¹⁵ Preambular Paragraph, Paris Agreement, 2015

¹¹⁶ ICESCR Art. 2(2); ICCPR Art. 26; UDHR Art. 7.

implemented in a non-discriminatory fashion. These and other agreements also recognize that individuals who are part of certain groups—notably, women, indigenous groups, and children—are entitled to special protections.

The UNFCCC does not speak of specific individuals or groups, but does recognize that some countries and ecosystems may be particularly vulnerable to the effects of climate change, and as such, they warrant special consideration and adaptation assistance.¹¹⁷ In addition, the Cancun Agreements provide more detailed instructions on how the parties should address the impacts of climate change on people who are vulnerable to climate change as a result of geography, gender, age, indigenous or minority status, and disability.¹¹⁸

(i) Women

The Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) provides a more detailed framework for protecting the rights of women and ensuring that they have a voice in public decisions. Art. 14(2) of the Convention, for example, mandates “all appropriate measures to eliminate discrimination against women in rural areas in order... that they participate in and benefit from rural development,” and requires participation “at all levels” as well as access to adequate living conditions.¹¹⁹ However, the Convention is more geared towards preventing acts of overt discrimination, as opposed to addressing the discriminatory effects of actions on women and as such the Convention does not provide much guidance on government obligations relating to the disproportionate burden that women will likely experience as a result of climate change¹²⁰. The Cancun Agreements recognize that gender equality and the effective participation of women are important for effective action on all aspects of climate change.¹²¹ They also discuss the need to address gender considerations in the implementation of REDD projects.¹²² However, they do not outline any specific requirements for countries to ensure that women are adequately involved in the various phases of government decision-making related to climate change mitigation and adaptation, or to address the potentially discriminatory effect of certain actions on women.¹²³

¹¹⁷ UNFCCC Arts. 3(2), 4(4), 4(10).

¹¹⁸ Cancun Agreements (2010) pp.7, 12 & 18.

¹¹⁹ Art.14(2) of CEDAW

¹²⁰ UNEP, n.53, p.27

¹²¹ Cancun Agreement, p.7

¹²² Ibid, p.72

¹²³ UNEP, n. 53, p.27

ii) Children

The Cancun Agreements recognize the need to “fully account” for the adverse effects of climate change on children, but do not contain additional instructions on how countries should do this. The Convention on the Rights of the Child outlines a variety of additional requirements that are relevant to the protection of children in the context of climate change. Article 24 is most relevant—it recognizes the “right of the child to the enjoyment of the highest attainable standard of health” and outlines how states should ensure full implementation of the right.¹²⁴ For example, states “shall take appropriate measures” to “combat disease and malnutrition, including within the framework of primary health care, through, inter alia, the application of readily available technology and through the provision of adequate nutritious foods and clean drinking-water, taking into consideration the dangers and risks of environmental pollution.”¹²⁵

In addition, the CESCR has directed states to “adopt comprehensive and integrated strategies and programmes to ensure that there is sufficient and safe water for present and future generations.”¹²⁶ The UNFCCC also has an intergenerational focus, with the Parties agreeing that they “should protect the climate system for the benefit of present and future generations of humankind.”¹²⁷

iii) Indigenous Peoples

OHCHR has recognized that climate change “poses a serious threat to indigenous peoples, who often live in marginal lands and fragile ecosystems which are particularly sensitive to alterations in the physical environment.”¹²⁸ This threat could potentially undermine the right to self-determination for indigenous peoples, which is recognized in both the ICCPR and the ICESCR,¹²⁹ as well as the rights outlined in the UN Declaration on the Rights of Indigenous Peoples. The Cancun Agreements explicitly refer to indigenous rights, and call for public participation of indigenous peoples in decisions about forestry and land use projects.¹³⁰

The UN Declaration on the Rights of Indigenous Peoples contains particularly robust requirements for states to engage and obtain consent from indigenous peoples before undertaking

¹²⁴ Art. 24 of the Convention on the Rights of the Child

¹²⁵ CRC Art. 25(2) (c).

¹²⁶ CESCR General Comment No. 15, UN Doc. E/C.12/2002/11 (Jan. 20, 2003).

¹²⁷ UNFCCC Art. 3(1).

¹²⁸ OHCHR, n. 106, p. 68

¹²⁹ Art. 1 of the ICCPR; Art. 1 of the ICESCR

¹³⁰ Decision -/CP.16, Outcome of the work of the Ad Hoc Working Group on Long -term Cooperative Action under the Convention .available online at : < https://unfccc.int/files/meetings/cop_16/application/pdf/cop16_lca.pdf >.

actions that will adversely affect those peoples. For example, it specifies that indigenous peoples shall not be relocated from their lands or territories without “free, prior and informed consent... and after agreement on just and fair compensation and, where possible, with the option of return.”¹³¹ It also requires states to provide redress measures in the event that land or property is taken from these people without their consent.¹³² These provisions are particularly relevant when governments are implementing or authorizing mitigation and adaptation projects that will affect lands or resources owned or used by indigenous peoples. Indeed, the Inter-American Court of Human Rights has decided several cases involving the obligation to protect indigenous rights in the context of projects that affect indigenous lands and resources that would appear applicable in these circumstances.¹³³

In addition, the Declaration recognizes that “Indigenous peoples have the collective right to live in freedom, peace and security” and a corresponding right “not to be subjected to forced assimilation or destruction of their culture.”¹³⁴ Climate change will likely have a devastating effect on many of the ecosystems that indigenous people rely on for their livelihoods and cultural identity, and as such, the effects of climate change could be construed as a violation of this principle. Although it may be difficult to establish causation for the purposes of bringing a successful claim before an international or regional human rights court, it is nonetheless reasonable that major emitters do have an obligation to curtail their emissions so as to avoid the destruction of indigenous cultures.

2.3. The Obligation of Non-State Actors under International Human Rights Law

Under International Human Rights Law states are held duty bound to protect the human rights of their individual citizens against the actions of other actors and thus must prevent, punish and remedy rights violations by non-State actors. And these obligations are known as guarantee and protection obligations.¹³⁵ The core international human rights treaties do not directly address the obligations of private parties to respect human rights, but there are some standards for non-state actors that countries are beginning to incorporate into domestic law. These standards are enshrined in the UN Guiding Principles on Business and Human Rights (the “Ruggie

¹³¹ Art.10 of the Universal Declaration on the Rights of Indegenou People

¹³² Ibid , Art.8, 11

¹³³ See, e.g., *Saramaka People v. Surin*, 2007 Inter-Am. Ct. H.R. (ser. C) No. 172, para. 95 (Nov. 28, 2007) cited in UNEP, *Climate Change and Human Rights* (UNON Pulishing, 2015).

¹³⁴ UNDRIP , Art.7 & 8

¹³⁵ Nicolas C. Santarelli, *Non-State Actors’ Human Rights Obligations and Responsibility under International Law*, Vol. 15 (2008), *REVISTA ELECTRÓNICA DE ESTUDIOS INTERNACIONALES*. Available online at :<

Principles”), proposed by UN Special Representative John Ruggie and endorsed by the UN Human Rights Council in June 2011.¹³⁶ The Ruggie Principles provide additional guidance to countries on how to fulfill their obligations in this context, as well as principles that are directly applicable to private actors.

The foundational principles for private actors include, inter alia:

1. Businesses and non –state actors should respect human rights by avoiding infringing on the human rights of others and addressing any adverse human rights impacts with which they are involved.
2. The rights that must be respected by businesses include, at minimum, the rights recognized in the International Bill of Rights (UDHR, ICCPR, and ICESCR) and the principles concerning fundamental rights set out in the International Labour Organization’s Declaration on Fundamental Principles and Rights at Work.
3. To meet their human rights responsibilities, businesses should implement policies and processes appropriate for their size and circumstances, so as to safeguard human rights in all aspects of their operation.
4. Businesses should also carry out human rights due diligence, which includes assessing actual and potential human rights impacts, integrating and acting upon the findings, tracking responses, and communicating how impacts are addressed.
5. Where businesses identify that they have caused or contributed to adverse impacts, they should provide for or cooperate in their remediation through legitimate processes.¹³⁷

It is worth noting that non-state obligations with respect to human rights are also outlined in the Oslo Principles (which deal specifically with climate change).¹³⁸ In addition, the International Bar Association (IBA) published a recent report on advancing climate justice which contains recommendations on how corporations can implement the Ruggie Principles through the implementation of corporate responsibility policies and other actions.¹³⁹

¹³⁶ UNHRC Res. 17/4, Human Rights and Transnational Corporations and Other Business Enterprises, UN Doc. A/HRC/Res/17/4 (July 6, 2011).

¹³⁷ Guiding Principles on Business and Human Rights, Part II: The Corporate Responsibility to Respect Human Rights (2011).

¹³⁸ Oslo Principles , pp.27-30

¹³⁹ IBA Preseindetial Task Force for Climate Change Justice and Human Rights, Achieving Justice and Human Rights in an Era of Climate Disruption (2014)

2.4. The Right to Development as a Theoretical Framework for Addressing the Climate Crisis

In this dissertation, it is believed that the United Nations Declaration on the Right to Development (UNDRD) is adequately suited to comprehensively address the climate injustice concerns associated with the global climate policy development that is continually evolving. In its Sixth Assessment Report, the IPCC for the first time in its publication history used the term “colonialism” in its summary.¹⁴⁰ The report underlined that historic and ongoing forms of colonialism drove the climate crisis explaining also that colonialism has helped to increase the vulnerability of specific people and places to the effects of climate change.¹⁴¹ Colonialism is not only cited as characterizing the underlying root of the climate crisis but also as a characteristic feature of current policy measures being taken to address the crisis.¹⁴² Apart from embodying colonial character (often witnessed in the form of land grabs, compromising the right to development of indigenous and local people and rights violations), climate policy is criticized as distributing obligations unfairly or inequitably as is the case with the Kyoto protocol and the Paris Agreement¹⁴³. In the context of such realities where colonialism is authoritatively cited as characterizing not only the underlying causes of the problem but also the response measures of the climate crisis, it is argued that adopting the human right to development as theoretical

¹⁴⁰ Harriet Mercer, ‘Colonialism: Why leading climate scientists have finally acknowledged its link with climate change’ (The Conversation, 22 April 2022) < <https://theconversation.com/colonialism-why-leading-climate-scientists-have-finally-acknowledged-its-link-with-climate-change-181642> > accessed on 24 March 2023 ; Yessenia Funes, ‘Yes, Colonialism caused Climate Change, IPCC Reports ’ (Atmos, 4 April 2022) < <https://atmos.earth/ipcc-report-colonialism-climate-change/> > accessed on 24 March 2023.

¹⁴¹ Ibid

¹⁴² For more on the colonial character of the climate policy measures see H. Bachram, *Climate Fraud and Carbon Colonialism: The New Trade in Greenhouse Gases*, Vol.5, No. 4, (2004), Capitalism Nature Socialism. Available online at: < <https://www.tandfonline.com/doi/abs/10.1080/1045575042000287299> > accessed on 24 March 2023; A.G. Bumpus & D.M. Liverman, ‘Carbon Colonialism? Offsets, Greenhouse Gas Reductions, and Sustainable Development’ in Richard Peet et al., *Global Political Ecology*, Rutledge, (2011) ; J. Davis et al, *Anthropocene, Capitalocene,... Plantationocene? : A Manifesto for Ecological Justice in an Age of Global Crisis*, Vol.13, (2019), *Geography Compass*. Available online at : < <https://par.nsf.gov/servlets/purl/10180270> > accessed on 1 April, 2023.

¹⁴³ K. Smith, *Offsets Under Kyoto : A Dirty Deal for the South* in Steffen Bohm & Siddhartha Dabhi (eds.), *Upsetting the Offset : The Political Economy of the Carbon Markets*, (Mayfly Book , 2009); L. Lohmann, *Neoliberalism and the Calculable World: The Rise of Carbon Trading* in Steffen Bohm & Siddhartha Dabhi (eds.), *Upsetting the Offset : The Political Economy of the Carbon Markets*, (Mayfly Book , 2009); J. Dehm, *Reflections on Paris : Thoughts towards a Critical Approach to Climate Law*, (2018), Vol.61 *Revue québécoise de droit international*. Available online at : < <https://www.proquest.com/openview/298c1dbc250da22876bd2c0dcffeda86/1?pq-origsite=gscholar&cbl=2069359> > accessed on 25 March 2023; Sara Ullstrom, ‘The Political Ecology of Carbon : Commodification, Colonialism, and debt in carbon offsetting under the Clean Development Mechanism’ (Bachelor’s Degree Thesis , Lund University, 2017).

framework would adequately address key issues of the climate injustice concerns associated with the climate crisis and its policy development.

The United Nations Declaration on the Right to Development (UNDRD) introduces the provisions of the Declaration by first underscoring the importance of being mindful about such principles as those that necessitate international cooperation in solving international problems of economic, social, cultural or humanitarian nature...recalling the relevant UN conventions, treaties, resolutions relating to ...the integral development of the human being, economic and social progress and development of all peoples including the need to recall those instruments concerning decolonization..., and the further promotion of friendly relations and cooperation among states in accord with the Charter under its preamble.¹⁴⁴ The Declaration also stipulates its provisions by recalling, under its preamble, the right of peoples to self-determination and full and complete sovereignty over their natural wealth and resources. A still key consideration, in the light of which the provisions of the Declaration were meant to be read, states that;

the elimination of the massive and flagrant violations of the human rights of the peoples and individuals affected by situations such as those resulting from colonialism, neo-colonialism, apartheid, all forms of racism and racial discrimination, foreign domination and occupation, aggression and threats against national sovereignty, national unity and territorial integrity and threats of war would contribute to the establishment of circumstances propitious to the development of a great part of mankind.¹⁴⁵

Here, it needs to be noticed that it is “a particular development model”¹⁴⁶ that fundamentally caused the problem of climate change. A development model that does not recognize the existence of (environmental) limits to economic growth, is based on the extraction and use of fossil fuels to propel the expansion of industrial capitalism and a development model with roots in colonialism and imperialist ambitions is referenced as accounting for the emergence of the

¹⁴⁴ Preamble of the UN Declaration of the Right to Development.

¹⁴⁵ Ibid

¹⁴⁶ D. H. Meadows et al, *The Limits to Growth: A Report for the Club of Rome's Project on the Predicament of Mankind*, (Universe Book, 1972); (Franchao Sun, 'Is the Fundamental Cause of Climate Change Capitalist Economic Growth?' (Global Social Challenges, 5 May 2021), < <https://sites.manchester.ac.uk/global-social-challenges/2021/05/05/is-the-fundamental-cause-of-climate-change-capitalist-economic-growth/> > ; P. Newell & M. Paterson, *Climate Capitalism: Global Warming and the Transformation of the Global Economy*, (Cambridge University Press, 2010) ; F. Sultana, The Unbearable Heaviness of Climate Coloniality, Vol.99, (2022), *Political Geography*. Available online at :< <https://www.sciencedirect.com/science/article/abs/pii/S096262982200052X> > accessed on 25 March 2023.)

climate crisis.¹⁴⁷ Given these fundamental causes of the climate crisis, the primary responsibility of the industrial capitalist states of the world in contributing to the problem, their unequal positions both in terms of levels of economic development, scientific and technological advancement and political power which they use in influencing states in the economic South to agree to their terms in climate negotiations, it is directly relevant that the right to development that recognizes the primary roles of the developed world in contributing to the climate crisis is put forth as constituting a theoretical solution to the climate injustice that characterizes existing climate policy development.

The right to development is granted to both individual human beings and peoples¹⁴⁸ and implies the full realization of the right of peoples to self-determination which includes the exercise of their inalienable right to full sovereignty over their natural wealth and resources.¹⁴⁹ Furthermore, the realization of the right to development is conditioned upon the full respect for the principle of international law concerning friendly relations and cooperation among states and their duty to cooperate with each other in ensuring development and eliminating obstacles to development.¹⁵⁰ In addition, the realization of the rights and the fulfillment of the duties of States is seen to be effectuated in a new international economic order based on sovereign equality, interdependence, and mutual interest and cooperation.

Moreover, the Declaration under its article -4(2), stipulates that “sustained action is required to promote more rapid development of developing countries ” and in this connection it regards the complementary role of international cooperation to the development effort of developing countries as being essential by way of providing the means and facilities that foster their comprehensive development.¹⁵¹ This provision is important in terms of framing both the development of mechanisms of addressing the climate crisis in a manner that addresses the unequal positions of the countries in the Global South and the provision of climate change adaptation fund needed to support poor developing countries not only cope with the adverse impacts of the climate crisis but also build climate resilient economies out obligation of those with primary responsibility for having caused the problem.

¹⁴⁷ Ibid

¹⁴⁸ Article -1(1) of the UN Declaration on the Right to Development

¹⁴⁹ Ibid, sub-art.(2)

¹⁵⁰ Article -3(2) & (3) of the UN Declaration on the Right to Development.

¹⁵¹ Article-4 (2) of the UN Declaration on the Right to Development.

Another key article that is directly relevant in terms of preventing human rights violations, land grabs and appropriation of lands in the South for “ostensible environmental ends” associated with the implementation of CDM and REDD+ projects¹⁵² is article-5 of the Declaration which states as follows;

States shall take resolute steps to eliminate the massive and flagrant violations of the human rights of peoples and human beings affected by situations such as those resulting from apartheid, all forms of racism and racial discrimination, colonialism, foreign domination and occupation, aggression, foreign interference and threats against national sovereignty, national unity and territorial integrity, threats of war and refusal to recognize the fundamental rights of peoples to self –determination.¹⁵³

In this dissertation, it is believed that the development of the global North is rooted in the colonial and historical accumulation of capital and fossil fuel based industrialization with the resultant effect of making the remaining atmospheric space scarce to support the right to development of the poor developing countries of the world.¹⁵⁴ Furthermore, it is contended that not only is it true that the adverse effects of climate change (explained in terms of the historical development of the global North) compromise a range of human rights of people in the global South due to their relative vulnerability but also curtail any development efforts being undertaken as these countries will be compelled to allot resources meant to building resilience instead of channeling them for further realizing development goals. So neither a 5.2 % reduction in emission of GHGs grandfathered in the year 1990 as stipulated in the Kyoto Protocol¹⁵⁵ nor a

¹⁵² J. Dehm, *Authorizing Appropriation? : Law in Contested Forested Spaces* in Christina Voigt (ed.), *Research Handbook on REDD+ and International Law*. (Edward Elgar, 2019) p. 496 ; Indigenous Environmental Network, ‘UN promoting potentially genocidal policy at World Climate Summit’ (8 December 2015).available online at : < <https://www.ieneearth.org/un-promoting-potentially-genocidal-policy-at-world-climate-summit/> > accessed on 28 March, 2023; M. Checker, *Double Jeopardy: Pursuing the Path of Carbon Offsets and Human Rights Abuses* in Steffen Bohm & Siddhartha Dabhi (ed.). *Upsetting the Offset: The Political Economy of Carbon Markets*, (Mayfly Books, 2009), p.41; T. Gilbertson & O. Reyes, ‘Carbon Trading: How it works and why it fails’ (Occasional Paper Series, Uppsala, 2009).

¹⁵³ Article -5 of the UN Declaration on the Right to Development.

¹⁵⁴ C.G. Gonzales, *Racial Capitalism and the Anthropogenic* in Sumudu A. Atapattu et al (eds.). *The Cambridge Handbook of Environmental Justice and Sustainable Development*. (Cambridge University Press, 2021); S. Bohm et al, ‘Greening Capitalism? A Marxist Critique of Carbon markets’ (2012), Vol. 0(0) *Organization Studies*. Available online at: < <https://core.ac.uk/download/pdf/16387374.pdf> > accessed on 12 April 2023; J. Hickel et al., ‘Imperialist appropriation in the world economy: Drain from the global South through unequal exchange 1990 -2015.’ (2022) Vol. 73 *Global Environmental Change*. Available online at: < <file:///C:/Users/Fifi/Downloads/1-s2.0-S095937802200005X-main.pdf> > accessed on 12 April, 2023.

¹⁵⁵ At that time, the IPCC suggested that there would need to be a rapid 50 to 70 % emission reductions if the world were to stand a chance of averting devastating climate change. Furthermore, it has been pointed out that the IPCC’s earlier calculations failed to take account of ‘slow feedback mechanisms that increased temperature rise caused by

voluntary pledge in emission reductions as stipulated in the Paris Agreement would suffice a just climate policy to compensate for the compromised right to development of poor developing countries given that a switch towards green development is more expensive than its realization via reliance on cheaper energy sources such as those of the fossil fuels.

The right to development is backward looking¹⁵⁶ as it traces historical roots of development of the countries in global North and helps us see how the colonial powers realized development in violation of article -5 of the UN Declaration on the right to development. It is also powerful because it sheds lights on how a particular mode of development initially involving the institutionalization of large scale plantations in newly conquered lands intensively worked by slaves from the African continent and later the expansion of fossil fuel based industrial capitalism with its imperial ambitions led to the emergence of such global environmental problem as the climate crisis¹⁵⁷. In this connection, the right to development proves to be a useful framework work as it relies on the United Nations Charter for its normative foundation where the principle of of equal rights and self –determination of peoples are recognized, Venna Declaration and Program of Action where the right to development is meant to be fulfilled to equitably meet the developmental and environmental needs of present and future generations and fostering the cultivation of equitable international economic relations among nations.¹⁵⁸ Moreover, a “tangible” link between the right to development and sustainability has been made in the 2030 Agenda for

greater GHG concentrations. A still important matter relates to scientists efforts to devising a single unit via which the impact of one GHG is compared simply with the another and then bought and sold in the form of pollution permits “downplaying the unpredictable, complex and non-linear impacts of climate change to render them easier for policy makers and markets to digest” as explained by Tamra Gilbertson and Oscar Reyes. For detailed discussion see J. Hansen et al, Target Atmospheric CO₂: Where Should Humanity Aim? (2008) Vol.2 The Open Atmospheric Science Journal. Available online at :< <https://openatmosphericsciencejournal.com/contents/volumes/V2/TOASCIJ-2-217/TOASCIJ-2-217.pdf> > accessed on 1 April, 2023; ‘T. Gilbertson and O. Reyes, Carbon Trading: How it works and why it fails’ (Occasional Paper Series, Uppsala, 2009).

¹⁵⁶ Henry Shue’s perspective talks about the need to work on luxury emissions in the future climate mitigation regulatory scheme instead of consideration of luxury emissions and associated standard of living of peoples in the global North ; the Contraction and Convergence model speaks of more deeper cuts in GHGs emissions of the developed world in the future climate mitigation regulatory regime; the Greenhouse Development Right framework operationalizes development in terms of per capita income which the countries in global South ought to realize in the future development efforts while addressing climate mitigation goal ; and both the distribution of aggregate ecological space and the carbon investment rights perspective put forward climate mitigation schemes that are beneficial to the countries in the global South in trying to inform future climate mitigation regime.

¹⁵⁷ J. Davis et al, Anthropocene, Capitalocene ...Plantationocene? : A Manifesto for Ecological Justice in an Age of Global Crisis, (2019) Vol.13 Geography Compass. Available online at: < <https://par.nsf.gov/servlets/purl/10180270> > accessed on 31 March 2023; L.Sealey –Huggins, ‘The Climate Crisis is a racist crisis’: Structural Racism, Inequality and Climate Change in Azeezat Johnson et al., (eds.). *The Fire Now: Anti-racist Scholarship in Times of Explicit Racial Violence* (Zed Books, 2018).

¹⁵⁸ UNHRC, Report of the Special Rapporteur on the Right to Development, A/HRC/36/49, 2 August 2017. available online at : < <https://www.refworld.org/reference/themreport/unhrc/2017/en/118740> > accessed on 27 July, 2024.

Sustainable development¹⁵⁹ affirming the position that the right to development endorses the idea that development models can not be decoupled from environmental sustainability within the limits of which it operates. The right to development is also in congruent with the Sendai Framework for Disaster Risk Reduction 2015-2030, the Addis Ababa Action Agenda of the Third International Conference on Financing for Development, and in various Human Rights Council Resolutions.¹⁶⁰

The four overarching principles, which are derived from the UN Declaration on the Right to Development and other instruments are: a) self-determination; b) intersectionality; c) intergenerational equity and; d) fair –distribution.¹⁶¹ The right to development also incorporates, inter alia, such principles of international human rights law as the principle of non-discrimination and fundamental freedom, and financing for sustainable development.¹⁶² Furthermore, the right to development recognizes the human person as the central subject of development and empowers persons and people to determine the substantive contents of development priorities and their preferred methods for realizing them.¹⁶³ Again, in accord with the guideline for the implementation of the right to development, meaningful participation is how the interests of the right holders are assessed and that those interested are safeguarded.¹⁶⁴

Moreover, ensuring participation entails “not merely consulting individuals and communities but placing right holders at the center of decision making in matters that affect their social, economic, cultural and political development”.¹⁶⁵ In addition, the right to development entails not merely brining about economic growth where people’s development priorities are not met but contributing to their holsitic development where their social, cultural, economic and polictical development interests are materialized. Neither should development be seen as being sequential whereby economic growth is initially sought to later finance social policies. According to the right to development, outcomes and methodologies are assessed not only

¹⁵⁹ Ibid

¹⁶⁰ Ibid

¹⁶¹ UNHRC, Reinigorating the Right to Development: A Vision for the Future, Report of the Sepcial Rapporteur on the Right to Development, Surya Deva, A/HRC/54/27, 4 August 2023. Available online at : < <https://researchers.mq.edu.au/en/publications/reinigorating-the-right-to-development-a-vision-for-the-future> > accessed on 28 July 2024.

¹⁶² UNHRC, Report of the Special Rapportuer on the Right to Development, A/HRC/42/38, 2 July 2019. Aavialbale online at : < <https://www.ohchr.org/sites/default/files/OHCHR--web--planches.pdf> > accessed on 27 July 2024.

¹⁶³ Ibid

¹⁶⁴ Ibid

¹⁶⁵ Ibid

against universal measurements, but also against context-specific measurements¹⁶⁶. This context based approach to monitoring and evaluating development policies and projects scrutinizes whether policies are effectively improving the wellbeing of “the human person,” in compliance with the Declaration on the Right to Development. Accountability mechanisms are also put in place in case a person’s wellbeing is infringed upon.

The implementation guideline of the right to development underscores the importance of promoting active, meaningful, and informed participation where, at the national level, States should design and implement development projects after holding meaningful consultations to identify the development priorities of the communities in the project area and benefit –sharing arrangements that would be suitable for those affected.¹⁶⁷ Whereas, at the international level, States should guarantee that all stakeholders are meaningfully included in the process of negotiating international agreements.

Non –state actors that produce information as regards development projects should provide the information transparently. Such information should be provided as a matter of priority for local communities in their languages and in accessible formats where the information can be translated to local and indigenous languages.¹⁶⁸ Technical information should be presented in a manner that could be easily understood by laypersons and it should be made available online. Mechanisms of ensuring accountability and providing remedies in cases where rights are violated do constitute the only vehicle via which the right to development is put into effect.

The other dimension of the right to development involves doing away with inequality and discrimination and as such affirms the principles of the international human rights norms that include the right to equality and the principles of non-discrimination. The concepts of discrimination, equality and the equitable distribution of the benefits of development are enshrined in the Declaration on the Right to Development where its preamble declares stating that “equality of opportunity for development is a prerogative both of nations and of individuals who make up nations” and article 2(3) reaffirms that States have the duty to formulate appropriate national development policies to promote the well-being of the entire population and of all individuals , and to ensure the fair distribution of benefits resulting from.¹⁶⁹ Moreover,

¹⁶⁶ Ibid

¹⁶⁷ Ibid

¹⁶⁸ Ibid

¹⁶⁹ Art.2 (3) of the Universal Declaration on the Right to Development.

article -8 of the UNDRD states that the fair distribution of income in the context of “economic and social reforms should be carried out with a view to eradicating all forms of social injustices” and that “states shall ensure, inter alia, equality of opportunity for all in their access to basic resources, education, health services, food, housing, employment and the fair distribution of income.”¹⁷⁰ Inequality matters for the right to development because it threatens the long-term social and economic development and impedes poverty reduction and impacts the ability of individuals and communities to participate in, contribute to and enjoy economic, social, cultural and political development.¹⁷¹

Multiple bearers of duties and responsibilities under the Declaration on the Right to Development include all human beings who have a responsibility for development (art.2 (2), and all States have tripartite duties to realize the right to development as stipulated under articles 2-8 of the Declaration which involves national, extraterritorial and collective levels.¹⁷² Though not explicitly stated in the Universal Declaration on the Right to Development, the evolving nature of international human rights law has it that international organizations and non-State actors too have independent duties and responsibilities. Accordingly, the United Nations agencies, international financial institutions, public development banks, businesses, civil society organizations, universities and media have duties and responsibilities under the UNDRD.

The right to development is regaining its due place in the arena of the international human rights law consequent upon failure of the existing economic order which left millions of people behind in a systematic way. This brought about the call for a new transformative order, including a new social contract.¹⁷³ The right to development is also closely connected to past colonization, which directly undermined the capabilities of many people in the global South to realize their right to development.¹⁷⁴ The report of the current rapporteur on the right to development further states that “despite [the adversities of colonialism], many States that benefited directly from the exploitation of people and resources during colonization continue to deny their duty to correct a historical injustice: peoples and States that were victims of colonization deserve not only a sincere public apology and reparation, but also financial and

¹⁷⁰ Art .8 of the UDRD

¹⁷¹ UNHRC, Report of the Special Rapporteur on the Right to Development, A/HRC/42/38, 2 July 2018. Available online at: < <https://www.ohchr.org/sites/default/files/OHCHR--web--planches.pdf> > accessed on 27 July 2024.

¹⁷² UNHRC, n. 161, p.6

¹⁷³ Ibid

¹⁷⁴ Ibid

technological support as part of a duty of cooperation and international solidarity”¹⁷⁵. This also arguably extends to the human, development and material costs of the climate crisis being witnessed in the global South as a result of unfair historic and current exploitation of the atmospheric carbon sequestering capacity by the global North.

Finally, the principles that human rights are indivisible, interrelated and interdependent also apply to the right to development. The right to development entails the realization of all human rights bent on the principles of equality and non - discrimination. In accord with the right to development all citizens and peoples within a State should be provided with equal opportunities so as to enjoy their rights to food, housing, work, health and education. It needs to be born in mind that the right to development is inherently compatible with such rights as the right to adequate standard of living and the right to education. For example, if we were to look into the 2030 Agenda for Sustainable Development Goals and Targets, which is the normative foundation of the right, we clearly see how the specific targets such as Goal -1: end poverty in all its forms every where; Goal-2: end hunger, achieve food security, improve nutrition and promote sustainable agriculture; Goal- 3: ensure healthy lives and promote wellbeing for all at all ages; Goal -10: reduce inequality within and among countries and Goal -13: take urgent action to combat climate change and its impacts align, substantively with the end of the realization of the right to adequate standard of living enshrined in the ICESCR.¹⁷⁶ The compatibility and alignment of the right to development with the right to education, which is also the focus of investigation and analysis in this research, is plainly substantiated if one reflects on , again , the targets of Agenda 2030 SDGs /targets namely Goal -4: ensure inclusive and equitable quality education and promote life long learning opportunities for all.

The United Nations General Assembly (UNGA) adopted, on 28 of July, 2022, a landmark resolution recognizing the human right to a clean, healthy and sustainable environment.¹⁷⁷ The resolution was adopted with unprecedented support (161 votes in favor, no votes against and 8 abstention) manifesting the fact the right does already have a recognition by member states with

¹⁷⁵ Ibid

¹⁷⁶ UN, Transforming Our World: The 2030 Agenda for Sustainable Development, A/RES/70/1, Available online at: <https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf> accessed on 3 August 2024.

¹⁷⁷ UNGA, The human right to a clean, healthy and sustainable environment, A/RES/76/300 (28 July 2022).

the 156 of them protecting it at national and regional levels.¹⁷⁸ The right to a healthy environment is understood as constituting both substantive and procedural rights.¹⁷⁹ While the substantive elements include clean air; a safe and stable climate; access to safe water and adequate sanitation; healthy and sustainably produced food; non-toxic environment in which to live, work, study and play; and a healthy biodiversity and ecosystems¹⁸⁰, the procedural elements include access to information, the right to participate in decision making, and access to justice and effective remedies, including the secure exercise of these rights free from reprisals and retaliation.¹⁸¹ The full realization of the right to a healthy environment also requires international cooperation, solidarity and equity in environmental action including resources mobilization as well as recognition of extraterritorial jurisdiction over human rights harms caused by environmental degradation.¹⁸²

It is important, here, to note that both the right to development and the right to a healthy environment are already protected under the African Charter on Human and Peoples Rights and the FDRE's Constitution. Article-22 (1) of the ACHPR states that "All peoples shall have the right to their economic, social and cultural development with due regard to their freedom and identity and the equal enjoyment of the common heritage of mankind."¹⁸³ Sub-article -2 of the same article states that "states shall have the duty, individually and collectively, to ensure the exercise of their right to development."¹⁸⁴ Whereas article -24 of the Banjul charter protects the right of all peoples to a general satisfactory environment for their development.¹⁸⁵ Moreover, article -43 of the Ethiopian constitution guarantees the right to development stating that "the peoples of Ethiopia as a whole, and each nation, nationality and people in Ethiopia in particular have the right to improved living standards and to sustainable development."¹⁸⁶ Furthermore, the article protects the rights of nationals to participate in national development and be consulted in

¹⁷⁸ OHCHR, UNEP and UNDP, What is the Right to a Healthy Environment? : Information Note. Available online at: < <https://www.undp.org/sites/g/files/zskgke326/files/2023-01/UNDP-UNEP-UNHCHR-What-is-the-Right-to-a-Healthy-Environment.pdf> > Accessed on 1 April, 2023.

¹⁷⁹ Ibid

¹⁸⁰ A/HRC/43/53: Good Practices on the Right to a safe, clean, healthy and sustainable environment, (30 December, 2019). Available online at : < <https://www.ohchr.org/en/documents/thematic-reports/ahrc4353-good-practices-right-safe-clean-healthy-and-sustainable> > accessed on 1 April, 2023.

¹⁸¹ OHCHR, UNEP and UNDP, n. 92.

¹⁸² Ibid

¹⁸³ Article -22(1) of the African Charter on Human and Peoples Rights

¹⁸⁴ Sub-article 2 of the Article -22 of the ACHPR

¹⁸⁵ Article- 24 of the Banjul Charter

¹⁸⁶ Article -43(1) of the Ethiopian Constitution

policies and projects affecting their community.¹⁸⁷ Sub-article-3 and 4 of the same article stipulate that all international agreements concluded by the State shall protect and ensure Ethiopia's right to sustainable development¹⁸⁸ and that the basic aim of development is to enhance the capacities of citizens for development and to meet their basic needs.¹⁸⁹ The constitution of the country also protects the right to a clean and healthy environment under article -44 stating that "all persons have the right to a clean and healthy environment."¹⁹⁰ So in spite of the fact that the international human right to development is declaratory in nature on the international plane it is bindingly anchored in both the African Charter on Human and Peoples Right and the Constitution of the Federal Democratic Republic of Ethiopia. It is also true that the international human right to a clean, healthy and sustainable environment is bindingly protected under the ACHPR¹⁹¹ and the Ethiopian constitution.

While being aware that the international human right to a clean, healthy and sustainable environment does have a direct bearing on the problem of the climate crisis as a normative tool this dissertation purports to rely on the provisions of the UN Declaration on the Right to Development, the provision of the same right under the ACHPR, and the Ethiopian Constitution as a theoretical framework that resolves the climate injustice associated with the existing international climate change regime and the implementation of its climate mitigation instruments. Since the question is not only about how the climate crisis is overcome in a manner that is fair but also about how climate policies are observed in a manner that complies with international human rights standards as underscored under the preamble of the Paris Agreement, the dissertation also adopts and guides its analysis relying on states' human rights obligations in the implementation of climate policy.

In this chapter, the human rights –based approach to climate change and development was discussed as a theoretical framework to address the climate crisis and human rights violations associated not only with it but government responses geared at addressing the problem. The recognition of the universal right to development both at the regional and domestic jurisdictions is put forth as meaningfully grounding the adopted framework in spite of the fact that, at the

¹⁸⁷ Sub-article-2 of article -43 of the Ethiopian Constitution

¹⁸⁸ Sub-article -3 of article 43 of the Ethiopian Constitution.

¹⁸⁹ Sub-article -4 of article -43 of the Ethiopian Constitution.

¹⁹⁰ Article -44 (1) of the Constitution of Ethiopia.

¹⁹¹ The specific provision under the African Charter on Human and Peoples Rights is slightly different as it states that peoples have the right to a general satisfactory environment for their development.

international level, the right to development is declaratory in nature. The provisions of the UN Declaration on the Right to Development clearly necessitates that states rethink their development models and climate mitigation strategies (emission trading and offsetting) in order to ensure the realization of the right to a healthy and sustainable environment while addressing the development of peoples and states which are relatively vulnerable to the crisis and have their right to development compromised due to inequality rife with colonialism and the global expansion of industrial capitalism. The subsequent chapter would take up the tasks of describing what the predominant carbon offsetting strategies are, discussing how they work, and demonstrating their lack of the environmental integrity requirements as stipulated under the UNFCCC.

Chapter Three

Global Climate Mitigation Policies: Clean Development Mechanisms (CDM) and Reducing Emissions from Deforestation and Forest Degradation plus (REDD+)

This chapter discusses the two successive climate mitigation strategies of the UNFCCC that are based on the idea of generating GHGs emission reductions or carbon credits in non – Annex I countries in return for support in promoting sustainable development in these countries, allowing Annex-1 countries meet their emission reduction targets cheaply complying with their commitments, and contributing to the ultimate objective of stabilizing atmospheric concentrations of GHGs. These strategies are the Clean Development Mechanism (CDM) of the Kyoto protocol¹⁹² and Reducing Emission from Deforestation and Forest Degradation plus Conservation, Sustainable Management of Forests and Enhancement of forest carbon sinks (REDD+) developed under decision 1/CP.16 of the Cancun Agreement¹⁹³ and established under the Paris Agreement.¹⁹⁴ Each of these climate strategies will be discussed with the intent of elucidating upon its definition and scope of activities, how it works, phases or procedures of implementation (implementation cycle), and how results (certified emission reductions (CERs) or carbon credits) are accredited or certified with a focus on its human rights implications.

The chapter also dwells on the human rights implications of technical issues or challenges related to the implementation of CDM and REDD+ activities and existing standards that the climate mitigation strategies may comply with. This part of the research is premised on the idea that Afforestation/ Reforestation Clean Development Mechanism Projects (A/R CDM projects) and Reducing Emission from Deforestation and Forest Degradation plus Conservation, Sustainable Management of Forests and Enhancement of forest carbon sinks (REDD+ projects) are essentially similar except that REDD+ is wider in its scope including avoided deforestation and forest degradation and the plus and that it is not project based.¹⁹⁵ Otherwise the two climate mitigation mechanisms are the same in that they constitute flexible mechanisms allowing the

¹⁹² Article -12 of the Kyoto Protocol

¹⁹³ Decision 1/CP.16: Report of the Conference of Parties on its Sixteenth Session held in Cancun from 29 November to 10 December 2010, FCCC/CP/2010/7/Add.1. Available online at: <https://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf>

¹⁹⁴ Article -5 (2) of the Paris Agreement

¹⁹⁵ L. Bhullar, 'REDD+ and the Clean Development Mechanism: A Comparative Perspective', (2013), International Journal of Rural Law and Policy. Available online at : https://www.researchgate.net/publication/317565518_REDD_and_the_Clean_Development_Mechanism_A_comparative_perspective/link/5bd5fc024585150b2b8c7c00/download accessed on 14 April 2023.

generation of certified emission reduction credits that could be sold in the international markets where the buyer uses it to meet its domestic emission reduction commitments set under the UNFCCC. So the discussion, in this dissertation, of REDD+ along with A/R CDM mechanisms is with the idea that REDD+, which would be taking the place of A/R CDM mechanism in the future climate mitigation regime, is not different from A/R CDM when seen from the vantage point of serving the climate stabilization goal set under the UNFCCC and in the way it operates. So how REDD+ works as a climate mitigation or stabilization goal is seen the same way as A/R CDM works and is designed to operate as a global climate mitigation policy.

The Clean Development Mechanism (CDM)

The Clean Development Mechanism (CDM) is one of the three (3) “flexible” mechanisms operationalized via the Kyoto protocol to help developed countries parties to the UNFCCC meet their GHGs emission limitations and reduction commitments in an economically efficient manner¹⁹⁶. It is stipulated under Art.12 of the Kyoto protocol that the CDM allows governments or private entities in industrialized countries to implement emission reduction projects in developing countries (non-Annex –I countries)and receive credit in the form of “ certified emission reductions” (CERs), which they may count against their national reduction targets¹⁹⁷. The CDM aims at promoting sustainable development in developing countries, to contribute to the fulfillment of the ultimate objective of the UNFCCC and assist the developed countries in achieving compliance with their quantified emission limitation and reduction commitments¹⁹⁸. CDM projects must be approved by all Parties involved, lead to sustainable development in host countries the determination of which rests in the host country, and result in real , measurable and long-term benefits in terms of climate change mitigation.¹⁹⁹ The emission reductions must also be additional to any that could have occurred without the project.²⁰⁰ This to say that CDM projects must substantiate that the reductions in the GHGs emissions go beyond business as usual

¹⁹⁶ Article -12 (3)(b) of the Kyoto Protocol to the UNFCCC ; S. Bohm et al, ‘Greening Capitalism? A Marxist Critique of Carbon Markets’ (2012) Vol.0 (0) Organization Studies. Available online at: < <https://core.ac.uk/download/pdf/16387374.pdf> > accessed on 17 April 2023.

¹⁹⁷ Art.12 (9) of the Kyoto Protocol

¹⁹⁸ Art.12(2) of the Kyoto Protocol

¹⁹⁹ Art.12 ,sub art.5,(a),(b)

²⁰⁰ Ibid, sub art. 5(c)

(BAU) and are in addition to any that would have occurred in the project's absence and this is known as 'additionality'²⁰¹.

The CDM, which critical writers see as a neo-liberal tool of climate change governance²⁰², is meant to work bent on the assumption that the free trade regimes and high economic growth rates are not only compatible with but are important precondition for environmental sustainability and that market-based tools are the most appropriate instruments to utilize in meeting the goal of environmental sustainability.²⁰³ It was in line with these principles that market-based tools of global environmental governance like the CDM were introduced as preferred politico-economic tools in tackling climate change in the Kyoto protocol of 1997 and also as key component of promising the new "green economy"²⁰⁴. The CDM was sought to be a "flexible"²⁰⁵ (flexible for companies and industries mainly in the US industrial heartland) mechanism so that companies and industries in the Global North could find it cheaper and easier to meet their emission reduction targets by investing in clean development projects in the Global South and buying Certified Emission Reduction Credits (ERC) thereof rather than reducing GHG emissions in their domestic spheres.²⁰⁶ In accord with Steffen Bohm et al, the CDM is, instead of being a just climate policy tool and capitalist reform towards a decarbonized and 'green' economic formation, "part of a longer historical development of global capitalism and its relation to nature", creates unequal power relations and structures globally²⁰⁷ and "exacerbates uneven development within the Global South".²⁰⁸

Furthermore, the CDM has been critiqued as promoting rather "carbon colonialism" and land grab in the Global South often linked with adverse consequences to the livelihoods of local

²⁰¹ UNDP, The Clean Development Mechanism: An Assessment of Progress, 2006, available online at: <https://www.uncclearn.org> accessed on 1 March 2022.

²⁰² S. Bohm et al, n. 122.

²⁰³ S. Bernstein, *The Compromise of Liberal Environmentalism* (Columbia University Press, 2002) p.101.

²⁰⁴ S. Bohm et al, n. 122

²⁰⁵ P. Newell & M. Paterson, *Climate Capitalism: global warming and the transformation of the global economy*. (Cambridge University Press, 2010).

²⁰⁶ G. Dale, "Green Shift": An analysis of corporate responses to climate change' (2008) Vol.3 (2) International Journal of Management Concepts and Philosophy. Available online at: https://www.researchgate.net/publication/49401482_'Green_Shift'_An_analysis_of_corporate_responses_to_climate_change/link/00463523009800ec0e000000/download > accessed on 17 April, 2023.

²⁰⁷ Cecilia Larsson & Moa Orvehed, 'Carbon Offsetting, a new form of CO₂ colonialism? : Local Implications of Tree-planting projects in East Africa' (Bachelor's Essay, Sodertorn University, September 2021).

²⁰⁸ S. Bohm et al, n. 122

people and communities.²⁰⁹ In this connection Julia Dehm cites a quote which airs the voice of a social movement released in December 2014 to coincide with the Lima COP as regards the flaws of market –based mechanism of climate mitigation as a core component of “green economy” as presented below;

In the ‘green’ economy framework, its promoters aim to make us believe that ‘sustainable economic growth’ is possible and can be ‘decoupled from nature’ by using capitalist forms of production, or that it is feasible to ‘compensate’ or mitigate contamination or destruction in one place by ‘recreating’ or ‘protecting’ another. Under an unjust and colonialist logic, the green economy subjugates nature and autonomous peoples by imposing restrictions on the use of and control over their territories in order to fill the pockets of a few, even when communities possess the deeds to their land.²¹⁰

Moreover, Anil Agarwal and Sunita Narain in their report in title “Global Warming in an Unequal World” labeled the strategies adopted to address the climate crisis as sustaining forms of “environmental colonialism”.²¹¹ On top of this the CDM has also been critiqued as not being effective in really stabilizing the climate as stated under the ultimate goal of the UNFCCC because, as Larry Lohmann maintains, even the staunch supporters of carbon markets admitted in the year 2007 that a quarter²¹², a half²¹³, or more of all CDM projects were business as usual.²¹⁴ The critiques of carbon markets underline that they are ineffective and corrupt, and are associated

²⁰⁹ H. Bachram, ‘Climate Fraud and carbon colonialism: The New Trade in Greenhouse Gases’ (2004) Vol.15, No.4 Capitalism Nature Socialism. Available online at: < <http://www.carbontradewatch.org/pubs/cns.pdf> > accessed on 17 April, 2023; K. Lyons & P. Westoby, ‘Carbon colonialism and the new land grab: Plantation forestry in Uganda and its livelihood impacts’ (2014) vol.36 Journal of Rural Studies. Available online at: < <https://www.sciencedirect.com/science/article/abs/pii/S0743016714000692> > accessed on 17 April 2023.

²¹⁰ No REDD+ in Africa Network, “To Reject REDD+ and extractive industries”, (1 December 2014). Available online at: < <https://no-redd-africa.org/index.php/declarations/110-to-reject-redd-and-extractive-industries> > cited in J. Dehm, Carbon Colonialism or Climate Justice? Interrogating the International Climate Regime from A TWAIL perspective (2016) Vol.33 Windsor Year Book of Access to Justice. Available online at: < <https://wyaj.uwindsor.ca/index.php/wyaj/article/view/4893> > accessed on 19 April 2023.

²¹¹ A. Agarwal and S. Narain, *Global Warming in an Unequal World: A Case of Environmental Colonialism* (Center for Science and Environment, 1991) p.1.

²¹² C. Sutter & J.C. Parreno, ‘Does the current Clean Development Mechanism (CDM) deliver its sustainable development claim? : An analysis of officially registered CDM projects’ (2013) Vol.84, Issue 1 Climate Change. Available online at: < <https://link.springer.com/content/pdf/10.1007/s10584-007-9269-9.pdf> > accessed on 18 April, 2023 ;

²¹³ M. Schlup, ‘The Gold Standard: Linking the CDM to development and poverty reduction’ (A Conference on Climate or Development, Hamburg Institute of International Economics, 28-29 October, 2005).

²¹⁴ L. Lohmann, ‘towards a different debate in environmental accounting: the cases of carbon and cost benefit’ (2009) Vol. 34, Issue 3-4 *Accounting, Organizations and Society*. Available online at: <http://www.thecornerhouse.org.uk/sites/thecornerhouse.org.uk/files/EnvAcctg.pdf> > accessed on 18 April 2023.

with negative social, economic and environmental outcomes²¹⁵, that they privilege elite groups in the Global South²¹⁶, create perverse incentives for exploiting the under-privileged²¹⁷ and contend that carbon markets “should in fact be seen as part of a broader set of ‘green economy’ discourses and practices which are currently facilitating the expansion of capitalist accumulation through the capture, pricing and monetization of ecosystem services and other environmental goods²¹⁸”.

So these flaws of the CDM, as a market –based climate solution, do, arguably, have negative human rights implications including a compromise of the human right to development of peoples in states where these projects are hosted. That the claims that the market –based carbon offsetting solution for the climate crisis is rather part of the long historical process of global capital accumulation that perpetuates uneven development, constitutes a false²¹⁹ and ineffective solution, introduces land and resources control in the South in a way that is experienced as colonial by local people and accompanied by human rights violation all substantiate violations of key provisions of the UN declaration on the right to development and provisions of the international covenants on civil, political, economic, social and cultural rights.

²¹⁵ L. Lohmann (ed.), *Carbon Trading: A Critical Conversation on Climate Change, privatization and power*, (The Dag Hammarskjöld Foundation, 2006); L. Lohmann, ‘Carbon trading, climate justice, and the production of ignorance: Ten examples’ (2008) Vol. 51. Development. Available online at: www.thecornerhouse.org.uk/pdf/document/ignornacefinalpdf. Accessed on 18 April, 2023; L. Lohmann, hold the Applause: a critical look at recent EU climate claims, The Corner House. Available online at: www.thecornerhouse.org.uk/resources/hold-applause accessed on 18 April 2023; L. Lohmann, Neoliberalism and the calculable world : The Rise of Carbon Trading in S. Böhm and S. Dahbi (eds.), *Upsetting the Offset : The Political Economy of Carbon Markets* (Mayfly, 2009); L. Lohmann, ‘Toward a different debate in environmental accounting: The cases of carbon and cost– benefit’ (2009) Vol. 34 Accounting, Organizations and Society. Available online at : < <http://www.thecornerhouse.org.uk/sites/thecornerhouse.org.uk/files/EnvAcctg.pdf> > accessed on 18 April 2023. ; L. Lohmann, ‘Uncertainty markets and carbon markets: Variations on Polanyian themes’ (2010) Vol. 5, Issue 2 New Political Economy. Available online at: < <https://www.tandfonline.com/doi/abs/10.1080/13563460903290946> > accessed on 18 April 2023.

²¹⁶ D. Whiteman et al., ‘Business and Biodiversity: They would say that.’ (2010) Vol. 466, Issue, 435 Nature. Available online at: < <https://www.nature.com/articles/466435b> > accessed on 18 April, 2023.

²¹⁷ P. Bond, ‘South African sub- imperialism’. (Paper presented to the Conference toward an Africa without Borders, Durban University of Technology, 8 July 2007).

²¹⁸ S. Sullivan, ‘Ecosystem service commodities’ – a new imperial ecology? Implications for animist immanent ecologies, with Deleuze and Guattari. (2010) vol. 69 A Journal of Culture/Theory/Politics. Available online at: < <https://www.ingentaconnect.com/contentone/twish/nf/2010/00000069/00000069/art00009> > accessed on 18 April, 2023; J. Heartfield, *Green capitalism: manufacturing scarcity in an age of abundance*. (Mute, 2008).

²¹⁹ Larry Lohmann documents that much of the IPCC work is influenced by US diplomats and that there is no evidence that verifies the claim that “emission by sources” of GHGs is compensated for by “removal by sinks “of the gases (Larry Lohmann, n. 141, p. 37). In addition, it is also not certain that “biotic carbon” is the same as “fossilized carbon” (see Joanna Cabello cited in Boaventura Monjane et al, *15 Years of REDD+: A Mechanism Rotten at the Core*. Montevideo, World Rainforest Movement, 2022, p. 25).

In the CDM governance architecture, there are eligibility criteria that all Parties must meet in order to participate: voluntary participation in the CDM, the establishment of a national CDM authority, and the ratification of the Kyoto protocol.²²⁰ In addition, industrialized countries must meet several other requirements: establishment of the assigned amount under Art.3 of the protocol, national system for the estimation of greenhouse gases, national registry, an annual inventory, and an accounting system for the sale and purchase of emission reductions.²²¹ In this regard, it has been critiqued that the very premises bent on which the "science or logic "of the accounting system of emission by sources and removal by sinks operate is flawed in itself and that "carbon offsetting" does not lead to net reduction in emission of GHGs.²²² Larry Lohmann discusses that as a result of "four impossibilities":i) the biophysical knowledge necessary to assemble a sufficiently certain and complete quantitative picture of carbon flows between the atmosphere and the biosphere;ii) sustainable consensus on what social agency is responsible and in what proportion for any quantified changes in carbon flows;iii) the ability to quantify the effects of social actions and institutions which mediate those carbon flows and;iv) the ability to specify a story line constituting what "would have happened "without a particular climatic action,that it is "impossible" to ascertain that there is verifiably generated carbon credits to effect meaningful transactions that ultimately produce the effect of climate mitigation .²²³ In other words, carbon trading, while being an unjust climate policy tool, leads to states' failure in respecting and protecting the human rights of their people to a clean, healthy and sustainable environment.

As regards participation, both private and public entities may participate in projects meant to generate emission reduction credits and activities related to monitoring and verification of carbon credits generated as a result of the implementation of the project with their activities being subject to the guidance of the CDM executive board (EB).²²⁴

²²⁰ The Report of the Conference of Parties on its Seventh Session, held at Marrakesh from 29 October to 10 November 2001, Add.1. Vol.2. Annex, Modalities and Procedures for the Clean Development Mechanism para. 28,29, and 30 available online at: https://unfccc.int/cop7/documents/accords_draft.pdf

²²¹ Ibid, Para. 31 (b),(c)(d) and (e)

²²² For detailed discussion of this see Larry Lohmann, *Democracy or Carbocracy? : Intellectual Corruption and the Future of the Climate Debate* (The Corner House Briefing , 2001)

²²³ Ibid

²²⁴ Art.12 (9) of the Kyoto protocol.

Art.3 (3) and (4) of the Kyoto protocol identifies the eligibility of different activities relating to land-use, land-use change and forestry (LULUCF) sector²²⁵. Despite being the most controversial issue at the 6th session of the Conference of the Parties (COP-6) held at The Hague in the year 2000, the different activities related to LULUCF have been delimited under the activities eligible for the Adaptation Fund and those eligible under the CDM projects in a compromised position proposed.²²⁶ The proposed position has, therefore, had it that: 1) avoided deforestation and combating land degradation and desertification in Non-Annex 1 Parties as adaptation activities eligible for funding via the Adaptation Fund but not through the sale of carbon credits; 2) allow only afforestation and reforestation projects in CDM, with measures to address non-permanence, social and environmental effects, leakage, additionality and uncertainty.²²⁷ The eligibility of activities pertaining to LULUCF under the CDM project was restricted to afforestation and reforestation (A/R) under the Marrakech Accord in 2001 during the first commitment period (2008-2012)²²⁸. Moreover, such terms as ‘forest’, ‘afforestation’ and ‘reforestation’ were defined for the purpose of CDM A/R activities as follows²²⁹;

‘Forest’ is a minimum area of land of 0.05-1.0 hectare with tree crown cover (or equivalent stocking level) of more than 10-30 % with trees with the potential to reach a minimum height to 2-5 meters at maturity in situ. A forest may consist either of closed forest formations where trees of various storeys and undergrowth cover a high proportion of the ground or open forest. Young natural stands and all plantations which have yet to reach a crown density of 10-30 % or tree height of 2-5 meters are included under forest as are areas normally forming part of the forest area which are temporarily unstocked as a result of human intervention such as harvesting or natural causes but which are expected to revert to forests.

²²⁵ Art.3(3)&(4) of the Kyoto Protocol

²²⁶ L. Bhullar, ‘REDD+ and the Clean Development Mechanism: A Comparative Perspective’ (2013) International Journal of Rural Law and Policy p.2 available online at: <https://epress.lib.uts.edu.au> accessed on 1 March 2022; see also Philip M. Fearnside, ‘Saving Tropical Forests as a Global Warming Countermeasure: An Issue that Divides the Environmental Movement’ (2001) Vol. 39 Issue 2 Ecological Economics. Available online at: < <https://www.sciencedirect.com/science/article/abs/pii/S0921800901002257> > accessed on 3 March 2022.

²²⁷ UNFCCC, Decision 5/CP.6, The Bonn Agreements on the Implementation of the Buenos Aires Plan of Action, UN Doc FCCC/CP/2001/5 dated 25 September 2001.

²²⁸ UNFCCC, Decision 11/CP.1, Land Use, land-Use Change and Forestry, UN Doc FCCC/CP/2001/13/Add.1 dated 21 January 2002, Annex, paragraph 13.

²²⁹ Ibid

‘Afforestation’ is the direct human -induced conversion of land that has not been forested for a period of at least 50 years to forested land through planting, seeding, and/or the human –induced promotion of natural seed sources.

‘Reforestation’ is the direct human-induced conversion of non-forested land to forested land through planting, seeding, and/or the human –induced promotion of natural seed sources, on land that was forested but that has been converted to non-forested land. For the first commitment period, reforestation activities will be limited to restoration occurring on those lands that did not contain forest on 31 December 1989.

Deforestation and avoided degradation have not been included under the CDM activities of the Kyoto protocol due to the refusal of developing countries to consider forests as ‘global public good’ and the associated sovereignty concerns they had²³⁰. They also did not want to cede their control over land use decisions. The other hurdle was related to the challenges and uncertainties inherent in quantifying forest sector emissions as well as methodological issues.²³¹

Though A/R CDM projects create a new sink that grows and absorbs atmospheric carbon, the absorption of carbon will cease at some point in time.²³² This happens when forests or trees stop growing, die, decompose or when they are cut down which returns the carbon dioxide absorbed or sequestered back to the atmosphere and nullifies the generated carbon credits²³³. As a result there are only time –bound temporary and long-term certified emission reduction credits.

²³⁰ See P. M Fearnside, ‘Saving Tropical Forests as a Global Warming Countermeasure: An Issue that Divides the Environment Movement’, (2001) 39(2) *Ecological Economics*, pp.167-184 available online at: <https://www.researchgate.net/publication/222656635_Saving_tropical_forests_as_a_global_warming_countermeasure_An_issue_that_divides_the_environmental_movemental_movement> accessed on 1 March 2022 ; W. F Laurence, ‘A New Initiative to Use Carbon Trading for Tropical Forest Conservation’ (2007) 39(1) *Biotropica*, pp. 20 -24 available online at:< <https://www.jstor.org/stable/pdf/30045478.pdf> > accessed on 1 March 2022 ; S. Engel and C. Palmer, ‘Painting the Forest REDD? Prospects for Mitigating Climate Change through Reducing Emissions from Deforestation and Degradation’ (IED Working Paper 3, 2008) < https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1430324 > accessed on 5 March 2022.

²³¹ Ibid

²³² Margaret Skutsch and Eveline Trines, ‘Understanding Permanence in REDD’ (Policy Paper No 6, The Kyoto Think Global Act Local Project (K: TGAL), 2010) <http://www.communitycarbonforestry.org/NewPublications/KTGAL%20Policy%20Note%206%20Permanance%20in%20REDD.pdf>; See also Michael Dutschke and Arild Angelsen, ‘How Do We Ensure Permanence and Assign Liability?’ in Arild Angelsen (ed), *Moving Ahead with REDD: Issues, Options and Implications* (CIFOR, 2008); Margaret Skutsch and Ben de Jong, ‘The Permanence Debate’ (2010) Vol.327 Issue 5969 *Science* Available online at : < https://www.researchgate.net/publication/41578414_The_Permanence_Debate > accessed on 19 March 2022.

²³³ M. Skutsch and B.J. Jong, ‘The Permanence Debate’, *Science*, Vol.327 (5969), 2010, p.1079. Available online at: < https://www.researchgate.net/publication/41578414_The_Permanence_Debate > accessed on 23 June 2023.

So temporary certified emission reductions (tCER) and long-term certified emission reductions (lCER) are developed as crediting periods of A/R CDM projects to address the issue of non-permanence of carbon credits.²³⁴ A/R CDM projects have suffered from fewer demands in the international carbon markets for reasons including the issue of non-permanence, the decision of the EU to exclude A/R CDM credits from the EU Emission Trading Scheme, the issue regarding additionality of CDM credits and the problem of leakage.²³⁵ Other than afforestation and reforestation activities the CDM includes activities that relate to improving energy efficiency, increasingly resorting to reliance on, rather, renewable energy sources, improved agricultural practices with resultant effect of reduced CH₄ and N₂O emissions, reductions of emissions of GHGs in industrial processes as pinpointed below.

Eligible Projects

The CDM includes projects in the following sectors²³⁶:

- End-use energy efficiency improvements
- Supply -side energy efficiency improvements
- Renewable energy
- Fuel Switching
- Agriculture (reduction of CH₄ , and N₂O emissions)
- Industrial Processes (CO₂ from Cement etc., HFCs , PFCs, SF₆)
- Sinks Projects (only afforestation and reforestation)

Noteworthy also is that Annex I Parties must avoid using CERs generated from nuclear energy to meet their emission reduction targets. And afforestation or reforestation are the only sink projects allowed during the first commitment period (2008-2012). In this connection, Annex I Parties can only add CERs generated from sink projects to their assigned amounts up to 1% of their baseline emissions for each year of the commitment period.

Actors in the implementation of CDM climate policy

²³⁴ L. Bullar , p.3

²³⁵ Pham Manh Cuong, 'REDD, LULUCF and CDM – Recent International Developments' (2010) http://www.iges.or.jp/en/fc/pdf/activity_201003/Vietnam/08_Cuong_REDD_Negotiation_processes.pdf; See, for eg, Alex Michaelowa and Pallav Purohit, 'Additionality Determination of Indian Projects: Can Indian CDM Project Developers Outwit the CDM Executive Board?' (2007) <http://medias.lemonde.fr/mmmpub/edt/doc/20070608/920594_additionality_determination_of_indian_cdm_projects.pdf>.23

²³⁶ UNEP, *Introduction to the Clean Development Mechanism (CDM)*, (UNEP, not dated) available online at : < https://unfccc.int/files/cooperation_and_support/capacity_building/application/pdf/unepcdmintro.pdf > accessed on 28 December 2021.

The actors involved in the governance of CDM policy are the Conference of Parties to the UNFCCC (COP/MOP), the Executive Board (EB), Panels /Working Groups/ Teams, the UNFCCC Secretariat, Designated Operational Entity (DOE), Host Party (HP) and the Donor Party(DP).²³⁷The COP/MOP,which is the ultimate decision making body of the UNFCCC,oversees the rules and procedures of the EB, the accreditation standards for and the designation of operational entities and review of regional /sub-regional distribution of CDM project activities²³⁸. Furthermore, the COP / MOP reviews annual reports of the executive board, the regional and sub-regional distribution of designated operational entities and take appropriate decisions to promote accreditation of such entities from developing country parties and assist in arranging funding of CDM project activities²³⁹.

The Executive Board (EB),on the other hand, is authorized to accredit Designated Operational Entities (DOEs), develop and maintain the CDM registry and approve methodologies for baselines, monitoring plans, and project boundaries.²⁴⁰ Furthermore, the EB is authorized to make decisions on re-accreditation, suspension and withdrawal of accreditation, and as regards the operationalization of accreditation procedures and standards.Other authorized roles that fall within the mandate of the EB include the conduct of reviews of accreditation standards, reporting to the COP/MOP as regards the regional and sub-regional distribution of CDM projects with the aim of identifying systematic barriers to their equitable distribution and development of approved rules, procedures and standards.²⁴¹The EB is also authorized to establish Panels,Working Groups and Teams which are assigned the tasks of conducting

²³⁷ H.A. Arthur, Encouraging CDM energy projects to aid poverty alleviation : Review of CDM Activities , (2003), available online at: <https://assets.publishing.service.gov.uk/media/57a08d0ced915d622c001735/R80372.pdf> accessed on 2 March 2022 ; See also R. Peters & L. Robertson , *A User's Guide to the CDM* , (Pembina Institute for Appropriate Development, 2003) p.6 available online on : https://www.pembina.org/reports/user_guide_2nd_ed.pdf accessed on 30 March 2022 ; C. Streck and J. Lin , 'Making Markets Work :A Review of CDM Performance and the Need for Reform' (2008) Vol.9 No.2 The European Journal of International Law .Available online at: <https://academic.oup.com/ejil/article/19/2/409/407762> accessed on 6 May 2022.

²³⁸ UNFCCC, Report of the Conference of the parties on its 7th session , held at Marrakesh from 29th October to November 2001 , FCCC/CP/2001/13/Add.2, 21 January 2002 available online at : <https://unfccc.int/process-and-meetings/conferences/past-conferences/marrakech-climate-change-conference-october-2001/cop-7/cop-7-reports> accessed on 10 March 2022.

²³⁹ The Marrakesh Accord, Annex I , Modalities and Procedures for Clean Development Mechanism, (B),paragraph 4.available at < https://unfccc.int/cop7/documents/accords_draft.pdf>

²⁴⁰ Ibid; see also J.C.P.de la Torre, 'The Clean Development Mechanism: An analysis of the Implementation in Ecuador', (MA Thesis, Wageningen University, 2006).

²⁴¹ Draft Decision - /CMP.1 (Article 12), Modalities and procedure for a Clean Development Mechanism as defined in Article 12 of the Kyoto Protocol, FCCC/CP/2001/13/Add.2 available online at: <https://unfccc.int/resource/docs/cop7/13a02.pdf> accessed on 6 May,2022.

technical assessments upon which decisions of the EB will necessarily be based. There are so far two panels, two working groups, and a team set up under the EB.²⁴² The panels the board established are the Methodologies Panel and the Accreditation Panels, and the Working Groups are the Small Scale Working Group and the Afforestation and Reforestation Working Group. These groups support the EB in the creation of methodological standards, guidelines, clarification and other methodological matters applicable to proposed and registered CDM project activities and the implementation of standards and procedures for accreditation of operational entities that validate and verify CDM project activities respectively²⁴³. The CDM Registration and Issuance Team (RIT) assists the EB to consider the requests for registration of project activities and the issuance of CERs respectively that are submitted by the DOE.²⁴⁴

The DOE is a body, which usually is a commercial consultant that has been accredited by EB and designated by the COP/MOP. They are entities authorized to validate a Project Design Document (PDD) and verify and certify emission reductions²⁴⁵. The DOE should demonstrate that it and its subcontractors have no real or potential conflict of interest with the participants in the CDM project activities for which it has been selected to carry out validation or verification and certification functions.²⁴⁶ It also must submit an annual activity report to the EB which are reviewed every three (3) years and it must accept that spot-checks may be carried out at any time.

Noteworthy is also the obligation of the DOE to comply with the applicable laws of parties hosting CDM projects when conducting validation and verification of project activities and certification for materialized CERs. This could be conceived as existing opportunity for host parties to ascertain that the various standards that the designated operational entities employ to validate, verify and certify projects are practically guided by human rights norms and standards. This is because designated operational entities use standards that focus only relatively on particular dimensions of the overall effects of their activities.

²⁴² UNFCCC, Procedure: Terms of Reference of the support structure of the CDM Executive Board, Version 03.1, Clean Development Mechanism, and CDM-EB-61-A01-PROC available online at: https://cdm.unfccc.int/Reference/Procedures/panels_proc02.pdf accessed on 16 May 2022.

²⁴³ Ibid

²⁴⁴ Ibid; see also C. Streck and J. Lin, 'Making Markets Work: A Review of CDM Performance and the Need for Reform' (2008) Vol.19 No.2 the European Journal of International Law. Available online at: <https://academic.oup.com/ejil/article/19/2/409/407762> accessed on 16 May 2022.

²⁴⁵ Ibid

²⁴⁶ Ibid

Not all standards equally and adequately attend to rights or social impacts dimensions of CDM project activities. The Gold Standard (GS) and the Climate, Community and Biodiversity Standards (CCBS) are, for example, more attentive and have stricter requirements for, inter alia, community participation and stakeholder consultation processes and assessments²⁴⁷ despite the fact that the NGOs which employ them are, in and of themselves, incapable of adjudicating complaints and granting remedies in cases rights violations occur. Moreover, since they only have an internet platform where they could receive complaints directly from individuals, groups and other stakeholders they are only accessible by people who are literate and have readily available access to the internet which is not the case in most rural areas of countries hosting the CDM projects. While this shows how inconveniently designed the mechanism of independently constituted commercial consultants are when seen in terms of ensuring human rights promotion and protection, it makes the case for government intervention derived from its human rights obligation and its prerogative in determining the sustainable development support component of the CDM project objectives as derived from the Kyoto protocol.

The UNFCCC Secretariat provides organizational platform for the various actors involved within the Kyoto institutional framework making available the links among the various actors participating in the CDM.²⁴⁸ Preparing the minutes of meetings, draft decisions and guidelines, arranging the meetings of the COP and the various Kyoto bodies and monitoring the implementation of the UNFCCC through the collection and analysis of the information provided by the parties all fall within the mandate of the role of the Secretariat.²⁴⁹ The UNFCCC Secretariat is said to be a powerful actor or entity in spite of the fact that it operates in the background.²⁵⁰

²⁴⁷ R.G. Wood, 'Carbon Finance and Pro-poor co-benefits: The Gold Standard and Climate, Community, Biodiversity Standards.' (Sustainable Markets Discussion Paper, International Institute for Environment and Development (IIED), 2011) p.8. Available online at: <http://www.environmentportal.in/files/Carbon%20finance%20and%20pro-poor.pdf> accessed on 6 May 2022; C. Voigt, 'Is the Clean Development Mechanism Sustainable? : Some Critical Aspects, Sustainable Development Law and Policy' (2008) Volume 8, Issue 2 Sustainable Development Law and Policy. Available online at: <https://digitalcommons.wcl.american.edu/cgi/viewcontent.cgi> accessed on 6 May 2022.

²⁴⁸ M. Netto and K.B. Schmidt, CDM Project Cycle and the Role of the UNFCCC Secretariat: in D. Freestone and C. Streck (ed.), *Legal Aspects of Implementing the Kyoto Protocol Mechanisms: Making Kyoto Work*, (Oxford University Press, 2005). p.175

²⁴⁹ C. Streck and J. Lin, n. 171 p. 27

²⁵⁰ Ibid, at 418.

The Host Party (i.e. the developing country) in a CDM project must be a party to the Kyoto protocol and designate a national authority for the CDM. The compliance requirement for the Donor Party are more elaborate and encompass the following. The Donor Party must be;

- i. be a party to the Kyoto protocol
- ii. have targets , calculated as agreed in Article 3 of the Kyoto protocol
- iii. have a national system for estimating sources and sinks of GHG , as in Article 5
- iv. have a national registry as agreed in Article 7
- v. have submitted the annual inventory (Article 5&7) (in the first commitment period, quality assessment is only needed for sources /sector categories from annex A)
- vi. have submitted supplementary information on emissions and carbon sinks (Article 3; paragraphs 3,4,7,8 and Article 7, paragraph 4).
- vii. will be considered to have met the above 6 eligibility requirements unless the enforcement branch of the compliance committee believes that these requirements have not been met (24.CP.7) or, based on reports of the expert review teams (Article 8), decides not to proceed with implementation related to these requirements and transmits this to the secretariat
- viii. will be considered to continue to meet the (first 6) above eligibility requirements until the enforcement branch of the compliance committee decides that the party does not meet one or more of the eligibility requirements, has suspended the party's eligibility and has transmitted this information to the secretariat²⁵¹.

While the Marrakesh Accord delineates the roles and mandates of the actors involved in the governance of a CDM project, it does not explicitly stipulate that the CDM Executive Board (EB), as a UN entity or body, is duty bound to promote and observe human rights in its decisions and development of accreditation criteria which it requires of the DOEs. The UNFCCC CDM EB, being a UN entity, is bound legally to promote and observe human rights because the UN itself is duty bound to promote and observe human rights as stated under the purpose for which it is established where under article -1(3) where it says "to achieve international cooperation in solving international problems of an economic, social, cultural or humanitarian character and in promoting and encouraging respect for human rights and fundamental freedoms for all ...".²⁵²

²⁵¹ H.A. Arthur, n. 164 p. 11

²⁵² Article -1 (3) of the UN Charter

Furthermore, article -55 (c) of the UN Charter stipulates that " ...the UN shall promote universal respect for and observance of human rights and fundamental freedoms for all ...".²⁵³ In addition, paragraph 8 of decision -1/CP.16, the COP underlines that "parties should, in all climate related actions, fully respect human rights".²⁵⁴ Hence, being part of the UN, the CDM EB is legally obliged to promote and encourage respect for human rights in its decisions as regards development of accreditation criteria which DOEs use for validating the PDD of CDM projects and verifying the generation of carbon credits. But as will be discussed in the subsequent chapter, the CDM EB has not been able to adjudicate human rights violations associated with the implementation of CDM projects.

The CDM Project Cycle

Project Identification and formulation

The identification and formulation of potential CDM projects is the first step in the CDM project cycle.²⁵⁵ A CDM project should demonstrate the qualities of being real, measurable and additional. Establishing the additionality of the emission reduction consequent upon the implementation of a project requires comparison of the emission reduction against a reasonable reference case identified as a baseline. The baseline is established by project participants in accordance with approved methodologies on a project specific basis. The baseline methodologies are developed based on three (3) approaches of the Marrakech Accord:

- Existing actual or historical emissions;
- Emission from a technology that represents an economically attractive investment; or
- The average emission of similar project activities undertaken in the previous five(5) years under similar circumstances and whose performance is among the top 20% of the their category²⁵⁶.

A monitoring plan which enables the collection of accurate emission data is the other element that a CDM project needs to have. The monitoring plan, which makes up the basis of future verification, is expected to provide the affirmation that emission reductions and other project objectives are being achieved and should be able to monitor the risks inherent in determination

²⁵³ Article -55 (c) of the UN Charter

²⁵⁴ Decision .1/CP- 16 of the UNFCCC

²⁵⁵ UNEP, n.163 p. 32; See also UNDP, *The Clean Development Mechanism: A User's Guide*, (Energy & Environment Group and Bureau for Development Policy, 2003), pp. 23-25.

²⁵⁶ Draft Decision - /CMP. 1 (Article 12) , Modalities and Procedures for a clean development mechanism as defined in Article 12 of the Kyoto Protocol of the Marrakesh Accords , para.48.

of baseline and project emission reductions. The monitoring plan can be established either by the project developer or by specialized agent. The baseline and monitoring plan must be developed in accord with an approved methodology. In case the project participants resort to use a new methodology, and then this must be authorized and registered by the Executive Board (EB). The project participants must determine whether the crediting period shall be 10 years or 7 years with the possibility to be renewed twice (a maximum of 21 years).²⁵⁷

National Approval

Countries with interests to participate in CDM must designate a National CDM Authority to evaluate and approve the projects, and serve as a point of contact. Countries hosting CDM projects have the responsibility of determining the national criteria for approving projects while the international process provides general guidelines for baselines and additionality. The major question that the national criteria address pertains to contribution to the achievement of sustainable development in the host country. The host country is also expected to prepare a project design document working with the investor. The project design document needs to have the following structure²⁵⁸:

- General description of the project ;
- Description of the baseline methodology;
- Timeline and crediting period;
- Monitoring methodology and plan;
- Calculation of GHGs by sources;
- Statements of environmental impacts;
- Stakeholders comments

The National CDM Authority issues a statement affirming its voluntary participation and also confirming that the CDM project activities assist the host country in achieving sustainable development.

Validation and Registration

Validation involves an independent evaluation of a project's activities by a designated operational entity against the requirements of a CDM as set out in decision 17 /CP.7 of Art.12 of the Kyoto protocol and the annex to the Marrakesh Accords as regards the modalities and

²⁵⁷ Ibid

²⁵⁸ Ibid

procedures of the implementation of the CDM, on the basis of the project design document.²⁵⁹ So once the project design document is prepared, a designated operational entity (DOE) reviews it and, after a public comment, decides whether or not it should be validated. The operational entities typically will be private companies such as auditing and accounting firms, consulting companies and law firms capable of conducting credible, independent assessments of emission reductions. Then upon successful validation of the project design document, the DOE submits it to the Executive Board for formal registration of the project. Registration signals that the validation of a CDM project activities by a DOE is accepted by the Executive Board and that the project is subsequently ready for verification, certification and issuance of CERs related to the project's activities.

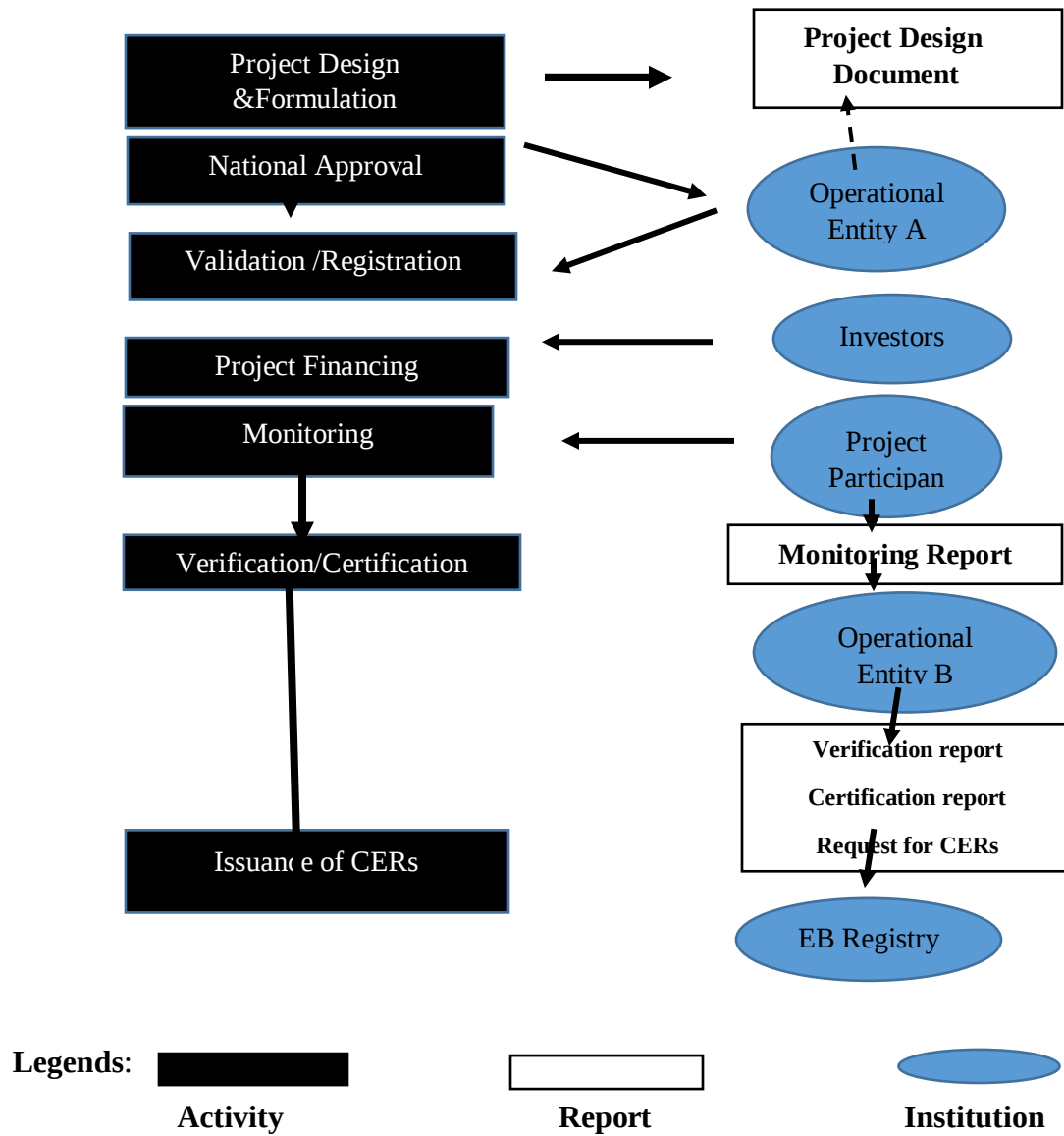
Monitoring, Verification and Certification

It takes a preparation of a monitoring report that estimates the actual emission reductions generated as a result of the project activities and its submission for verification by an operational entity before result –based payments could be made or the CERs could be sold in international carbon markets. Hence, once a project is operational, participants prepare a monitoring report, including an estimate of CERs generated, and submit it for verification by an operational entity. Verification involves the ex-post determination of the monitored reductions in emissions of GHGs by an operational entity²⁶⁰. The operational entity ensures that CERs have resulted in accordance with the guidelines and conditions agreed upon in the initial validation of the project. And having conducted a detailed review, operational entities prepare a verification report and later certify the amount of CERs generated by the CDM project. Certification ascertains that the project achieved the emission reductions as verified. The certification report also incorporates a request for issuance of CERs. Then the CDM Executive Board instructs the CDM registry to issue the CERs unless a project participant or three (3) Executive Board members request a review within 15 days of submission of the certification report.

²⁵⁹Decision 17/CP.7, Modalities and procedures for a clean development mechanism as defined in Article 12 of the Kyoto protocol, FCCC/CP/2001/13/Add.2 available online at: <https://unfccc.int/resource/docs/cop7/13a02.pdf>
Accessed on 11 May 2022.

²⁶⁰ Ibid

Project Cycle for a CDM Project²⁶¹



²⁶¹ UNEP, Introduction to CDM Report available online at:
https://unfccc.int/files/cooperation_and_support/capacity_building/application/pdf/unepcdmintro.pdf.

What is REDD+?

The international community has already recognized that the warming of the planet is accounted for in terms of anthropogenic emissions of GHGs mainly via the burning of fossil fuels and also consequent upon land use changes and/ or deforestations. Early efforts to address the problem set the objective of “stabilizing the emissions of GHGs at the level that would prevent dangerous anthropogenic interference with the climate system” operationalized through the Kyoto protocol which set emission reduction targets to be complied with by Annex I countries and provided the mechanisms of CDM (Clean Development Mechanisms), Joint Implementation and Emission Trading²⁶². So countries were obliged to develop low carbon emission policies across economic sectors and exert efforts to increase sequestration of carbon through conserving and enhancing carbon sinks and reservoirs. Subsequent developments led to the signing of the Paris Agreement in 2015 where protection, conservation and sustainable management of tropical forests was made a primarily important climate mitigation strategy.

It was in 2005 that the states of Costa Rica and Papua New Guinea (PNG) leading the ‘Coalition of Rainforest Nations’ (CfRN) came up with the idea of RED (Reducing Emissions from Tropical Deforestation) in the negotiations of the Conference of Parties (COP-11) to the UNFCCC in Montreal, Canada.²⁶³ They made a joint submission entitled “Reducing Emission from Deforestation in Developing Countries: Approaches to stimulate actions”, supported by several other Latin American and African Countries.²⁶⁴ This is taken as the introduction of RED (Reducing emission from Deforestation) into the UNFCCC process where the COP invited Parties and observer organizations to make submissions in accord with this proposal on “issues relating to reducing emission from deforestation in developing countries” for consideration by the Subsidiary Body for Scientific and Technological Advice (SBSTA).

Subsequent negotiations of the COP (when working on the Bali Action Plan) on the matter expanded the scope of RED having recognized also that the degradation of forests causes emissions of carbon dioxide and therefore, needs to be addressed when reducing emission from deforestation. “RED” was expanded to include forest degradation, the roles of conservation, sustainable management of forests and enhancement of forest carbon stocks in the scope of

²⁶² Articles 4, 12 & 17 of the Kyoto Protocol to the UNFCCC

²⁶³ J. Gupta et al (ed.), *Climate Change, and Forests and REDD: Lessons for Institutional Design*. (Rutledge, 2013), p. 80.

²⁶⁴ UNFCCC, FCCC/CP/2005/MISC.1, 11 November 2005

methodological issues to be explored by the SBSTA but it is argued that it is only the activities that reduce emission from deforestation and forest degradation that were meant to be eligible, at that point in time, for compensation due to the semicolon separating “policy approaches and positive incentives” for the first two (2) activities and the “roles” of the three (3) activities after the “ plus”sign.²⁶⁵ Later in 2008, the SBSTA formally recognized the “the plus” in REED+ - the role of conservation, sustainable management of forests and enhancement of forest carbon stocks – as additional activities in tropical rainforests that could be compensated having dropped the semicolon that separated the sets of activities since Bali. So by attaching monetary values to standing forest (since forests preserved sequester carbon and are carbon stocks) the REED+ mechanism prevents emission of carbon dioxide from deforestation, degradation of forests, unsustainable use of forests and deterioration of forest reservoirs and sinks.

Thus, REDD+ refers to practical approaches and positive incentives to reduce emissions from deforestation and forest degradation and to support conservation of existing forest carbon stocks, sustainable forest management and enhancement of forest carbon stocks in developing countries²⁶⁶. It is a forest based climate mitigation approach that aims to incentivize developing countries to reduce emissions from deforestation and forest degradation, conserve forest carbon stocks, sustainably manage forests, and enhance forest carbon stocks.²⁶⁷

The concept of REED+ works bent on the understanding that forests or plants use CO₂ in the process of photosynthesis in which it is converted into organic compounds constituting the plant materials such as its bark, trunk and leaves. But if plants die, cut down or burnt, the carbon dioxide that is stored is released into the atmosphere contributing to increased concentration of GHGs. So in order to avoid increased emission of carbon dioxide and enhance its absorption by plants and forests REED+ helps prevent deforestation and degradation ²⁶⁸, support conservation and sustainable forest management activities and contribute to enhancing forest carbon stocks.

²⁶⁵ V. Holloway & E. Giandomenico, *Carbon Planet White Paper: The History of REED+ Policy*, (Carbon Planet Limited, 2009).

²⁶⁶ EU REDD Facility, Introduction to REDD+, Briefing available on www.euredd.efi.int/documents/15552/154912/introduction+to+redd+/eaabc68f-9176-40b0-acf3-dd4e81e40aad accessed on Nov.30,2021

²⁶⁷ Joyeeta Gupta, Nicolien van der Grijp and Onno Kuik (eds.), *Climate Change, Forests and REDD : Lessons for Institutional Design* (Routledge, 2013) p. 77

²⁶⁸ While deforestation refers to a complete clearance of a once forested land (forest land changed into non-forest land use), forest degradation means changes to a forest cover through activities such as logging, mining or shifting cultivation.

The Scope of REDD+

The Cancun agreements identified the five (5) different REDD+ activities which are considered as the “scope” of REDD+²⁶⁹ ;

- Reduction of emission from deforestation;
- Reduction of emission from forest degradation ;
- Conservation of forest carbon stocks;
- Sustainable management of forests and ;
- Enhancement of forest carbon stocks.

These activities have not been further defined in the relevant decisions which allow for flexibility in contextually interpreting the activities as they are implemented in each of the developing countries. The challenge would be that it may be difficult to identify what activities that each of the REDD+ activities would consist of as they are interpreted in different national contexts. However , the UN-REDD program offers what would constitute as an understanding of the nature , implications or relevance of each of the activities in specific country contexts as follows²⁷⁰;

- Emissions from deforestation occur when forests are cleared for a variety of purposes, such as using the land for agriculture, or for building infrastructure such as roads. Reducing emission from deforestation is an effort to mitigate GHG emissions resulting from the human –induced long term or permanent conversion of land use from forest to other non-forest uses.
- Emission from forest degradation occurs when human disturbances, such as logging or fuel wood gathering, directly reduce the carbon stock of a forest without changing the land use (i.e. the forest remains a forest).
- ‘Enhancement’ is generally understood to include afforestation and reforestation, and forest rehabilitation /restoration.
- Having noted that conservation is the only REDD+ activities without precedent under the UNFCCC and that there is no experience to date involving conservation of forest carbon

²⁶⁹ Decision 1/CP.16-available at <http://unfccc.int/resources/docs/2010/cop16/eng/07a01.pdf#page=2>

²⁷⁰ UN-REDD Program, Towards a Common Understanding of REDD+ under the UNFCCC: A UN-REDD Program document to foster a common approach of REDD+ Implementation, (Technical Resources Series, 2016) available online at: https://www.unclearn.org/wp-content/uploads/library/redd_under_the_unfccc_hq.6_713128_1.pdf accessed on 16 May 2022.

stocks, the UN-REDD program reports that conservation activities may be defined by certain countries as the preservation of existing forest carbon stocks, which in itself may not generate emissions or removals. Some countries, however, may argue that conservation activities increase removals, in accord with their national circumstances.

Again, like the Clean Development Mechanism, REDD+ is a neoliberal politico-economic tool recommended by the industrialized states and the international institutions (such as the UN itself and the World Bank) that they so profoundly influence to but ostensibly address the climate crisis.²⁷¹ As a neo-liberal tool of mitigating the climate crisis, REDD+ is predicated on the false assumptions that the market-based mechanisms will help stabilize the climate via flexible and cheaper ways of reducing GHGs emissions while at the same time facilitating increased economic growth. Moreover, as has been argued previously with Afforestation/Reforestation Clean Development Mechanism (CDM), REDD+ is premised on faulty assumptions that take it for granted that “biotic” carbon is the same as “fossilized carbon”; that all GHGs have same climatic effects and hence could be translated into carbon dioxide equivalence on the one hand²⁷² and also that the additionality of an emission reduction project relative to “what would have happened in the business as usual scenario” is accurately calculated producing a net emission reduction in the emission of GHGs on the other and hence, generation of carbon credits.²⁷³

In this connection, it has been documented that even if all countries which are parties to the Paris Agreement were to effectively implement their emission reductions pledges which they made, it will not stop the planet from warming in order of 2.7 – 3.1 degree centigrade beyond and above the Paris goal.²⁷⁴ This, in turn, is associated with rather catastrophic consequences and resultant adverse impacts upon the effective exercise of a wide range of human rights.

²⁷¹ Larry Lohmann, ‘Ending Colonialism Means Ending REDD+’ in Joana Cabello and Jutta Kill, *15 Years of REDD+: A Mechanism Rotten at the Core* (World Rainforest Movement, 2022); Joana Cabello and Tamara Gilbertson, ‘A Colonial Mechanism to Enclose Lands: A Critical Review of Two REDD+ focused special issue’ (2012) Vol.12 (1/2) Theory and Politics in Organization. Available online at: < <https://ephemerajournal.org/sites/default/files/2022-01/12-1cabellogilbertson.pdf> > accessed on 17 June 2023; Jichuan Sheng et al, ‘Neoliberal Conservation in REDD+: The Roles of Market Power and Incentive Designs’ (2019) Vol, 28 Land Use Policy. Available online at: <https://www.sciencedirect.com/science/article/abs/pii/S0264837719302510> accessed on 17 June 2023.

²⁷² Joanna Cabello, Is all Carbon the Same? : Fossil carbon, Violence and Power in Joanna Cabello and Jutta Kill, *15 Years of REDD+: A Mechanism Rotten at the Core* (World Rainforest Movement, 2022).

²⁷³ Barbara Haya, ‘Measuring Emissions against an Alternative Future: Fundamental Flaws in the Structure of the Kyoto Protocol’s Clean Development Mechanism’, (Energy and Resource Group Working Paper ERG 09-011, University of California, 13 March 2016).

²⁷⁴ “INDCs lower projected warming to 2.7° C: Significant Progress but still above 2°C “(1 October 2015). Available online at: < <https://climateactiontracker.org/publications/indcs-lower-projected-warming-to-27c->

Furthermore,grassroot indigenous and climate activists critiqued REDD+as“land –grabbing false solution to climate change that both privatize the air we breathe,uses forests, agriculture, water ecosystem in the Global South as sponges for industrialized countries pollution and will bring trees, soil, and nature into a commodity trading system.”²⁷⁵They contended that REDD+ is a mechanism that “steals the future of people in the global South, lets polluters off the hook, and is a new form of colonialism”.²⁷⁶It has now been shown that REDD+ does actually operate as a carbon offsetting scheme in which developed countries provide financial resources to promote the reduction of deforestation and forest degradation in the global South and, in return, are able to count their own international compliance obligations the generated carbon credits from such “result-based action”.²⁷⁷Operating this way REDD+, in practice, shifts or displaces the site and material responsibility of emission reduction or climate mitigation to forested countries in the global South.²⁷⁸ This spatial displacement of emission reduction via carbon offsetting, in turn, does have a crystal clear implications about the distribution of the costs of climate mitigation globally.

While it is the industrialized states that are primarily responsible for the climate crisis, the international community as represented by the COP in the Paris Agreement instigated a climate mitigation strategy that,again, through the operation of the international carbon market practically shifted the site and material responsibility of climate mitigation allowing the global North evade the obligation to introduce a necessary structural transformation involving a shift away from reliance on fossil fuel based economic growth.Hence, REDD+ represents a specific way of framing and responding to the urgent challenge of addressing climate change, which is not neutral in its effects but with potential wide ranging implications for how forests are governed and valued, for biodiversity, and for livelihoods of the estimated 1.6 billion people who

[significant-progress-but-still-above-2c/](#) > accessed on 19 June 2023; See also Julia Dehm, ‘Reflections on Paris: Thoughts towards a Critical Approaches to Climate Law’, (2018), *Revue québécoise de droit international*. Available online at: https://www.persee.fr/doc/AsPDF/rqdi_0828-9999_2018_hos_1_1_2297.pdf accessed on 19 June 2023.

²⁷⁵ Indigenous Environmental Network, UN Promoting Potentially genocidal policy at World Climate Summit, (8 December, 2015). Available online at: < <https://www.ieneearth.org/un-promoting-potentially-genocidal-policy-at-world-climate-summit/> > accessed on 19 June 2023.

²⁷⁶ Ibid; see also Julia Dehm, ‘Authorizing Appropriation? : Law in Contested Forested Spaces’ in Christina Voigt (ed.) *Research Handbook on REDD+ and International Law* (Edward Elgar, 2016) p. 496.

²⁷⁷ Ibid

²⁷⁸ Ibid

live in and around forests and depend upon them to some degree for their livelihoods.²⁷⁹ Furthermore, it is seen as “already functioning as a form of governance, a particular framing of the problem of climate change and its solutions that validates and legitimizes specific tools, actors and solutions while marginalizing others.”²⁸⁰ Henceforth, REDD+, which is the same climate strategy as A/R CDM policy, in what it is and in the way it operates, constitutes, again, an unjust climate policy that perpetuates inequity among states, violates the right to self – determination of peoples, infringes on article-4(2) of the UN Declaration on the right to development concerning the need to support rapid development of developing countries and compromises a range of human rights of local people and communities including both procedural and substantive rights.²⁸¹ And this happens at the different stages of its implementation which are described as follows.

A ‘Phased Approach’ to REDD+ Implementation

The Cancun Agreement stipulates an iterative approach to REDD+ implementation as it decides that the activities undertaken by Parties (the five activities stipulated in paragraph 70 of the decision) should be implemented in phases beginning from the development of national strategies or action plans, policies and measures, and capacity –building, followed by the implementation of national policies and measures and national strategies or action plans that could involve further capacity -building, technology development and transfer and results –based demonstration activities and evolving into results-based action that should be fully measured, reported and verified.²⁸² The phased approach also recognizes that the implementation of the activities (the five (5) activities) including the choice of a starting phase depends on specific national circumstances, capacities and capabilities of each developing country Party and the level

²⁷⁹ Johan Eliasch, *Climate Change: Financing Global Forests. The Eliasch Review*. (Routledge, 2008) p.9.

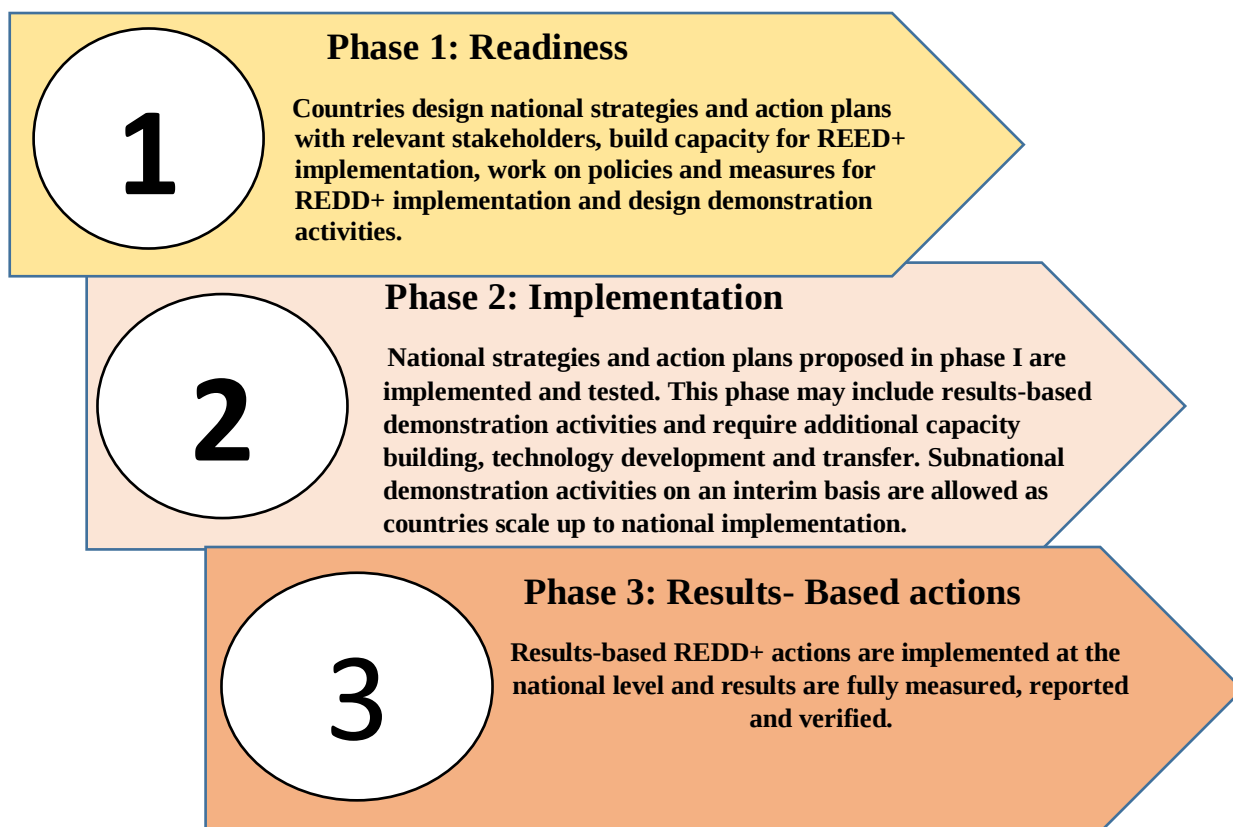
²⁸⁰ Marry C. Thompson et al, ‘Seeing REDD+ as a Project of Environmental Governance’ (2011) Vol. 14 Issue 2, *Environmental Science and Policy*. Available online at: < <https://www.sciencedirect.com/science/article/abs/pii/S1462901110001619> > accessed on 20 June 2023.

²⁸¹ Joshua Hammond, ‘Salvaging the United Nations REDD+ Program against the Backdrop of International Human Rights Violations’, Vol. 45, No.4, *Denver Journal of International Law and Policy*. Available online at: < <https://digitalcommons.du.edu/cgi/viewcontent.cgi?article=1018&context=djilp> > accessed on 21 June 2023; Mucahid M. Bayrak et al, Ten Years of REDD+ : A Critical Review of the Impact of REDD+ On Forest Dependent Communities, Vol. 8, Issue 7, (2016), *Sustainability*. Available online at: < <https://www.mdpi.com/2071-1050/8/7/620> > accessed on 21 June 2023; Yolanda A. Collins, Colonial Residue: REDD+, Territorialisation and the racialized subject in Guyana and Suriname, Vol. 106, (2019), *Geoforum*, pp.38-47. Available online at: < <https://www.sciencedirect.com/science/article/abs/pii/S0016718519302283> > accessed on 21 June 2023.

²⁸² Decision1/CP.16, paragraph 73 of the Cancun Agreement available at <https://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf#page+13>

of support it received.²⁸³ And to this end urges the developed countries to support, via multilateral and bilateral channels, the implementation of the activities in all the three (3) non-discrete and hence overlapping phases.

Description of the three (3) phases of REDD+ Implementation based on decision 1/CP.16.



Most UN-REDD+ partner countries were in REDD+ readiness phase (phase I) as of late 2016.²⁸⁴ The REDD+ readiness phase covers the efforts that a country is undertaking to develop capacities for the implementation of REDD+.The REDD+ readiness support is currently being provided via bilateral and multilateral initiatives.The UN-REDD+ program and the World Bank's FCPF are the two major initiatives coordinating activities meant to support countries in their readiness efforts.The harmonization of the Readiness Preparation Proposal (R-PP) format which is a framework document delineating a clear plan,budget and schedule for a country to

²⁸³ Ibid , paragraph 74

²⁸⁴ UN-REDD+ Program, n. 197 p.18

achieve its REDD+ readiness is a resultant development of the efforts of bilateral and multilateral coordination activities.²⁸⁵

The second phase of REDD+ implementation anticipates ‘demonstration activities’.²⁸⁶ In this connection the decision adopted during the Bali COP in 2007 contains an annex that enlists an indicative guidance for undertaking and evaluating a range of demonstration activities meant to address the drivers of deforestation relevant to national circumstances, with a view to reducing emissions from deforestation and forest degradation and this enhancing forest carbon stocks due to sustainable management of forests. The guidance is listed below²⁸⁷;

- i) Demonstration activities should be undertaken with the approval of the host Party.
- ii) Estimates of reduction or increases of emissions should be results based, demonstrable, transparent and verifiable, and estimated consistently over time.
- iii) The use of methodologies described in paragraph six (6) of this decision is encouraged as a basis of estimating and monitoring emissions.
- iv) Emission reduction from national demonstration activities should be assessed on the basis of national emissions from deforestation and forest degradation.
- v) Subnational demonstration activities should be assessed within the boundary used for the demonstration, and assessed for associated displacement of emissions.
- vi) Reductions in emissions or increases resulting from the demonstration activity should be based on historical emissions, taking into account national circumstances.
- vii) Subnational approaches, where applied should constitute a step towards the development of national approaches, reference levels and estimates.
- viii) Demonstration activities should be consistent with sustainable forest management, noting, inter alia, the relevant provisions of the United Nations Forum on Forests, the United Nations Convention to Combat Desertification and the Convention on Biological Diversity.
- ix) Experience in implementing activities should be reported and made available via the Web platform.

²⁸⁵ Ibid

²⁸⁶ Decision 1/CP.16, paragraph 73 of the Cancun Agreement

²⁸⁷ Decision 2/CP.3, Reducing Emission from deforestation in developing countries : approaches to stimulate actions, FCCC/CP/2007/6/Add.1, pp.11

- x) Reporting on demonstration activities should include a description of the activities and their effectiveness and may include other information.
- xi) Independent expert review is encouraged.

Thirdly, result- based REDD+ actions are implemented nationally and the results are fully measured, reported and verified. Measurement for non-Annex I Parties is applied both to efforts to address climate change and to the impacts of these efforts, including the level of GHG emissions by sources and removal by sinks, emission reductions and other co-benefits. Such measurement occurs at the national level. Initially, it referred to the measurement of GHGs emissions by sources and removals by sinks through the national GHG inventories, which are reported in national communications but now non-Annex I Parties need to measure the specific effects of national mitigation actions as well as the support needed and received and to provide this information, including their national inventory report, as part of their BUR.²⁸⁸ And since the methodologies for measurement are not defined by the Convention, Parties rely on methodologies developed externally such as that by the IPCC and other organizations. In this regard the COP, at least, identifies and endorses the methodologies that Parties should use.

Reporting for non-Annex I Parties is implemented through the national communications and the Biennial Update Report (BUR). Parties are required to report on their actions to address climate change in their national communications which include information on the GHG inventories, adaptation, mitigation actions, and their effects, constraints and gaps, support needed and received, and other information considered relevant to the achievement of the objective of the Convention.²⁸⁹ National communications are to be submitted every four (4) years and prepared following the guidance contained in the revised guidelines for the preparation of national communications for non-Annex I Parties contained in the annex to the decision.²⁹⁰ BURs are to be submitted every two years, providing an update of the information presented in national communications, in particular in national GHG inventories, mitigation actions, constraints and gaps, including support needed and received.²⁹¹

Verification is addressed at the international level through International Consultation and Analysis (ICA) of the BUR which is the process meant to increase the transparency of mitigation

²⁸⁸ The UN Climate Change Secretariat, *Handbook of Measurement, Reporting and Verification for Developing Country Parties*, (United Nations Convention on Climate Change 2014).

²⁸⁹ Ibid

²⁹⁰ Decision 17/CP.8 of the UNFCCC

²⁹¹ Decision 2/CP.17, annex III of the UNFCCC

actions and their effects, and support needed and received.²⁹² National communications are not subject to ICA. At the national level, verification is implemented through domestic MRV mechanisms to be established by non-Annex I parties, general guidelines for which were adopted at COP 19 in 2013. Provisions for verification at domestic level that are part of the domestic MRV framework are to be reported in BUR.

Following is provided an overview of the elements subject to MRV under the current international framework as adopted from UNFCCC's Handbook of Measurement, Reporting, and Verification for Developing Country Parties²⁹³:

What is measured?

- GHG emissions and removals by sinks;
- Emission reductions (or enhancement of removals by sinks) associated with mitigation actions compared to baseline scenario;
- Progress in achieving climate change mitigation and adaptation (i.e. GHG emission reductions or enhancement of sinks and reductions in vulnerability), achievement of sustainable development goals and co-benefits;
- Support received (finance, technology and capacity building);
- Progress with the implementation of mitigation action.

What is reported?

- Data on GHG emissions and removals by sinks (inventory as part of the national communication and inventory update report as part of the (BUR));
- Data on emission reductions (or enhancement of removals by sinks) associated with mitigation actions compared to a baseline scenario (BURs, national communications);
- Progress with the implementation of mitigation actions (BURs and national communication);
- Key assumptions and methodologies;
- Sustainability objectives, coverage, institutional arrangements and activities (in the national communications and BURs);
- Information on constraints and gaps as well as support needed and received.

²⁹² Decision 2/CP.17, annex IV and 20/CP.19 of the UNFCCC

²⁹³ The UN Climate Change Secretariat, n215 .p.46

What is verified?

- All quantitative and qualitative information reported, in the BUR, on national GHG emissions and removals, mitigation actions and their effects, and support needed and received;
- Data may be verified through national MRV and through ICA, where appropriate.

In connection with the science and its level of certainties with regards to the possibility of accurately enumerating the carbon that trees sequester or soak, whether it is possible to learn about "what would have happened in the absence of a REDD+ project (that is accurately establishing the baseline) "and the conduct of monitoring and verifying exercises of emissions by sources and removal by sinks of GHGs, critiques assert that there doesn't exist adequate evidence and scientific basis underpinned by the conduct of rigorous standard procedures. One of these critiques is Larry Lohmann who having noted that in 2000, when the IPCC finalized its 377 pages report on Land Use, Land Use Change and Forestry, countries like the US, Japan, Canada, Australia, New Zealand and Norway had been pressing hard to be given some time to count "huge" amount of carbon soaked up by their forested land against their industrial emissions, reported that the IPCC came up with conclusions that reflected the interests that these countries were pressing to be upheld abandoning normal standards of technical rigor that the reports used to comply with.²⁹⁴ Lohmann clarified this saying that defying warning from the International Institute for Applied System Analysis that the IPCC's work to date could not be considered adequate in handling the uncertainties underlying the carbon accounting problem and thus the Kyoto Protocol, the authors assumed without evidence that 'removals by sinks' could verifiably compensate for 'emission by sources'.²⁹⁵

Furthermore, the panel of experts were said have brought little of the available relevant knowledge as regards forest carbon accounting to bear on its deliberations. In this connection Lohmann reports that "thousands of relevant peer-reviewed references were missing – on deforestation, the history of forestry development projects, peasant resistance, forest commons regimes, investor behavior and so on."²⁹⁶ He maintained that while the panel observed that it is 'very difficult, if not impossible' to distinguish changes in biotic carbon stocks that are 'directly

²⁹⁴ Larry Lohmann, *Carbon Trading: A Critical Conversation on Climate Change, Privatization and Power*. (The Dag Hammarskjöld Center, (2006)). p. 36.

²⁹⁵ Ibid

²⁹⁶ Ibid

human –induced’ from those that are ‘caused by indirect and natural factor’, it failed to draw the logical conclusion that it would be very difficult, if not impossible, for countries to claim credit for forests and soil.²⁹⁷

But this fell on non-scientist UN diplomats from the global South (Uganda, Kenya, Tanzania and Guatemala) to raise scientific questions that the expert panel had neglected about forest data, opportunity costs of carbon forestry, accounting for effects on fossil fuel use and the like. Moreover, since most of the authors of the report were affiliated with environmental consultancies, mainstream forestry or economics institutes and faculties, industry associations, official agencies and government funded research institutions, Larry Lohmman, observes, they saw “carbon offset” research as a promising enterprise for their research institutions.²⁹⁸ Thus, the foregoing discussions shows that the so called ‘carbon accounting’ that includes determination of base line, national inventory of emissions (the balance between emission by sources and removal by sinks), monitoring forest carbon stocks and verifying it and determination of the additionality of a project all are bent, rather, on uncertain and scientifically unverifiable premises signaling that the carbon offset mechanisms of climate mitigation constitutes, rather, a false solution.

This, in turn, might be taken as accounting for why efforts taken so far to stabilize the climate would not prevent its warming beyond and above 2 degrees which the Paris Agreement sets to be a dangerous threshold and therefore, won’t prevent impacts against the full and effective exercise of a wide range of human rights of people in the different corners of the world. The other very important inference drawn, in the light of the foregoing discussion, is the permeating influence of the global North in “dictating” policy that favors the same capitalist economic interests that brought about the problem of the climate crisis over genuine solutions that address the roots of the problem. However, irrespective of its faulty assumption the REDD+ strategy is being piloted in countries via the support of the UN-REDD+ and the World Bank Forest Carbon Partnership Facility (FCPF) through the development of its elements as described below.

²⁹⁷ Ibid

²⁹⁸ Ibid

The Elements of REDD+ Implementation

The implementation of REDD+ and acquisition of Results Based Payments or Fund (RBPs/RBF) presupposes, as stipulated in Cancun Agreement, the development of the following four elements²⁹⁹:

- i.) A National Strategy (NS) or Action Plan (AP);
- ii.) A national (or subnational as interim) Forest Reference Emission Level (FREL) and/or Forest Reference Level (FRL);
- iii.) A robust and transparent National Forest Monitoring System (NFMS) for the monitoring and reporting of the five REDD+ activities, including for measurement, reporting and verification results;
- iv.) A safeguard information system.

REDD+ National Strategies (NS) and Action Plans (AP)

Once a country decides to undertake REDD+ implementation, it is asked to develop a REDD+ National Strategy (NS) or Action Plan (AP) that describes how it plans to reduce emissions and /or how it strategizes to enhance, conserve and sustainably manage its forest carbon stocks. The terms NS and AP are used, in the UNFCCC COP decisions, interchangeably. NS/AP are products of the readiness phase (phase 1), drawing on various strands of analytical work, stakeholder engagement and strategic decisions undertaken to prepare for REDD+ implementation (phase 2).³⁰⁰ It is the central role of a government to design and implement national REDD+ programs as indicated by the UNFCCC COP decisions.

In this regard, it is important that there be undertaken national policy reforms and measures that tackle the main drivers of deforestation and forest degradation so as to catalyze, coordinate and support subnational efforts, public and private actors as well as to ensure the overall coherence of policies and measures. The design and implementation of REDD+ should involve the full engagement of all stakeholders, including those who benefit from forests or whose activities impact forests, as well as their political and customary leaders at various levels of governance. These strategies are also meant to identify who will be responsible for the implementation of the policies and measures.

²⁹⁹ Decision 1/CP.16, para. 71 of the Cancun Agreement

³⁰⁰ UN REDD+ Program, n.197 p.29

Though there is no direct requirement, in the decision text of the Cancun Agreement, as regards what the actual content of the NS/AP that countries are required to develop, the agreement indicates that the COP “requests developing country Parties, when developing and implementing their national strategies or action plans, to address inter alia, drivers of deforestation and forest degradation, land tenure issues, forest governance issues, gender considerations and the safeguards identified in paragraph 2 of annex I to this decision, ensuring the full and effective participation of relevant stakeholders, inter alia, indigenous peoples and local communities.”³⁰¹

The Cancun Agreements also set out general guidance that should be followed when implementing REDD+ activities in a specific paragraph³⁰² which should be reflected on while developing NS/AP;

- i. Contributes to the achievement of the objective set out in Article 2 of the Convention (stabilize GHG emissions so as to avoid dangerous human interference with the climate system);
- ii. Contribute to the fulfillment of the commitments set out in Article 4, paragraph 3, of the Convention (common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances on new and additional resources);
- iii. Be –country driven and be considered options available to Parties;
- iv. Be consistent with the objective of environmental integrity and take into account the multiple functions of forests and other ecosystems;
- v. Be undertaken in accordance with national development priorities, objectives and circumstances and capabilities and should respect sovereignty;
- vi. Be consistent with Parties’ national sustainable development needs and goals;
- vii. Be implemented in the context of sustainable development and reduction of poverty, while responding to climate change;
- viii. Be consistent with the adaptation needs of the country;
- ix. Be supported by adequate and predictable financial and technology support, including support for capacity building ;
- x. Be results-based;

³⁰¹ Decision 1/CP.16, paragraph 72 of the Cancun Agreement

³⁰² Decision 1/CP.16, Appendix 1, paragraph 1

- xi. Promote sustainable management of forests.

Forest Reference Emission Level or Forest Reference Level (FREL/FRL)

A forest reference emission level /forest reference level (FREL/FRL), expressed in tonnes of carbon dioxide equivalent per year, for REDD+ is a benchmark for assessing a country's performance in implementing REDD+ activities³⁰³. While the UNFCCC does not provide a distinct definition for a FREL and the FRL, a common interpretation of the terms is that FREL refers only to emission from deforestation and forest degradation; whereas FRL can be applied to the enhancement of forest carbon stocks (i.e. to account for removals as well as emissions).³⁰⁴

FREL/FRL can be established at a subnational scale as an interim measure –representing less than the country's entire national territory of forest area –while transitioning to the national level. The established forest reference emission level or forest reference level may reflect one or more of the five (5) activities of REDD+ and significant pools and/or activities should not be excluded. In cases where significant activities are excluded, reason for omission need to be provided in the submission. Provided that the measured, reported, and verified REDD+ results will be compared against the FREL/FRL, there is a critical linkage between FREL/FRL and MRV for REDD+. Ensuring consistencies in methodologies, definitions, comprehensiveness and the information provided between the assessed FREL/FRL and the results of the implementation of REDD+ activities is essential. This helps ensure that reductions are credible and not an artefact of inconsistent methodologies.

National Forest Monitoring Systems (NFMS)

Two decisions of the Conference of Parties (Decisions 11/CP.19 and 14/CP.19) in what is construed as the Warsaw Framework for NFMS and MRV provide the modalities for the implementation of the activities. Decision 11/CP.19 establishes that the primary function of the NFMS is the MRV of REDD+ activities. Accordingly, the key elements of the Warsaw framework³⁰⁵ for NFMS require that it;

- Make available data and information that are transparent, consistent over time, and suitable to be MRV;
- Build upon existing systems while being flexible and allowing for improvement, reflecting the phased approach to REDD+ implementation;

³⁰³ Decision 12/CP.17, paragraph 7 of the Warsaw Framework for REDD+

³⁰⁴ The UN-REDD+ Program, n.197 p.39

³⁰⁵ see specifically Decision 11/CP.19 of the UNFCCC

- Be guided by the most recent IPCC guidance and guidelines, as adopted or encouraged by the COP, as appropriate, as a basis for estimating anthropogenic forest related greenhouse gas emissions by sources and removals by sinks, forest carbon stocks, and forest carbon stock and forest area change.
- Provide as appropriate, relevant information for national systems for the provision of information on how the REDD+ safeguards are addressed and respected.

The second decision encompasses the modalities for measuring, reporting and verifying REDD+ results including an annex to the decision with guidelines for the elements to be included in the REDD+ BUR technical annex. The important elements in the decision 14/CP.19 deal with the transparency and consistency of the data as regard the anthropogenic forest related emission of GHGs by sources and removals by sinks, forest carbon stocks, forest carbon stocks and area changes both over time and with respect to the established FREL/FRL. Other elements, inter alia, have to do with how the results of implementation of REDD+ activities are communicated (tonnes of CO₂ equivalent per year), what requirements should a developing country party fulfill in order to obtain RBPs/RBF, and the roles of LULUCF TTE (Technical Team of Experts).

Measurement, Reporting and Verification (MRV) in the context of REDD+ implementation is elaborated as the process that countries will need to follow in order to estimate the performance of REDD+ activities in mitigating climate change—i.e. emission reductions and forest carbon stock enhancements—reported in tones of CO₂ equivalents per year (tCO₂ e/year). In this connection, the COP decided that Parties be guided by the latest IPCC guidelines to ascertain the transparency, consistency, accuracy, comparability and completeness of their national inventories of emissions of GHGs by sources and removals by sinks, forest carbon stocks and forest area changes. The IPCC guidance and guidelines relate mainly to the Measurement and Reporting elements of the MRV component of a NFMS. The monitoring function of the NFMS, on the other hand, allows countries to assess a broad range of forest information, including in the context of REDD+ activities. While the monitoring function is implemented via a variety of methods and serves different purposes, in REDD+ context it is likely to focus on the impacts and outcomes of demonstration activities carried out during the second phase of REDD+ and national policies and measures for REDD+ in the third phases³⁰⁶. The monitoring function also makes up a

³⁰⁶ UN –REDD+ Program, n. 197 p. 49

tool that can help promote transparency of REDD+ implementation to the international community. Monitoring will be nationally specific and is carried out in relation to both REDD+ specific and non-REDD+ needs but the focus, however, is on two REDD+ specific monitoring aspects³⁰⁷:

- i.) Monitoring to assess the performance of REDD+ demonstration activities in Phase 2;
- ii.) Monitoring of the performance of national REDD+ policies and measures in Phase 3.

Safeguards and Safeguards Information System (SIS)

A set of seven (7) safeguards, which are commonly referred to as the Cancun Safeguards, are required to be promoted and supported when undertaking REDD+ activities in accord with Decision 1/CP.16 annex1 of the Cancun Agreement of 2010³⁰⁸. The safeguards in Appendix 1 of the relevant decision stipulate that when carrying out REDD+ activities, the following safeguards should be promoted and supported:

- i.) That actions complement or are consistent with the objectives of the national forest programs and relevant international conventions and agreements;
- ii.) Transparent and effective national forest governance structures, taking into account national legislation and sovereignty;
- iii.) Respect for the knowledge and rights of indigenous peoples and members of local communities, by taking into account relevant international obligations, national circumstances and laws, and noting that the United Nations General Assembly has adopted the United Nations Declaration on the Rights of Indigenous Peoples;
- iv.) The full and effective participation of relevant stakeholders, in particular indigenous peoples and local communities, in actions referred to in paragraph 70 and 72 of this decision (decision 1/CP.16);
- v.) That actions are consistent with the conservation of national forests and biological diversity, ensuring that the actions referred to in paragraph 70 of Decision 1/CP.16 are not used for the conversion of natural forests, but are instead used to incentivize the protection and conservation of natural forests and their ecosystem services, and to enhance other social and environmental benefits;
- vi.) Actions to address the risks of reversal;

³⁰⁷ Ibid

³⁰⁸ Decision 1/CP.16, the Cancun Agreement : Outcome of the work of the Ad Hoc Working Group on Long- term Cooperative Action under the Convention , FCCC/CP/2010/7/Add.1 (15 March 2011)

vii.) Actions to reduce displacement of emissions.

Furthermore, the Cancun Agreement and the subsequent decisions adopted in Durban also request Parties to develop a Safeguard Information System for providing information on how the Cancun safeguards are being addressed and respected throughout the implementation of REDD+ activities. The decision are such that they allow flexibility for Parties in interpreting them in the lights of their specific national contexts. The Durban decision in relation to providing information on how the safeguards are addressed and respected states that Parties implementing REDD+ activities "...should provide a summary of information on how the safeguards in decision 1/CP.16 appendix 1 are being addressed and respected throughout the implementation of the activities." It further stipulates that the summary of information should be provided periodically and be included in the national communications. It is also agreed that systems for providing information on how the safeguards are addressed and respected:

"...should take into account national circumstances, recognize national legislation and relevant international obligations and agreements, respect gender considerations, and;

- a) Be consistent with the guidance identified in decision 1/CP.16, appendix 1;
- b) Provide transparent and consistent information that is accessible by all relevant stakeholders and updated on a regular basis;
- c) Be transparent and flexible to allow for improvements over time;
- d) Provide information on how all of the safeguards are being addressed and respected;
- e) Be country –driven and implemented at the national level;
- f) Build upon existing systems, as appropriate."

The Warsaw decision (Decision 12/CP19), on the other hand, relates to the timing and frequency of presentation of the summary of information on how all the safeguards referred to in Appendix I of the Cancun Agreements, are being addressed and respected. Important provisions of the decision are:

- In addition to National Communications, an additional channel is referred to so as to provide summary of information on how all the safeguards are being addressed and respected which is via the submission of the summary of information directly to the UNFCCC REDD+ Web platform;
- In terms of timing, the information on safeguards (whether through the national communication or the UNFCCC Web Platform) should be provided after the start of

implementation of the five (5) REDD+ activities and before the country aims to access Results Based Payments (RBPs) , if seeking to do so;

- In terms of frequency, the information provided should be in line with the frequency of national communications, which are to be submitted every four (4) years.³⁰⁹

Moreover, it was also agreed that developing countries seeking to obtain REDD+ RBPs /RBF should submit the most recent of summary of information on how all of the safeguards agreed to in the Decision 9/CP 19 have been addressed and respected. Again, Decision 17/CP21³¹⁰ (in Paris) did further provide guidance in accord with which developing countries are required to:

- Provide information on which REDD+ activities are included in the summary information.
- Are strongly encouraged to provide the following in the summary:
 - i.) Information on national circumstances relevant to addressing and respecting safeguards.
 - ii.) A description of each safeguard in accordance with national circumstances.
 - iii.) A description of existing systems and processes relevant to addressing and respecting the safeguards, including information systems.
 - iv.) Information on how each safeguard has been addressed and respected, according to national circumstances.
- Are encouraged to provide any other relevant information on the safeguards in the summary and to improve the information provided over time, taking into account the stepwise approach.

In accord with the UN-REDD+ Program the term “addressing” is interpreted as signaling a coherent body of Policies, Laws and Regulations (PLRs) and associated institutional arrangements which are planned to be in place or already existing to deal with the potential benefits and risks associated with REDD+ actions.³¹¹ Again the UN-REDD+ program understands “Respected” to mean that the PLRs are implemented via the institutional arrangements and enforced in practice

³⁰⁹ Decision 12/CP.19 , The timing and frequency of presentations of the summary of information on how all the safeguards referred to in decision 1/CP.16 , appendix I, are being addressed and respected , FCCC/CP/2013/10/Add.1 (22 November 2013) .

³¹⁰ Decision 17/CP.21 , Further guidance on ensuring transparency , consistency, comprehensiveness and effectiveness when informing on how all the safeguards referred to in decision 1/CP.16 , appendix I, are being addressed and respected , FCCC/CP/2015/10/Add.3 (10 December 2015) .

³¹¹ UN-REED Program , n.197 p.54

and that this implementation affects real and positive outcomes on the ground in line with the Cancun safeguards.³¹²

CDM and REDD+ Implementation: Technical uncertainties and human rights implications

Issues associated with effective implementation of CDM and REDD+ policy measures are essentially linked with the criteria for actual generation of carbon credits. These issues pertain to setting robust *Baselines*, proving *Additionality*, ensuring *Permanence*, avoiding *Leakage* and ascertaining precise *Quantification of GHG emissions and removals*. These technical uncertainties and issues are viewed, in this thesis and more importantly, in terms of the “environmental integrity”³¹³ requirement, under the UNFCCC and its Kyoto protocol, of the mitigation measures and by extension from the perspective of their human rights implications. Given that the adverse impacts and threats to the effective and full enjoyment of human rights of climate change is recognized by the OHCHR³¹⁴, the global effort to mitigate the causes of global warming is concomitantly an effort to protect human rights from the climate crisis. Therefore, uncertainties that pertain to technical and methodological issues of mitigating GHGs emissions implicate states’ and private entities’ abilities to meet their human rights obligations in the context of the global response to the climate crisis³¹⁵.

The other frame of reference from which the technical failures or uncertainties as regards the criteria for obtaining CERs and the associated result-based payments could be seen as implicating states obligation for human rights protection is the promotion of sustainable development goal which is one of the objectives of the Clean Development Mechanism and also

³¹² Ibid

³¹³ Christina Voigt defines “environmental integrity” generally in terms of “the ability of an environmental measure to reach its objective and purpose. She sees it as relating to the quality of the regime, its instruments and its institutions. In the context of climate change regime, it refers to the extent to which the means are able to achieve the objective as set in Article -2 of the UNFCCC. In particular case of the CDM, she identifies “primary” and “secondary” connotations where the primary sense refers to demonstrated ability to approve projects and to certify emission reductions that are real and additional ... while in its secondary sense it refers to other environmental concerns for example as related to biodiversity protection .” See Christina Voigt, ‘Is the Clean Development Mechanism Sustainable? : Some Critical Aspects’ (2008) Vol.8 Issue 2 Sustainable Development Law and Policy. Available online at: <https://digitalcommons.wcl.american.edu/cgi/viewcontent.cgi?> Accessed on 10 May 2022.

³¹⁴ HRC, Annual Report of the Office of United Nations High Commissioner for Human Rights on the Relationship between Climate Change and Human Rights, A/HRC/10/61, 15 January 2009 available online at : <https://documents-dds-ny.un.org/doc/UNDOC/GEN/G09/103/44/PDF/G0910344.pdf?> Accessed on 11 May 2022.

³¹⁵ Though a state’s human rights obligations against the adverse impacts of climate change has not been unambiguously established so far, states’ human right obligation here is construed to mean their general obligation to limit warming below 1.5 degree centigrade by living up to their emission reductions and limitation targets in the case of Annex –I countries and voluntary emission reduction of developing countries under the Paris Agreement in the case of non-Annex I countries.

has been emphasized under decision 1/CP.16 of the Cancun Agreement where the REDD+ approach for enhancing climate mitigation action in developing countries is developed. In this context, sustainable development is understood as recognizing “limits” to development, and of the ability of the biosphere to absorb the effects of human activities.³¹⁶ So if and when effective, climate mitigation efforts help ensure the sustainability of the conditions in which development manages to meet the fulfillment of human rights. Below are described and explained the technical issues and their implications for the effectiveness of the climate regime and hence for human rights of particularly local people and communities.

Baseline

Setting baseline refers substantively to determining an existing reference level of GHG emissions of a particular project’s territory or a national jurisdiction. Conceptually it engages us to consider what amount of GHGs are emitted under the business –as –usual scenario (BAU) in a condition in which there are no interventions made to reduce the emission of these gases³¹⁷. The business–as usual (BAU) or the historical average emissions of GHGs or future projected emissions level determined as reference emissions levels are critical in determining the meaning or value of a project’s or a program’s intervention as it clarifies the amount of emission reductions effected or carbon credits generated³¹⁸. Baselines or Reference Levels are developed using a variety of approaches which, inter alia, include activity-specific baselines, historical average emissions and sectorial performance standards³¹⁹.

Employing techniques of scenario analysis or emission modeling, the activity–specific approach to setting baseline work based on the evaluation of what the expected drivers of future emissions are and also assumption of what might have happened if a project or a program has not been introduced.³²⁰ In the context of scenario analysis for REDD+ or more specifically ‘avoided deforestation’ a reference emission is often determined by assessing drivers of deforestation in similar area and applying the historical deforestation rates seen in the project area. In this regard

³¹⁶ WCED, *Our Common Future, Report of the World Commission on Environment and Development*, (United Nations, 1987), pp.37-38.

³¹⁷ S.M. Walker et al., *Technical Guidance on Development of a REDD+ Reference level* .(Winrock International, 2013) p.7

³¹⁸ A. Angelson et al, *Modalities for REDD+ Reference Levels: Technical and Procedural Issues*. (Meridian Institute, 2011) p18.

³¹⁹ T. Chagas et al., *A Close Look at the Quality of REDD+ Carbon Credits*. (A Report, 2020) available at: <https://www.climatefocus.com/sites/default/files/A%20close%20look%20at%20the%20quality%20of%20REDD%20B%20carbon%20credits%20%282020%29%20V.20.pdf>. Accessed on 20 December ,2021

³²⁰ Ibid

the baseline scenario can also assume the implementation of infrastructure projects (such as roads) or agricultural policies that lead to increased deforestation in which case a more complex modeling may be needed. But the use of complex modeling approaches makes it difficult for auditors to assess modeling assumptions used in the creation of baselines. This is observed creating a risk for baseline that may be overly generous in assuming future reference emissions³²¹.

Historical data is typically relied on in jurisdictional approaches to setting REDD+ baselines. Such an approach utilizes the average value of historical emissions of GHGs over a reference period. This approach is at times considered a proxy for obtaining a business as usual scenario in REDD+ jurisdictional programs.³²² Otherwise historical trend is determined from historical data in creating linear projections which then is used as a reference baseline. In other cases, “adjustments” to historical average data are permitted such as for planned deforestation due to construction of infrastructures and land concessions. While the approach employed in establishing the baseline is critical for the robustness of REDD+ emission reductions and also for RBPs (Results Based Payments) by extension, need also be noted that they may involve challenges resulting in, for example, gerrymandered selection of high deforestation zones, and cherry picked areas with high rates of deforestation.³²³

So issues or challenges in the construction of baselines arise in the choice between using historical average value of emissions or linear projections of emissions based on historical trends on the one hand and the use of similar drivers of deforestation coupled with historical rates of emission of GHGs in project areas or adopting proportional share of historical averages of emissions of GHGs in jurisdictional programs. Thus, at the core of the challenge surrounding establishing a robust baseline is an accurate determination of a reference baseline bent on which the actual emission reductions as a result of a project’s or a program’s intervention is determined. In this regard, critiques argue “that carbon and specially carbon offsets are an inherently “unregulatable commodity” given the impossibility of assessing the “additionality” claimed against counterfactual baselines”.³²⁴ Even in case it is possible to verify the additionality of

³²¹ Ibid

³²² Ibid

³²³ Ibid

³²⁴ See L. Lohmann, “Regulation as Corruption in Carbon Offset Markets” in Steffen Bohm and Siddhartha Dabhi, (eds.) *Upsetting the Offset: The Political Economy of Carbon Markets*, (London, MayFlyBooks, 2009) .p.175; C. Vogit, n. 240 p.3.

emission reduction due to a project, concerns are raised that the Panel on Guidelines for Methodologies for Baselines and Monitoring Plan (Meth Panel) which assists the EB, in this regard, is not adequately equipped to carry out this task, (that there remains question as regards the capacity of the members to carry out this task) and also question about whether there is available budget to carry out this kind of task.³²⁵ The possible implications is that the reduction in emissions are mere “paper reductions” and hence, are not real. And “seeing” that this happens in a context in which the said “saved GHGs emissions” are used to allow an Annex –I country to increase its emission by the same amount above its permits under the Kyoto protocol means that the CDM allows the fossil fuel based industrial capitalist states to continue to emit GHGs failing to live up to its environmental integrity requirement and perpetuating the climate crisis and by extension the human rights impacts thereof.

Additionality

The concept of additionality represents the understanding that reduction of emissions of GHGs or their removals would not have actually occurred without incentivized intervention of GHGs mitigation projects or programs³²⁶. In other words, additionality refers to reductions in emissions of GHGs or their removals brought about as a result of a project’s intervention when seen in relation to established forest emission reference level or baseline. Additionality is an issue faced in the context of REDD+ implementation because it is impossible to know what might have happened if a REDD+ project had not been initiated³²⁷. Critiques had it that it is difficult to affirm with certainty that forest conservation was only possible because of REDD+. And that it is wrong to assume that a so called “business –as –usual” scenario would always imply forest destruction underscoring that for millions of Indigenous Peoples, local communities and women, their business as usual has been to live in harmony with forests, rather than destroying them.³²⁸

So as has already been argued, the difficulty in precisely ascertaining the additionality of GHGs reductions consequent upon interventions via a CDM or a REDD+ project because of the impossibility of determining exactly what could have happened in the absence of a project makes

³²⁵ Christina Voigt n. 240 p.3

³²⁶ M. Arnoldus & R. Bymolt , *Demystifying Carbon Markets : A Guide to Developing Carbon Credit Projects* , (KIT Publishers , (2018)) p. 20

³²⁷ Global Forest Coalition, *15 Years of REDD+: Has it been Worth the Money?* .(Briefing 2020) available at : <https://globalforestcoalition.org> accessed on 20 Dec.2021

³²⁸ Ibid

the CDM ineffective in terms of meeting the overall objective of the UNFCCC, exacerbates the real cause of the climate crisis by fueling fossil fuels based economies and thereby result in adverse human rights consequences from climate change. Thus, human rights impacts do not only result from the actual implementation of the climate mitigation strategies but basically also as a result of ineffectiveness of climate policies in meeting their environmental integrity and sustainable development goals.

Permanence

Permanence relates to the need for an emission reduction to remain unreversed.³²⁹ The carbon stored in planted trees may be released due to both natural and man-made disturbances (such as forest fire, climate change, when trees die, landslides, pests, diseases). This poses a risk of reversal or non-permanence which is more likely to occur in areas which are affected by climate change. The issue of ensuring permanence is particularly relevant when credits are issued for storing carbon – whether in trees or in geological formations – since there is a risk that the credited carbon removal is reversed i.e. emitted back into the atmosphere.³³⁰ Here, non-permanence becomes an issue if the emission reductions effected via implementing REDD+ projects turns out to be temporary (which is likely as standing trees are evidently subject to destructions) and these temporary results are used to compensate permanent emissions from fossil fuels.³³¹ Thus, these also have implications for attainment of the aggregate emission reductions needed to be realized via the global efforts under Article -2 of the UNFCCC. Again, ineffectiveness leads ultimately to continued impacts of the climate crisis on the full and effective enjoyment and exercise of human rights consequent upon the adverse effects of the climate problem but also as a result of its failure to make development sustainable.

³²⁹ D. Murphy et al., 'Climate Change Mitigation through Land Use Measures in Agriculture and Forestry Sectors', (International Institute for Sustainable Development, Background Paper, 2009), p.15. Available online at: https://www.fao.org/fileadmin/user_upload/rome2007/docs/Climate_Change_Mitigation_through_Land_Use_Measures.pdf accessed on 10 May 2022.

³³⁰ C. Galik et al., 'Alternative approaches for addressing non-permanence in carbon projects: an application to afforestation and reforestation under the Clean Development Mechanism' (2014) Vol.21 Issue 1 Mitigation and Adaptation Strategies for Global Change. Available online at : < <https://ideas.repec.org/a/spr/masfgc/v21y2016i1p101-118.html> > accessed on 6 May 2022.

³³¹ Global Forest Coalition, n. 254. p.3

Leakage

Leakage refers to shifting of deforestation from the site where a CDM or REDD+ activities are being undertaken to another location³³². It is the spillover effects of a mitigation measure.³³³ Decision 19/CP.9 defines leakage as the increase in GHGs emissions by sources, which occurs outside the boundary of A/R CDM project activity, and which is measurable and attributable to the A/R project activity.³³⁴ Relocation of activities that increase GHGs emissions in other places may occur consequent upon GHGs emission reductions measures being undertaken at a given place due a REDD+ or a CDM A/R intervention activities and it is this shift in the emissions of GHGs to a different place or site outside emission reduction measures without a project boundary that is referred to as leakage. This is due to the fact that while deforestation can be avoided in one place, CDM or REDD+ projects are not able to mitigate the risk that deforestation will simply move to another region or country. In the context of REDD+, the concern is negative leakage i.e. decreased deforestation in a project area would result in increased deforestation outside the project boundary.³³⁵

This also signals the exiting practical problem of neatly accounting for emission reductions that is real, and additional and thus be content that UNFCCC based climate solutions are contributing to the realization of the ultimate objective of the convention and helping prevent dangerous interference with the climate system and the associated human rights impacts that would have occurred in the absence of these solutions.

Quantification and Uncertainty

Quantification is of GHGs emissions and removals which involve the accurate and precise measurements of GHG reductions and removals. It may necessitate, for instance, estimating the carbon stock in forests and the area of deforestation. This in turn depends on the collection, analysis, and archiving of data for measuring GHG emissions and removals. The ability to accurately measure emissions or (removals) is important for ensuring integrity of emission

³³² See Sven Wunder, 'How do we deal with Leakage' in Arild Angelson (ed). *Moving Ahead with REDD+: Issues, Options, and Implications*, (CIFOR, 2008), pp. 65- 75.

³³³ C. Streck, 'REDD+ and Leakage: debunking myths and promoting integrated solutions' (2021) Vol.21 Issue 6 Climate Policy. Available online at: < <https://www.tandfonline.com/doi/full/10.1080/14693062.2021.1920363> > accessed on 5 May 2022.

³³⁴ UNFCCC, Decision 19/CP.9, Modalities and Procedures for Afforestation and Reforestation Project Activities under the Clean Development Mechanism, UN Doc. FCCC/CP/2003/6/Add 2 dated 30 March 2004, annex.

³³⁵ United Nations, *Low Carbon Green Growth Roadmap for Asia and the Pacific: Turning Resource Constraints and the Climate Crisis into economic growth opportunities*. (United Nations, 2012).

reductions. Forest carbon credits suffer from a relative complexity of estimating GHGs from forests—from analyzing satellite data to multiple (and repeated) field measurements across a broad landscape—which can lead to substantial measurement errors. Increasing the number of samples or improving the quality of satellite data are believed to contribute to increasing accuracy of quantifying forest –related GHGs emissions³³⁶. Otherwise the difficulty of precisely measuring forest–related GHGs emissions is more pronounced for jurisdictional REDD+ projects than project–based interventions. This in turn raises questions about the quality of results of monitoring, and verifying emissions and removals throughout the crediting periods and establishing the additionality of emission reductions in reference of the baseline scenario. Thus, it also raises concerns about the effectiveness of the climate action in terms of meeting environmental integrity requirements and associated implications for human rights and sustainable development.

This chapter focused on introducing the two successive climate mitigation policy tools (namely A/R CDM and REDD+ projects) developed through UNFCCC negotiations to address the climate crisis the global community is faced with. While introducing the policy tools, it discussed the climate justice and human rights implications of the nature, assumptions, and governance of the policy tools. It is discerned from the foregoing discussions that both the CDM and REDD+ mechanisms of climate mitigation rather serve the end of global capital accumulation where the industrialized states could still evade their historical and current responsibility of changing the climate by continuing to pollute the air while at the same time shifting “the geography and material responsibility of climate mitigation in the global South”.

Both the CDM and REDD+ policies, as carbon offsetting mechanisms, are bent on faulty assumptions: that “biotic carbon” and “fossilized carbon” are the same, all GHGs have same climatic effects, and that “emission by sources of GHGs” could certainly, verifiably and commensurately compensated by “removal by sinks” of the gases. Hence, carbon offsetting does not lead to net emission reductions and the resultant climate mitigation. As such they are false solution to the climate crisis.

In addition, there has globally been witnessed uneven distribution of CDM projects where most of the projects are concentrated in already industrialized countries and such developing countries as China, India, Brazil, Mexico while the Least Developed Countries and countries in

³³⁶ T. Chagas et al., n. 246 p. 18

Sub-Saharan Africa becoming not attractive as sites of CDM investment projects. And this worsens the injustice with which global climate policy is identified as it prevents those countries which are most vulnerable to impacts but contributed the least to climate change from receiving the sustainable development support which is only nominally associated with the CDM projects. The sustainable development contribution of CDM projects and co-benefits associated with the implementation of REDD+ projects has not been observed to be genuine and meaningful to local communities as discussed earlier in the chapter. Furthermore, both the CDM and REDD+ mechanisms have been documented to have resulted in violation of both procedural and substantive human rights of local people as thoroughly discussed in chapter-five of this dissertation.

This chapter introduced the predominant climate mitigation strategies: the CDM and the REDD+ introduced via the Kyoto Protocol and the Paris Agreement respectively. While discussing what they are and how they work it also shed lights on the major critiques and associated human rights implications. It has been underlined that both the basis bent on which the determination of emission reduction targets were set and the nature of the climate policy tools developed effected inequity among states and did not address the "riddles" associated with the climate crisis: unequally caused, and disproportionately impacts those which are most vulnerable. As far as Kyoto's Clean Development Mechanism is concerned, its governance architecture is such that there is no mechanism for adjudicating human rights infringements associated with project implementations, and that there have been witnessed uneven geographic distributions of the project with implications for unjust distribution of sustainable development contributions in host states which itself is shown to be inadequate.

Moreover, CDM projects have failed on their environmental integrity scores and have been documented to have brought about serious human rights violations in the context of their implementation as will be discussed in detail in chapter-5. Similarly, REDD+ strategy is shown as working on similar logic as A/R CDM strategy. They both are the same in that they are carbon offsetting tools, and that they both are market-based mechanisms. REDD+ is also shown as a false solution to the climate crisis that uses lands and forests in the global South as sponges of GHGs pollution in the global North shifting the material responsibility and site of climate mitigation in the South in a manner that authorizes the global North to exercise control over forests and land compromising livelihoods rights of local people and communities.

That all the technical challenges of A/RCDM and REDD+, i.e. challenges of proving the additionality of the projects, managing leakage, ensuring permanence, precise determination of baselines, monitoring, reporting and verifying emission reductions means that the climate strategies cannot be verifiably shown to bring about net emission reductions and the resultant climate stabilization. This, in turn, means that climate policy will not prevent threats against the full and effective exercise of a wide range of human rights from the climate related adverse impacts in different parts of the world. By and large, the chapter showed that these dominant climate policies are bent on false premises and don't genuinely address the roots of the problem. The chapter that follows will build on these critiques of the dominant climate policy tools.

Chapter -Four

International Climate Mitigation Regime: A Critical Look at Its Human Rights Implications

This chapter discusses the critiques mounted against the international climate change regime. The critiques are organized under their central themes: rights and obligations in the anthropocene, climate mitigation as carbon colonialism and human rights implications of market-based mechanisms. While all the three (3) critiques have their respective conceptual frames within which they examine how rights are implicated, they are threaded together by the idea that the colonial and capitalist political economic structure that fundamentally explains climate change and climate related rights violations has not been adequately addressed by the global climate mitigation regime. Furthermore, they all share the claim that the international climate regime is itself complicit in perpetuating the unequal power dynamics between the Global North and South sanctioning unjust distributions of rights and obligations and facilitates the expansion of global capitalism. Each of the critiques will be accompanied by the discussions of their human rights implications.

Rights and Obligations in the Anthropocene

The first of these critiques is put forth by Davis and colleagues³³⁷; Castree³³⁸; Swyngedouw³³⁹; and Lovbrand et al³⁴⁰ who emphasized on debates as regards the ontological significance, theoretical implications and practical challenges of living in a geological era named “the anthropocene.” Initially coined by the Danish Chemist Paul Crutzen and the American Ecologist Eugene Stoermer, the term “Anthropocene” is meant to designate a geological epoch in which we live and is characterized by the global impact of human activities on Earth.³⁴¹ The anthropocene has adopted a variety of meanings in different disciplines including in philosophy

³³⁷ J. Davis et al, 'Anthropocene, Capitalocene ... Plantationocene? A Manifesto for Ecological Justice in an Age of Global Crisis', (2019) Vol.13 Issue 5 Geography Compass. Available online at: < <https://compass.onlinelibrary.wiley.com/doi/abs/10.1111/gec3.12438> > accessed on 15 December 2022.

³³⁸ N. Castree, 'Geography and the Anthropocene II: Current Contributions.' (2014) Vol.8 Issue 7 Geography Compass. Available online at: < <https://compass.onlinelibrary.wiley.com/doi/10.1111/gec3.12140> > accessed on 15 December 2022.

³³⁹ E. Swyngedouw, 'Anthropogenic Politicization: From the Politics of the Environment to politicizing Environments' in K. Bradely and J. Hedren (eds.) *Green Utopianism* (Routledge, 2014).

³⁴⁰ E. Lovbrand et al, 'Who speaks for the future of Earth? How critical social science can extend the conversation on the Anthropocene'. (2015) Vol.32 Global Environmental Change. Available online on: < <https://www.sciencedirect.com/science/article/abs/pii/S0959378015000497> > accessed on 17 December 2022.

³⁴¹ P. Crutzen & E. Stoermer, "The Anthropocene" *Global Change News Letter* (USA, May 2000) 41: 17-18.

and political science. In philosophy, the “Anthropocene” has become an expression of modernity, an attack on Earth and the biosphere or a biological imperative that is inherent to human existence whereas in politics it has been contemplated as a logical consequence of global capitalism or the decoupling between environmental health and human welfare.³⁴² However, despite its use in environmental politics to emphasize the force of human activities, on the globe, amounting to that of geological agents as recapitulated in the Geological Time Scale (GTS), the “anthropocene” is shown as lacking in adequate stratigraphic evidence to qualify a formal geological epoch.³⁴³ Given the designation of the “anthropocene” as representing mankind becoming a geological agent, Davis and his colleagues argue that such understanding of the Anthropocene in the international climate mitigation regime attribute the cause of global climate change to the Anthropos (the lives of all human beings) without pinpointing the particular political economic roots and racial distinctiveness of western societies that more accurately explains the socio-ecological crisis of global climate change³⁴⁴.

The critique emphasizes the uneven causes and consequences of global environmental change in addition to the unrevealed whiteness and eurocentricity of the Anthropocene discourses.³⁴⁵ Drawing on the works of Lewis and Maslin³⁴⁶; Davis and Todd³⁴⁷; Whyte³⁴⁸; Verges³⁴⁹; Pulido³⁵⁰ and Moore³⁵¹, Davis and his colleagues argue that colonialism and

³⁴² W.J. Autin, 'Multiple Dichotomies of the Anthropocene.' (2016) Vol. 3 Issue 3 Anthropocene Review. Available online at: < <https://journals.sagepub.com/doi/abs/10.1177/2053019616646133> > accessed on 10 January 2023.

³⁴³ V. Rull, 'The “Anthropocene”: neglects, misconceptions, and possible futures', (2017) Vol.18 No. 7 Science and Society. Available Online at : < <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5494497/> > accessed on 15 January 2023.

³⁴⁴ Davis et al, n.263, p.3.

³⁴⁵ Ibid

³⁴⁶ S.L. Lewis & M.A. Maslin, Defining the Anthropocene, (2015) Vol. 519 (7542) Nature. Available online at : < https://www.researchgate.net/publication/273467448_Defining_the_Anthropocene > accessed on 10 October 2021.

³⁴⁷ H. Davis & Z. Todd, 'On the Importance of a Date or Decolonizing the Anthropocene', (2017) Vol.16 No.4 An International E-Journal for Critical Geographies. Available online at: < <https://acme-journal.org/index.php/acme/article/view/1539> > accessed on Jan. 15, 2022.

³⁴⁸ K.P. Whyte, Indigenous science (fiction) for the Anthropocene: Ancestral dystopias and fantasies of climate change crisis. (2018) Vol.1 Issue 1-2 Environment and Planning E: Nature and Space. Available online at: < <https://journals.sagepub.com/doi/10.1177/2514848618777621> > accessed on 10 Oct. 2021.

³⁴⁹ F. Verges, 'Racial Capitalocene' in G.T. Johnson, & A. Lubin (eds.) *Futures of Black Radicalism* (Verso, 2017) pp.72-82.

³⁵⁰ L. Pludio, 'Racism and the Anthropocene' in G. Mitman, M. Armiero, & R. Emmet (eds.) *Future Remains: A Cabinet of Curiosities for the Anthropocene*, (University of Chicago Press, 2018) pp. 116-128.

³⁵¹ J.W. Moore, 'The Capitalocene, Part 1: On the Nature and Origins of our Ecological Crisis.' (2017) Vol.44 Issue 3 The Journal of Peasant Studies. Available online at: < <https://www.tandfonline.com/doi/full/10.1080/03066150.2016.1235036> > accessed on 7 February 2022.

enslavement underpinned the present global socio-ecological crisis.³⁵² In explaining the role of colonialism as the cause of the current socio-ecological crisis, it is argued that newly colonized land in the Americas led to a surplus of cheap agricultural commodities and other raw materials in Europe which allowed Europe to “transcend its ecological limits and sustain its economic growth”³⁵³ in the process that constituted the anthropocene and where colonialists conquered the lands of indigenous peoples, they refused to acknowledge indigenous life on land forcing rather a landscape, climate, flora, fauna into an idealized version of the world modeled on sameness and replication of the homeland.³⁵⁴ Furthermore, the narratives of environmental destruction in the Anthropocene has been criticized as leaving out the indigenous peoples experiences of and resistance to settler colonialism in which hardships that many non-indigenous peoples experience as a result of the climate crisis have been claimed to be the ones that indigenous peoples have already endured due to different forms of colonialism: ecosystem collapse, species loss, economic crash, drastic relocation, and cultural disintegration.³⁵⁵

In a similar vein, Pulido cited in Davis and colleagues contend that the Anthropocene should be largely viewed as an outcome of race-related practices on account that “the meta-processes which have contributed to the anthropocene, such as industrialization, urbanization and capitalism are radicalized”. Furthermore, Pulido argued that, since the negative effects of climate catastrophe and environmental degradation disproportionately impact people of color, racism serves as an ideology to legitimize and obscure the catastrophic effects of contemporary global capitalism³⁵⁶.

In encapsulating the foregoing arguments, Davis et al synthesizes that the Anthropocene is not a product of “human nature” or humanity as a whole but, rather interrelated historical processes set in motion by the white race that provided the precondition for the development of

³⁵² J. Davis et al. p. 4; J. Cupples, ‘Climate Change and Racial Capitalism in the Neoliberal Eurocentric University’ in Julia Cupples, Dan van der Horst, Stefan Rzedzian, Nicole Plummer and Sam Staddon (eds.) *Climate Change and Social Justice: Reflections on COP26 from Geographies of Social Justice Research Group*. (The University of EDINBURGH, 2021).

³⁵³ Lewis & Maslin, n 271 p.177.

³⁵⁴ Davis & Todd, n 272 p.770.

³⁵⁵ K.P. Whyte Indigenous Science (fiction) for the Anthropocene: Ancestral dystopias and fantasies of climate change crisis, (2018) Vol. 1 No. (1-2) Environment and Planning E. Nature and Space. Available online at: < <https://journals.sagepub.com/doi/10.1177/2514848618777621> > accessed on 17 October 2021.

³⁵⁶ L. Pulido, “Racism and the Anthropocene” in G. Mitman, M. Armiero & R. Emmett (eds.), *Future Remains: A Cabinet of Curiosities for the Anthropocene*, (University of Chicago Press, 2020) pp.116-128.

global capitalism via the processes of settler colonialism and enslavement, organized and rationalized by racism.³⁵⁷ It has been further argued that such epistemological blinders in Anthropocene scholarship to the role of racism and resistance are not simply academic oversight as they have implications for how we might envision (or fail to envision) just responses to the global ecological change.³⁵⁸ Otherwise, the anthropocene is also seen as framing the anthropogenically –oriented human rights in the context of the environment (as opposed to eco-centrally –oriented rights) in which the rights are not meant to preserve natural cycles, ecological structures and processes or maintain the balance of nature but serve human needs and wants and as such place human beings at the center³⁵⁹.

Based on the distinction between the anthropocentrally- oriented and eco-centrally based rights and the fact that the current climate regime is focused on curbing emissions rather than addressing the problem via political-economic and cultural transformations, it can be argued that the current climate regime has failed to meet its target: stabilizing GHGs while maintaining climate systems. So the anthropocene does not only validly identify those really responsible for climate change but also cannot show the social –ecological hierarchies and racial struggles involved in historical economic systems that led to global capital accumulation.

The alternative conceptualization that is discussed as offering the potential for a more nuanced and comprehensive understanding of the historical antecedents leading up to the current global socio-ecological crisis is the notion of Plantationocene³⁶⁰. The concept of Plantationocene came out in last few years to describe the long –distance simplification of landscape; alienation

³⁵⁷ Davis et al. n263 p.4.

³⁵⁸ Ibid

³⁵⁹ L.J.Kotze, 'Human Rights and the Environment in the Anthropocene' (2014) Vol. 1 Issue 3 the Anthropocene Review. Available online at: < <https://journals.sagepub.com/doi/10.1177/2053019614547741> > accessed on 30 January 2022.

³⁶⁰ N. Aikens et al, 'South to the Plantationocene' (2019) ASAP Journal. Available online at: < <https://asapjournal.com/south-to-the-plantationocene-natalie-aikens-amy-clukey-amy-k-king-and-isadora-wagner/> > accessed on 30 January 2022; J. Carney, 'Subsistence in the Plantationocene: Dooryard gardens, agro biodiversity, and the subaltern economies of slavery' (2020) Vol.48 Issue 5 The Journal of Peasant Studies. Available online at: < <https://www.tandfonline.com/doi/full/10.1080/03066150.2020.1725488> > accessed on 30 Jan.2022; see also D. Haraway, 'Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin' (2015) Vol.6 Issue 1 Environmental Humanities. Available online at: < <https://read.dukeupress.edu/environmental-humanities/article/6/1/159/8110/Anthropocene-Capitalocene-Plantationocene> > accessed on 30 Jan.2022.

of land and labor; transportation of genomes, plants, animals and people.³⁶¹ It also suggests that large-scale, export-oriented agriculture dependent on forced labor has played a dominant role in structuring modern life since the insertion of European power in the Americas, Asia and Africa.³⁶² Unlike the concept of Anthropocene, the notion of Plantationocene is said to highlight critical dynamics that shaped the current socio-ecological crisis that involve the global circulation of people and plants, the simplification of plantation landscape and the role of long distance capital investments in the processes of homogenization and control.³⁶³ Other than failing to recognize racial differentiation and social hierarchies of the plantation economy, the concept of Plantationocene, as viewed by Davis et al., offers a means of decentering the Eurocentric narrative by which coal, the steam engine, and the industrial revolution constitute the epicenter of global environmental change and highlights the important role of plantation ecologies and politics in shaping the present.³⁶⁴

Haraway et al. highlights the concept of Plantationocene as “the historical relocations of the substances of living and dying around the Earth as the necessary prerequisite to their extraction.”³⁶⁵ Tsing characterizes Plantationocene by scalability (the proficiency through which the plantation was able to expand via its established blueprint involving the decimation of local people and plants, the installation of plantation infrastructure on the cleared lands, and the importation of foreign people and crops) and interchangeability (the ability to exchange one species for another).³⁶⁶ On her part Haraway emphasizes the sym-poietic elements which she conceives are constitutive of Plantationocene in her writing where she says “one must surely tell of the networks of sugar, precious metals, plantations, indigenous genocides, and slavery, with their labor innovations and relocations and decomposition of critters and things sweeping up both

³⁶¹ D.J. Haraway et al., ‘Anthropologists are talking – About the Anthropocene’ (2016) Vol.81 Issue 3 Ethnos. Available online at: < <https://works.swarthmore.edu/cgi/viewcontent.cgi?article=1450&context=fac-biology> > accessed on 30 January 2022.

³⁶² W. Wolford, ‘the Plantationocene: A Lusotropical Contribution to the Theory’ (2021) Vol. 0 Issue 0 Annals of the American Association of Geographers. Available online at: < <https://www.tandfonline.com/doi/full/10.1080/24694452.2020.1850231> > accessed on 30 Jan.2022.

³⁶³ Haraway et al., n. 286 pp. 535-564

³⁶⁴ Ibid

³⁶⁵ Ibid

³⁶⁶ A. L. Tsing, *The Mushroom at the End of the World: On the Possibility of Life on the Capitalist Ruins*. (Princeton University Press, 2015) pp.38-39.

human and non-human workers of all kinds”³⁶⁷ Furthermore, Woods argued that the permutations of the Plantation now characterize “enclosures and reserves; industrial estates and mill villages; free trade and export zones; ghettos and gated communities; suburbanization and gentrification; game preserves and tourist resorts ;pine plantation and mines; migratory and prison labor.”³⁶⁸

Mac Kittrick’s work, on the other hand, focuses on the significant role of historical plantation geographies in imagining possibilities for life in the present drawing on her analysis that shows the mischaracterization of the Plantationocene as allowing multi-species flattening where she sees the dispossession of Indigenous peoples, enslavement of black people, and the propagation of non-human life on *economiendas*, plantations and reservations as interrelated and yet distinct processes in the service of the colonial –racial capitalist project. Mac Kittrick also insists on the role of historical plantation geographies in imagining possibilities for life in the present. In this regard, she contends that if the Plantationocene is meant to signal a global history of the present, then “the geographies of slavery, post-slavery, and Black dispossession opportunities to notice that the right to be human carries in it a history of racial encounters and innovative Black diaspora practices that, in fact, spatialize acts of survival.”³⁶⁹ Furthermore, while she offers a schematic view of the plantation as a racially and economically ordered space which violently structured differentiated life, she insists that such violence “cannot wholly define future human agency since refusals, ruptures, resistance and openings inhere in Black life on historical plantation and beyond”.³⁷⁰

The alternative vision believed to have a potential for guiding concerns of socio-ecological justice in an age of global crisis is the vision of the multispecies plot³⁷¹. The plot, which is a space within plantations where the slaves cultivated their own food, was a site for nurturing an oppositional mode of Black life.³⁷² Inherent in the plot are the characteristics of relational modes

³⁶⁷ D.J. Haraway cited in J. Davis et al, ‘Anthropocene, Capitalocene ... Plantationocene? A Manifesto for Ecological Justice in an Age of Global Crisis’, (2019) Vol.13 Issue 5 Geography Compass. Available online at: < <https://compass.onlinelibrary.wiley.com/doi/abs/10.1111/gec3.12438> > accessed on 15 December 2022.

³⁶⁸ Ibid

³⁶⁹ K. McKittrick, ‘Plantation Futures’ (2013) Vol.17 Issue (3(42)) A Caribbean Journal of Criticism. Available online at : < [https://read.dukeupress.edu/small-axe/article-abstract/17/3%20\(42\)/1/33296/Plantation-Futures?redirectedFrom=fulltext](https://read.dukeupress.edu/small-axe/article-abstract/17/3%20(42)/1/33296/Plantation-Futures?redirectedFrom=fulltext) > accessed on 15 December 2022.

³⁷⁰ Ibid , p.11

³⁷¹ S. Wynter ‘Novel and History, Plot and Plantation’ (1971) Vol. 5 Savacou .Available online at: < <https://trueleapress.files.wordpress.com/2020/04/wynter-novel-and-history-plot-and-plantation-first-version-1971.pdf> > accessed on 15 December 2022.

³⁷² Ibid

of being, multiple forms of kinship, and the non-binary ways of engaging the world that fosters the ethics of care, equity, resilience, creativity and sustainability understood as being forged in and articulated through grounded racial –political struggles.³⁷³ The vision of the ‘multi-species’ plot could be likened with the environmental ethic that ecocentrism entails which Lovbrand and his colleagues also propose as an alternative vision in the current crisis. In accord with Lovebrand, ecocentrism describes the world as “intrinsically dynamic, interconnected web of relations in which there are no dividing lines between the living and the non-living or the human and the non-human”.³⁷⁴ At the heart of the ecocentric ethic lies the realization that the future of life on Earth depends squarely on safeguarding ecological integrity³⁷⁵. Thus, Davis et al. maintain that the plot offers a challenge to ethical visions that minimize or obscure unequal relations of difference and it might help conceptualize multispecies assemblages that lead out of socio-ecological crisis toward better futures— assemblages that are not just envisioned but lived and that simultaneously tend to the needs of social reproduction, social justice, and ecological care³⁷⁶.

The slaves, on the plot, advanced a theoretical and practical framework that guided their interactions with the nonhuman environment fostering multispecies wellbeing.³⁷⁷ Accordingly, land was understood as a unifying medium bringing humans and non-humans together in a socio-ecological assemblages of reciprocity. One relevant belief about land bend upon which the slaves worked the plot is the recognition that land is a source of spiritual and material nourishment connecting families to the past, present and futures entailing that human beings are tied to and therefore, are duty bound to protect the land. This is contrasted with the idea of “rational use” of the land that propelled colonial expansion allowing for the seizure, enclosure, privatization, intense cultivation, and commodification of land as a mean of European accumulation. So the principle of “good –use” upheld a non-binary socio-ecological awareness deeply rooted in a spiritual code of reciprocity in which the human, non-human and the spiritual worlds are conceived while, being distinct, were co-creative. Here, co-creation meant that the fate of humans

³⁷³ Ibid

³⁷⁴ E. Lovbrand, ‘Earth System governmentality: Reflections on Science in the Anthropocene’ (2009) Vol.19 Global Environmental Change. Available at: < <http://www.zeeli.pro.br/wp-content/uploads/2018/04/2009-Lövrbrand-et-al-ESS-Science-in-the-Anthropo.pdf> > accessed on 1Feb.2022.

³⁷⁵ I. Ayestaran, ‘The Second Copernican Revolution in the Anthropocene: An Overview’ (2008) Vol.3, *Revista Internacional Sostenibilidad, Tecnología y Humanismo*. Available online at: < <https://upcommons.upc.edu/bitstream/handle/2099/7083/ayestaran.pdf> > accessed on 1 February 2022.

³⁷⁶ Davis et al, n.263 p. 5

³⁷⁷ Ibid

and non-humans were intertwined and therefore, a moral consciousness was needed to direct thought and action towards what might be referred to as “the multispecies wellbeing.” So such a vision of the plot compels us to think about the current socio-ecological crisis much as a moral and spiritual dilemma as it is an economic one where capitalist exploitation is the cause and consequence of an inner crisis playing out within the human mind, heart and consciousness.³⁷⁸

One key implication of this critique on the assumption, adopted in the UNFCCC, the Kyoto protocol and subsequent agreements, that the global climate change crisis is caused by all humans (as it adopts the term anthropogenic in its abstract and universal sense) is that such assumption equally makes all peoples in all states responsible and are hence equally duty bound to take corrective measures. This when seen in the light of the fact that those people who are not responsible are presently experiencing adverse effects (including threats to the very existence of their states, their production systems, to the security of lives of their people) as a result of a problem in whose emergence they have little or no role, creates multi-layered problem.

On the one hand the processes that caused the problem in western societies i.e. industrialization, urbanization and global capitalism have enabled the fulfillment of basic economic, social and cultural rights of their people while effecting global climate crisis that inhibits efforts of those people in poor countries exerted in meeting their basic rights amidst experiences of adverse impacts of the climate crisis. On the other hand, the ascription of the problem as caused by all humans would mean that the poor developing states are also to commit themselves to their responsibilities of mitigating the adverse impacts of global climate crisis. This would doubly punish the poor developing states with the resultant effects of threats to the security of the human rights of their people from adverse effects of climate change and curtailed efforts, by the states, of meeting the socio-economic rights of their peoples.

The alternative conceptualization of plantationocene which recognizes spatial hierarchies and social differentiation in the racial-political struggles of the slaves in the plantation economies sees the plantation economy as being the root of western capital accumulation and expansion of global capitalism. It also underlines spatial hierarchies and social differentiation in which the slaves cultivated an alternative mode of life while confronting, and resisting under the overriding system of the plantation economy. This, coupled with Wood’s argument that the permutations of

³⁷⁸ J. Davis et al. n.263 p. 4.

the plantation economy now characterize,inter alia, enclosures and reserves now, in essence, resemble climate mitigation strategies being implemented in the form of CDM and REED + policy measures in developing countries where questions still remain as regards how forest regeneration and preservation plans incorporate the right to FPIC,tenure rights, the right to development, livelihood rights, and environmental decision making rights of local people and communities.This will be attested to in the discussions of rights implications of the implementation of *Humbo A/R CDM* project in *Wolayita* Zone in the Southern region of Ethiopia in chapter six of this work.

Furthermore, afforestation and reforestation activities and those of sustainable forest management strategies of REED+ projects being implemented in developing countries including Ethiopia still are faced with the problem of sustainably securing benefits from the projects as substitutes of income from their livelihoods. In a nutshell, by failing to distinctly and clearly trace the roots and the actual agents responsible for the global climate crises and framing the cause as being anthropogenic in its abstract and universal sense the assumptions of the UNFCCC, its protocol and subsequent agreements aided in wrongfully distributing rights and responsibilities.This is so because mitigation measures mean that developing and poor countries reach peaks of their emissions in a context in which their economies falls short of meeting economic needs.So by granting the right to emit via, for example,emission trading and Clean Development Mechanisms (CDM) to the developed world and limiting growth in the South by limiting emissions via NDCs pledges of the poor countries, the UNFCCC and subsequent negotiations unjustly distributed rights and obligations among states.Furthermore, the convention devised mitigation mechanisms that are documented to have resulted in the violations of the rights of local peoples and forest-dependent communities.The international climate regime is not only complicit in perpetuating the global dynamics of power inequalities between the North and South but also sanctioned rights violations through the implementation of unjustly devised climate policy measures.

Climate Mitigation Projects as Carbon Colonialism

A different perspective from which the international climate regime is critiqued comes from the observation that the policies whose implementation it underpins result in adverse social, economic and environmental consequences that are experienced by local and forest dependent

communities as being colonial in nature.³⁷⁹ Dehm, for example, puts forth a TWAIL (Third World Approach to International Law) critique of the UNFCCC in the aftermath of the Paris Agreement in December 2015 which sees the regime as facilitating the perpetuation of unequal power dynamics and furthering neo-liberal goals. Furthermore, having discussed the role of the Paris Agreement (Art. 5 & 6) in terms of facilitating market –based strategies to address global climate mitigation goal as set in the UNFCCC, Dehm³⁸⁰; Mboya³⁸¹; Huggins³⁸²; & Bachram³⁸³ put forth their critiques from different perspectives. One of these critiques underlines not only the lack of effective action through the UNFCCC but also the inappropriateness of the form of climate action pursued. This is to say that the Kyoto protocol’s “flexibility mechanisms” have led to environmental and social justice problems as they operate bent on the utilization of carbon markets. These problems associated with the market –based mitigation mechanisms have been identified as including the uncertainties surrounding “the additionality” of saved GHG emissions consequent upon the implementation of mitigation projects³⁸⁴, the “dangerous destruction” of the projects away from necessary structural changes in fossil fuel based energy production, use and distribution³⁸⁵, and the appropriation of land in the South for ostensible environmental ends³⁸⁶.

³⁷⁹ H. Bachram, ‘Climate Fraud and Carbon colonialism : The New Trade in Greenhouse Gases’ (2004) Vol.15 Issue 4 Capitalism Nature Socialism .Available online at: < <http://www.carbontradewatch.org/pubs/cns.pdf> > accessed on 20 February 2022.; C. Eberle, N. Munstermann & J. Siebeneck, ‘Carbon Colonialism : A Postcolonial Assessment of Carbon Offsetting’ (A Research Paper, University of Bonn/ United Nations University, 2019).Available online at : < https://www.researchgate.net/publication/337622634_Carbon_Colonialism_A_postcolonial_assessment_of_carbon_offsetting > accessed on 30 January 2022 ; J. Dehm, ‘Carbon Colonialism or Climate Justice ? Interrogating the International Climate Regime from a TWAIL perspective’ (2016) Vol.33 No.3 Windsor Year Book of Access to Justice. Available online at : < <https://wyaj.uwindsor.ca/index.php/wyaj/article/view/4893> > accessed on 30 January 2022; see also J. Dehm, ‘Authorizing Appropriation? Law in Contested Forested Spaces’ (2018) Vol. 28 No. 4 The European Journal of International Law. Available online at: < <https://academic.oup.com/ejil/article/28/4/1379/4866328> > accessed on 3 February 2022.

³⁸⁰ Dehm, n.302 p. 7.

³⁸¹ A. Mboya, ‘Human Rights and the Global Climate Change Regime’ (2018) Vol.58 No.1 Natural Resources Journal. Available online at: < <https://www.jstor.org/stable/26394775> > accessed on 3 February 2022.

³⁸² L. Sealey-Huggins, ‘“1.5° c to stay alive”: climate change, imperialism, and justice for the Caribbean’ (2017) Vol.38 No. 1 Third World Quarterly. Available online at: < <https://www.tandfonline.com/doi/full/10.1080/01436597.2017.1368013> > accessed on 7 February 2022.

³⁸³ Bachram, n.302 p. 6.

³⁸⁴ Jessica F. Green, ‘Does Carbon Pricing Reduce Emissions? A Review of ex-post analysis’ (2021) Vol.16 No.4 Environmental Research Letters. Available online at: < <https://iopscience.iop.org/article/10.1088/1748-9326/abdae9> > accessed on 7 February 2022.

³⁸⁵ S. Bullock, M. Chillis and T. Picken, *A Dangerous Destruction : Why Offsetting is Failing the Climate and the People : The Evidence* (A Friends of the Earth Report , 2009)

³⁸⁶ J. Fairhead, M. Leach and I. Scoones, ‘Green Grabbing: A New Appropriation of Nature?’ (2016), Vol.39 No.2 Journal of Peasant Studies. Available online at : < www.tandfonline.com/doi/full/10.1080/03066150.2012.671770 > accessed on 7 February 2022.

In her critique of the international climate regime, Dehm writes that while human rights have provided a language and framework in interrogating the climate regime, they, themselves, appear inadequate for addressing the climate justice and equity issues that the international climate regime poses.³⁸⁷ Similarly, the human rights approach has been critiqued as having “loopholes” and can too easily be manipulated to further legitimize neo-liberal goals hence, is inadequate to address the underlying shifting dynamics of power.³⁸⁸ Accordingly, human rights may provide tool for taming how new forms of international power over land authorized by climate regime are exercised, however, they have less to say about the underlying expansion of global power over land in the South through market mechanisms.³⁸⁹ While this is what is subscribed to in this research, it still holds true that the human rights tool is key in terms of supporting and encouraging grassroots efforts and movements fighting against violations of rights of local peoples by climate mitigation projects and ensuring rights protection by their governments. This is to say that since human rights provide individual human beings a range of entitlements and hold governments duty –bound to ensure the enjoyment of these entitlements, individuals who are members of communities and peoples within states could use them to safeguard their well- being, security, and interests in the context of the implementation of climate solutions or policies.

Seeking equity and justice, developing countries have been pushing for the principle of Common but Differentiated Responsibility (CBDR) in the UNFCCC negotiations, bent on their belief that it addresses inequalities in terms of responsibilities for and vulnerability to climate change, since it recognizes real historic, political and economic differences through the institution of different standards for differently situated states³⁹⁰. The principle of CBDR emerged as a consequence of ‘the application of equity in general international law’.³⁹¹ It is seen as formally integrating environment and development at the international level and also as a means of making one’s country commitment more “just” relative to the commitments of other countries in

³⁸⁷ Dehm, n.306

³⁸⁸ B. S. Chimni, ‘Third World Approaches to International Law: A Manifesto’ (2006) Vol.8 Issue 1 International Community Law Review. Available online at: < https://brill.com/view/journals/iclr/8/1/article-p3_2.xml?language=en > accessed on 7 February 2022.

³⁸⁹ Dehm, n. 306 p. 150.

³⁹⁰ P. Pauw et al ‘Different perspectives on differentiated responsibilities : A state –of-the –Art Review of the Notion of Common bud Differentiated Responsibilities in International Negotiations’ (2014) Discussion Paper. Available online at: <www.die-gdi.de/uploads/media/DP_6.2014.pdf> accessed on 7 February 2022.

³⁹¹ P. Sands et al., *Principles of International Environmental Law*. (3rd eds. Cambridge University Press, 2012).

the context of global environmental governance.³⁹² It was only during the 1992 United Nations Conference on Environment and Development that CBDR officially became an international principle spelt out under Principle 7 of the Rio Declaration. The principle attained relative importance in the context of negotiations on international climate policy and has also been relevant for other conflicts of interest along the North-South ‘fault line’ of international politics.³⁹³

So far as critiques of the principle is concerned, a major critique concerns the fact that the basis of differentiation of responsibilities has not been clarified and that the de facto interpretation shows that it is based on capability, not culpability, of the Global North and the lack of capacity of the global South³⁹⁴. The critique holds that if the differentiation is based on ‘capacity instead of culpability or responsibility’ then such a differentiation will warrant interventions by the developed states in the internal affairs of states in the Global South in the name of cooperation in climate mitigation actions which is itself designed in furthering neoliberal goals.³⁹⁵ Hence, it is maintained, that the failure of CBDR to “specify on what basis is differentiation is to be made between countries –capability and/or culpability– opens up a conceptual ambiguity whose resolution has material effects.³⁹⁶ It is further argued that;

While, on the one hand, differentiation poses real risk if it based on Southern lack of capacity, instead of Northern responsibility with a possibility of authorizing a reiteration of a colonial “dynamic of difference”, it operates as a redistributive measure to compensate and ameliorate the North’s unequal appropriation of atmospheric space if it is grounded in current per capita and historical responsibility of the developed countries for climate change³⁹⁷.

³⁹² T. Honkonen, *The common but differentiated responsibility principle in multilateral environmental agreements: Regulatory and Policy aspects*. (Kluwer Law International, 2009)

³⁹³ T. Deleuil, ‘The Common but differentiated responsibilities principle: changes in continuity after the Durban Conference of the Parties’ (2012) Vol.21 Issue. 3 Review of European Community and International Environmental Law. Available online at: < <https://onlinelibrary.wiley.com/doi/full/10.1111/j.1467-9388.2012.00758.x> > accessed on 20 February 2022.

³⁹⁴ Dehm, n. 306 p. 141

³⁹⁵ Ibid; see also D.V. Horst, ‘Climate Goldilocks : We need to host more than the COP if we want to do ‘our fair bit’ in Scotland in Julie Cupples, Dan van der Horst, Stefan Rezdian Maris Wilson and Sam Staddon (eds.) *Climate Change and Social Justice : Reflections on COP 26 from the Geographies of Social Justice Research Group*. (University of EDINBURGE, 2021)

³⁹⁶ Ibid

³⁹⁷ Ibid

The other critique put forth by Dehm³⁹⁸;Dehm³⁹⁹; Bachram⁴⁰⁰; Larsson & Orvehed⁴⁰¹;and Westoby & Lyons⁴⁰² relates to how the ascription of “common concern ” to the problem of climate change without contending with how the problem was brought about and accounting for its historical responsibility authorizes the UNFCCC enact measures that helped maintain a colonial “dynamic of differences” despite formal decolonization. Carbon markets, in this regard, are demonstrated to be an institutional response to the problem of climate change that establish new forms of authority over lands in ways that are experienced as colonial. This is demonstrated by a case in Uganda where the government licensed a Norwegian private company called Green Resources to enclose both forestry and public lands and prevents access, and use rights by the local community despite a Tree Planting Act allowing people living in the vicinity to get use rights to a point that the residents felt they were treated as non-citizens.⁴⁰³ The other interesting evidence instantiating imperial and colonial influence upon the poor developing countries comes from the global North’s (particularly of the USA’s) efforts to use bribes and aids to force climate vulnerable countries such as Ethiopia to agree to proposals in UNFCCC negotiations as exemplified by secret negotiations during the Copenhagen Accord.

In accord with leaked cables obtained from WikiLeaks,in a detailed meeting in Addis Ababa in 2010 between Ethiopian Prime Minister Melese Zenawi,leader of the African Union climate change negotiations and the US undersecretary of state Maria Otero,Zenawi was told that Ethiopia must sign the Copenhagen Accord or else any other diplomatic discussion and the prospect of further financial aid, would be halted⁴⁰⁴.Similarly,Ecuador and Bolivia were “punished” for their dissent from the Copenhagen Accord by having their US development aid cut⁴⁰⁵.Such evidences illustrate how the unequal power relations between the Global North and South, which itself has its explanatory roots in colonialism and enslavement,erodes the sovereign

³⁹⁸ Dehm, n.306 p.137

³⁹⁹ Dehm, n. 306 p. 138

⁴⁰⁰ Bachram, n. 302 p.6

⁴⁰¹ C. Larsson, ‘Carbon Offsetting, a new form of Colonialism? : Local Implications of tree -planting Projects in East Africa’ (Bachelor Essay, Sodertom University, 2021).

⁴⁰² P. Westoby & K. Lyons, ‘Carbon Colonialism and the new land grab: Plantation forestry in Uganda and its livelihood impacts’ (2014) Vol.36 Journal of Rural Studies. Available online at: < <https://www.sciencedirect.com/science/article/abs/pii/S0743016714000692> > accessed on 27 February 2022.

⁴⁰³ Ibid , p.19

⁴⁰⁴ US Under Secretary for Democracy and Global Affairs Maria Otero, “US Embassy Cables: US Urges Ethiopia to back Copenhagen Climate accord” Available online at : < <https://www.theguardian.com/world/us-embassy-cables-documents/246644> >

⁴⁰⁵ Huggins, n. 305 p. 2449

rights of states through making aid conditional and thereby subjugating the Global South to policies that promote their interests. In this regard, Dehm suggests that Third World States and social movements should find ways to substantively define “common concern” as being constitutive of struggles against neo-liberal approaches to climate solution in a manner that forges cooperation among geographically localized and contextually suited struggles against it. To this effect, she brings forth Arturo Escobar’s concern which is directed at theorizing how social movements confronting a neo-liberal globalization might be seen as “constituting a new form of counter hegemonic globalization” or “alternative globalization” or “transmodernity”⁴⁰⁶

The point being made is that there is a possibility of thinking about different ways of “commonality” to address the problem of global climate mitigation action. To illustrate this, Dehm identifies three (3) different ways “commonality” could be constituted drawing on the practice of global climate mitigation;

one that is underpinned by utilitarian justice (the operation of carbon markets), the second on distributive justice (the one that operates under the principle of “contraction and convergence”) and the third could be identified as the “plurality of justices” (this includes those climate activists and social movements organized against the extraction of fossil fuels and in defense of a more localized control over local resources.)⁴⁰⁷

Moreover, Dehm brought forth the observation that the very framing of climate change is not neutral as is evident in the specific understanding of the problem at play in how the primary objective of the UNFCCC is articulated “the stabilization of GHGs in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system”. Important also that, such a level, the objective states “...should be achieved in a manner that enables economic development proceeds in a sustainable manner.” Such a specific framing of the objective is observed focusing attention not “inward” but “outward”: not on the politico-economically linked causes of fossil fuel extraction but on the aggregate build up, in the atmosphere, of the GHGs without distinctions made with respect to the social context where

⁴⁰⁶ A. Escobar, ‘Beyond the Third World: Imperial Globality, Global Coloniality and Antiglobalization Social Movements’ (2004) Vol.25 Issue 1 Third World Quarterly. Available online at: < <https://www.jstor.org/stable/3993785> > 5 March 2022.

⁴⁰⁷ Dehm, n. 302 p. 146

emissions arise. In such a manner, the objectives of the agreement are translated from a political goal and antagonistic of transforming these causes and “overcoming fossil fuel dependence by entrenching a new historical pathway” to a more technical goal of achieving “measurable, divisible greenhouse gas emission reductions.”⁴⁰⁸

Important in this connection is the efforts of developed states, Norway for example, in terms of exerting pressures upon poor countries of Africa forcing them to rely on renewable energy sources and undermine the extraction, sell and utilization of fossil fuels in Africa while working harder in ever increasing their natural gas exports and expanding their economies themselves⁴⁰⁹. Norway, in this connection, is described as ‘the most fossil fuel dependent rich country in the world’⁴¹⁰. But the country, together with the Nordic and Baltic countries, is working hard (by lobbying the World Bank) to stop all financing of natural gas projects in Africa until 2025 thereby intruding into the sovereign rights of these states linked with the use of natural resources within their territorial jurisdictions⁴¹¹. So in addition to pressuring negotiations in the international climate fora the global north is promoting international climate policy which essentially could be dubbed colonial in nature.

Finally, the international climate negotiations of the COP have been seized by corporate companies engaged in extraction of fossil fuels and associated businesses, and politicians with the goal of promoting “green capitalist accumulation” at different times. And that the COP is ineffectual in materializing the promises it made. So as already suggested by Dehm alternative “commonalities” could be reconstituted as a common concern which is based on resisting and fighting against the real causes – the extraction and use of fossil fuels – in a manner that are locally engendered and contextually rooted. It is also underlined that international environmental law benefits from contextual legal resources of, for example, indigenous peoples if it intends to genuinely address the problem of climate change. So the alternative commonality, that is suggested to build grass roots movements and reflect genuine voices, is centered on allies among social movements, all over the world, whose activities represent a common concern of antagonism

⁴⁰⁸ Dehm, n.302 p.149

⁴⁰⁹ Vijaya Ramachandran, ‘Rich Countries Climate Policies are Colonialism in Green’ FP (Washington , 3 November 2021)

⁴¹⁰ Ibid

⁴¹¹ Ibid

against the real causes of climate change –the system of extraction, distribution and use of fossil fuels⁴¹².

The foregoing discussions highlighted critiques of the global climate regime which are directly relevant in the context of the present research in different dimensions. An important dimension is that the market –based climate solutions that the global climate regime operationalizes have failed on two fronts: 1) they are ineffective in terms of attaining the target of limiting global temperature increase to 1.5 degree Celsius as set by the Paris Agreement hence, failed to mitigate climate impacts and human rights violations thereof; and 2) they became instrumental in perpetuating the unequal power relations between the global North and South and sanctioned interventions in internal affairs of poor countries violating Third World States' sovereignty and rights of local peoples.

In this regard, it has been raised that international human rights law is inadequate in addressing the root of the problem but it is argued, in this research, that human rights law does not only help tame the way climate mitigation measures are implemented but also could become a powerful tool in animating locally relevant and contextually designed social movements and activism against rights violations and transgressions perpetrated by various actors in the context of climate mitigation actions. I would also argue that by allowing local peoples claim their rights against their respective governments, human rights could prove to be effective in enlivening movements and activism against the globalization of neoliberal climate solutions in a globally orchestrated fights against the globalization of ostensible neoliberal solution to climate change as conceived by Escobar.

Human Rights Implications of Market-based Climate Mitigation Mechanisms

A still important critique focuses on the human rights implications of the market–based climate solutions enshrined in the global climate regime. The critique stresses that the market –based climate solutions operationalized through the Kyoto protocol and the Paris Agreement is incompatible with human rights, promote inequity, violate human rights of local people and communities and are ineffective in mitigating the problem.⁴¹³ Mboya argues that the three (3)

⁴¹² Dehm, n.302 p. 160

⁴¹³ A. Mboya, 'Human Rights and the Global Climate Change Regime' (2018) Vol.58 No.1 Natural Resources Journal. Available online at :< <https://www.jstor.org/stable/26394775> > accessed on 17 March 2022; M. A. Candace

market-based climate mitigation mechanisms created under the Kyoto Protocol: i) emission trading ii) joint implementation of carbon-offsetting projects; and iii) the clean development mechanism (CDM) are inherently incompatible with international human rights law. She does this by analyzing how the right to emit (RTE) created by the Kyoto protocol benefits the developed countries at the disadvantage of the developing and poor countries.

Emission Trading is what enables an Annex –I country to sell an unused permit to another Annex-I country⁴¹⁴. It created a carbon market by incentivizing countries which reduce emissions and sell excess permits and those which are unable to meet their reductions obligations to buy permits from more “efficient” countries⁴¹⁵. Joint Implementation (JI) allows any party included in Annex-I to transfer or acquire from any other such Party emission reduction units resulting from projects aimed at reducing GHGs emission or enhancing carbon sinks in any sector of the economy provided that such project has the approval of the parties involved, that the emission reduction is additional to what otherwise would occur and is supplemental to domestic mitigation actions.⁴¹⁶ It seeks to encourage technology transfer and cooperation by allowing an Annex-I country to undertake an emission reduction project in another Annex-I country in exchange for emission permits.⁴¹⁷ The Clean Development Mechanism (CDM), on the other hand, is created by Art.12 of the Protocol with the purpose of supporting non-Annex–I countries in “achieving sustainable development” and to provide Annex-I countries with a cheaper alternative mechanisms to comply with their targets.⁴¹⁸

& J. D. Bowen, ‘The Ethical Challenges of the UN’s Clean Development Mechanism’ (2013) Vol.117 No.4 the Journal of Business Ethics. Available online at: < <https://www.jstor.org/stable/42001888> > accessed on 25 March 2022; S. Duyck et al, ‘Human Rights and the Paris Agreements Implementation Guidelines: Opportunities to Develop a Rights –based Approach’ (2017) Vol.12 No.3 Carbon and Climate Law Review. Available online at: < <https://www.jstor.org/stable/26554683> > accessed on 27 March 2022.

⁴¹⁴ Art.17 of the Kyoto Protocol

⁴¹⁵ C. Napoli, ‘Understanding Kyoto’s failure’ (2012) Vol. 32 No.2 the SAIS Review of International Affairs. Available online at: < <https://www.jstor.org/stable/27000907> > accessed on 14 Feb.2022; see also D.C. Matisoff, ‘Making Cap-and-Trade –Work: Lesson from the European Experience’ (2010) Vol.52 No.1 Environment: Science and Policy for Sustainable Development. Available online at: < www.tandfonline.com/doi/full/10.1080/00139150903479530 accessed on 10 Feb.2022. > accessed on 27 March 2022.

⁴¹⁶ Art.6(1) of the Kyoto Protocol

⁴¹⁷ Napoli , n.337 p.184

⁴¹⁸ C. Hepburn, ‘Carbon Trading : A Review of the Kyoto Mechanisms’ (2007) Vol.32 The Annual Review of the Environment and Resources .Available online at :< <https://www.annualreviews.org/doi/pdf/10.1146/annurev.energy.32.053006.141203> > accessed on 14 February 2022.

Having explained how the right to emit (RTE) allows the developed countries to continue to emit a certain quota of GHGs for free and then engage in carbon trading to buy beyond their assigned amount, Mboya⁴¹⁹; Pears & Bohm⁴²⁰; Adams & Luchsinger⁴²¹ contend that it perpetuates inequality, violations of human rights in poor countries, and is ineffectual in meeting the climate mitigation goals as set in UNFCCC. They argue that the emission rights that developed states were assigned which is based on their 1990 emission levels allowed them to participate in the global carbon markets and create more economic resources they could use to adapt to and mitigate climate change impacts. On the other hand, since the developing countries are not assigned the RTE and therefore, excluded from the global carbon market except for being sites of carbon offsetting projects, they are not in a position to invest in the carbon economy and support their economies and that they are left at will of donor countries to pay for adaptation and mitigation of climate change impacts.

The second line of argument concerns the fact that the RTE is not a human right since it is sold and bought hence alienable, that it is exclusionary (is not exercised by all human beings), and cannot be claimed and ascertained as emission trading is carried out mostly through corporations which cannot be reached by human rights law for redress as human rights regime places a duty on state governments, not on private entities, as guarantors to citizens' rights. Here, it is also important to note that institutions which have the power of overseeing processes of implementation of carbon offsetting projects or schemes in developing countries cannot also be reached by human rights law making difficult to remedy rights violations in developing countries. Important, in this connection, is the fact that the standards that validators or verifiers (which are themselves private entities) rely on while accrediting emission reduction projects do not invariably focus on the social impacts of the projects i.e. human rights impacts of emission reduction projects. Different standards focus on varying ranges of the components of climate mitigation projects. Some focus on the biodiversity component, others on biodiversity and social impacts components and there are those that focus on climate, biodiversity and community

⁴¹⁹ Mboya, n.335 p.58

⁴²⁰ R. Pears & S. Bohm, 'Ten reasons why carbon markets will not bring about radical emission reductions' (2015) Vol. 5 No.4 Carbon Management .Available online at:

<<https://www.tandfonline.com/doi/full/10.1080/17583004.2014.990679>>. Accessed on 10 February 2022.

⁴²¹ B. Adam & G. Luchsinger, *Climate Justice for A Changing Planet : A Primer for Policy Makers and NGOs* (UN Non-governmental Liaison Service, 2009)

elements which is the case for Climate, Community, and Biodiversity Standard (CCBS)⁴²². Thus, emission trading, by design and in the way it works, cannot ensure the protection of human rights of people whom climate solution affects.

Noteworthy also are the observations and critiques with regards to the actual protections of human rights in the context of climate change mitigation actions. One is that as swiftly as the rights to emit (RTE) are created and implemented, the global community has failed to actualize the progressive realization of social, economic and cultural rights⁴²³. In this connection, Mboya holds that the purchase of additional emission space by developed countries from developing ones through CDM and JI projects, though providing some income they could potentially use for their development, effectively amounts to developing countries selling-off their right to development.⁴²⁴ The other is the point that the development and actual implementation of the right to emit (RTE) did not need the time it is taking the members of the international climate regime to respect and protect already existing human rights in the context of climate change⁴²⁵.

Similarly, REDD+ projects have been criticized for prohibition of farming and use of forest resources (for example in Uganda⁴²⁶), aggravated conflicts over land between government and local people in Indonesia⁴²⁷, decreased land holdings and excluded local people from accrued revenues in Cameroon⁴²⁸, and restricted all harvesting in forest reserve in Mozambique⁴²⁹.

⁴²² See L. Schmidt & K. Gerber, *A Comparison of Carbon Market Standards for REDD+ projects* (German watch, 2016)

⁴²³ Mboya n.335 p. 57; M. Limon, 'Human Rights and Climate Change: Constructing a Case for Political Action' (2009) Vol.33 Harvard Environmental Law Review. Available online at : < <https://harvardelr.com/wp-content/uploads/sites/12/2019/07/33.2-Limon.pdf> > accessed on 17 February 2022; see also J.G. Speth, *Red Sky At Morning : America and the Crisis of the Global Environment* (2nd Edition, Yale University Press, 2009), pp.5-6.

⁴²⁴ Ibid, p.64;

⁴²⁵ S.C. Aminzadeh, 'A Moral Imperative: The Human Rights Implications of Climate Change' (2007) Vol.30 No.2 Hastings International and Comparative Law Review. Available online at: < https://repository.uclawsf.edu/hastings_international_comparative_law_review/vol30/iss2/4/ > accessed on 17 February 2022.

⁴²⁶ R. Jindal et al, 'Forest based carbon sequestration projects in Africa: Potential benefits and challenges' (2008) Vol.33 No.2 Natural Resource Forum. Available online at: < <https://onlinelibrary.wiley.com/doi/10.1111/j.1477-8947.2008.00176.x> > accessed on 20 February 2022.

⁴²⁷ M. Van Noordwijk et al, *Local Perspectives on REDD+ in Comparison with those at the International Negotiation tables and their representations in quantitative scenario models* (Project Report, Word Agro Forestry Center, 2011).

⁴²⁸ L. Westholm et al, *Assessment of existing global financial initiatives and monitoring aspects of carbon sinks in forest ecosystems – The issue of REDD+* (Focali Report, Focali, 2009).

⁴²⁹ R. Jindal, 'Livelihood Impacts of payments for forest carbon services: field evidence from Mozambique' in: L. Tacconi, S. Mahanty and H. Suich (eds.), *Payment for Environmental Services, Forest Conservation and Climate Change: Livelihood in the REDD?*, (Edward Elgar Publishing Limited, 2010), pp. 185-211.

Furthermore, the market -based approaches to climate mitigation has been primarily driven by “the inventiveness and greed of financiers” and not by concerns to contain and possibly reverse climate change⁴³⁰. In this regard, it is maintained that ‘even if we stopped emitting greenhouse gases from burning fuels today, it is not the end of the story for global warming as there is a delay in air temperature increase’⁴³¹. So the climate change problem would still be with us even when we succeed in halting emission of greenhouse gases which is simply impossible. Thus, the market-based solutions that the international community came up with via the Kyoto protocol and later through the Paris Agreement are but superfluous. Carbon capitalism, therefore, discriminates against those who cannot afford to pay and widens the economic gap between climate duty bearers and right holders.

The solution to such ill-designed climate policy, according to Mboya, is adopting what she calls the Carbon Investment Right (CIR) model where resource and per capita investment units are adopted. In accord with the model there could be, for example, a forest amount unit of account (FAU) for states that have significant cover; animal biodiversity amount unit (ABAU) for countries that have large numbers of animal species; flora biodiversity amount unit (FBAU); water amount unit (WAU) for water bodies that are carbon sinks; soil quality units (SQU). It is argued that investing in these units could be an incentive for both developing and developed countries which prioritizes sustainable use and conservation of their natural resource and availing them with both economic benefits and environmental preservation that benefits both the states and the whole planet.

Finally the foregoing discussion on the human rights implications of market-based climate mitigation regime is relevant in the context of the present study in that it illuminates upon the incompatibility between human rights and rights to emit (RTE) GHGs; nature of the actors, their interactions and relationships in market-based climate solution; human rights impacts of climate solutions implemented in host countries and the ostensible nature of the solutions. The alienable, exclusive and tradable nature of the RTE meant that it cannot be enjoyed by everyone and that the private nature of entities involved which could be simultaneously funders and verifiers of

⁴³⁰ See, for example, Rainforest Action Network, ‘Stop Banks Funding Climate Chaos’ available online at: www.ran.org/campaign/stop-banks-funding-climate-chaos/ > accessed on 18 February 2022.

⁴³¹ Richard Rood, ‘If we stopped emitting greenhouse gases right now, would we stop climate change?’ <The Conversation, 5 July 2017> < <https://theconversation.com/if-we-stopped-emitting-greenhouse-gases-right-now-would-we-stop-climate-change-78882> > accessed on 17 February 2022.

emission reductions in carbon market meant that they cannot adjudicate rights violations and cannot also be reached by human rights law. Most relevant, in the context of this research, is the idea that the better position that developed countries find themselves in carbon markets and the availability of cheaper sites, in poor countries, for implementing carbon offsetting projects meant that they easily built resilience while compromising the right to development of local people in host countries. Given that the world is set towards zero emission in years to come, poor countries find it very expensive to rely on clean technologies to meet their development goals amidst the global effort to shift away from the reliance on fossil fuels.

Chapter –Five

The Status of Human Rights in the Implementation of CDM and REDD+ projects: A Review of Selected Global, Regional and National Experiences.

This chapter sets out to discuss a number of selected cases of implementations of both CDM and REDD+ policy tools in different corners and contexts of the world with the prime objective of demonstrating the global nature of human rights violations associated with the implementation of not only A/R CDM projects but also other types of CDM and REDD+ projects. In the previous chapters there have been elucidated upon human rights implications of the “undemocratic” and “unjust” processes or procedures in which what are called “flexible” and “market –based climate “policy tools were developed. It was discussed how powerful states (like the US) managed to single handedly devise market–based climate mitigation tools so as to protect the economic performance of its industrial heartlands and huge companies in working out the climate mitigation provisions of the Kyoto Protocol and then withdraw from it leaving the rest of the world “act” against the climate crisis but only to allow, those which are most responsible for the problem, continue to pollute the air and buy their way out of assuming their obligation to stabilize the climate. The resultant impact of this being increased emissions of GHGs, uneven distribution of CDM projects globally and the associated inequitable distribution of the sustainable development contribution which the CDM policy entails, and clear violations of both procedural and substantive human rights of local peoples and communities.

The previous chapters have also discussed how REDD+ as “a neo-liberal climate mitigation policy tool” instigated by the Paris Agreement works, more or less, the same way as the CDM of the Kyoto protocol as carbon offsetting mechanism. And after the unfair distribution of climate mitigation obligations among states globally; failure, to a greater extent, of the sustainable development contributions of the CDM projects in host states; human rights violations associated with the implementation of the CDM projects as will be shown, here, the Paris Agreement, while adopting carbon offsetting mechanism under the guise of REDD+ also expanded the obligation to mitigate the problem of climate change so as to include those states which only insignificantly contributed to the climate crisis and are hardest hit by its adverse consequences. The Paris Agreement has affirmed the claim that tropical deforestation and degradation of forested lands also significantly contributes to the climate crisis and hence, climate mitigation strategy needs to

focus of efforts of strengthening carbon sequestration through the protection of tropical forests and prevention of forest degradation. By so doing, in effect, the agreement facilitated conditions in which climate mitigation “shifts the site and material responsibility of GHGs emission reduction responsibilities” in the Global South and enlivened a form of environmental governance in which the exercise of control over forested spaces and their land based resources is in the hands of those who purchase carbon credits generated via the REDD+ projects it devised. This, in turn and as will be shown in this chapter, resulted in land grabs, and human rights violations in ways that local people experience as being colonial.

In this chapter, the different contexts in which the implementation of CDM and REDD+ projects, in the different corners of the world, violated both procedural and substantive human rights will be elucidated upon with the intent of showing how different combinations of actors interact in different ways (without being considerate of human rights of local people) to disadvantage local people and their rights in short sighted attempts of having their projects registered by the CDM EB of the UNFCCC. Through identifying and describing the roles that each of the actors in a given CDM or REDD+ project played and discussing how allegations of human rights violations were addressed, the chapter intends to show how inadequately equipped the CDM and the REDD+ governance architecture is to ensure that human rights are respected and protected in the context of the implementation of climate policy.

Rights Implications of CDM Projects: *Global Experiences*

Human rights infringements have often been associated with the approval, registration and implementation of the Clean Development Mechanisms (CDM) projects globally. This section of the dissertation utilizes selected cases from different corners of the world with the intent of learning about the various contexts in which CDM projects cause violations of different sets of human rights and the responses from both local governments and international institutions. The cases include the Alto Maipo hydropower scheme in Chile, the Barro Blanco dam in Panama, the Bajo Aguan biogas recovery project in Honduras, the “integrated waste –to –energy project” in India, and Xacbal hydroelectric project in Guatemala.

Alto Maipo

The Alto Maipo project is a “run of the river” electricity generating megaproject with an installation capacity of 530MW⁴³². The project works by diverting river water through 70 kms of tunnels.⁴³³ The technology generates electricity from the natural flow of water without construction of a dam.⁴³⁴ It is located in the Maipo river basin which supplies millions of people, in Santiago, Chile, with clean water. The project has both social and environmental impacts.⁴³⁵ The adverse impact it has on the upper part of Maipo river basin (which results from the diversion of water from the tributaries of the river) through 70 km of tunnel has endangered the quality and availability of water to the capital city, Santiago.⁴³⁶ It has further destroyed the social fabric of the towns of *El Alfalfal* and *Los Maitenes* by dividing the population with economic benefits where some parts of the population were made beneficiary at the exclusion of the others.⁴³⁷ Such local livelihoods as livestock raising, beekeeping, and tourism which were developed by the local communities have suffered irreversible impacts with direct consequence on the economic development of the villages⁴³⁸. It is also observed that the project companies have even built a perimeter wall in *El Alfalfal* to supposedly isolate it from the noise and pollution produced by the removal of soil, further altering the life of the villagers.

Moreover, a non-binding stakeholder consultation was made to engage with citizens but this means that citizens’ comments and opinions couldn’t be taken and considered by the local authorities.⁴³⁹ In this connection, Juan Larrain highlights that the company tried to obtain Environmental Qualification (EQ) from the relevant local authorities which was opposed to by the local people who marched to stop the process of obtaining the environmental qualification;

⁴³² Juan Sebastian S. Larrain, ‘Local Resistance to Extractivism: Community Mobilization in the Case of Chile’ (PhD Thesis, University College London, 2019).

⁴³³ Ibid

⁴³⁴ Ibid. But this is opposed by the local community who argued that the project did, in fact, build an interior reservoir of water in the face of the claim by the company that there only is a 70kms water canal via which the river water travels to deposit at two lowly built stations.

⁴³⁵ “Chile’s Alto Maipo Hydroelectric Project (PHAM)” Factsheet, available online at: < https://www.ciel.org/wp-content/uploads/2017/02/FactSheet_AltoMaipo_Chile.pdf > accessed on 27 June 2023.

⁴³⁶ Carbon Markets Watch, *The Clean Development Mechanism : Local Impacts of a Global System* (2018). Available at < <https://carbonmarketwatch.org/wp-content/uploads/2018/10/CMW-THE-CLEAN-DEVELOPMENT-MECHANISM-LOCAL-IMPACTS-OF-A-GLOBAL-SYSTEM-FINAL-SPREAD-WEB.pdf> > accessed on Oct.13,2021

⁴³⁷ Ibid

⁴³⁸ Ibid

⁴³⁹ Juan S. Larrain , n.355 p. 171

and made critical observations as regards the environmental impact assessment of the company but only to see the company receive the Environmental Qualification (EQ) from the relevant authorities.⁴⁴⁰ This was explained in terms of pressure against the local authorities both from the central government and the company itself that exploited the alignment of the public-private interests in the context of the prevailing political-economic inclination of the country.⁴⁴¹ Local people's fight against the implementation of the project (which was named the NO Alto Maipo Movement) did not end with grant of EQ to the company as they continued to have the decision of the local authority to be investigated by independent commission, later via judicialisation of the case and their petition to the Inter-American Court of Human Rights against the Chilean government.

The other problem that relates with the Environmental Impact Assessment (EIA) was that it was reported in highly technical language which made it extremely difficult for the local communities to understand the results and engage with the project developers.⁴⁴² In addition, there were differences between the impacts identified in the EIA, and real changes on the ground. This is, reportedly, due to synergistic impacts, which were not considered in the EIA, and which affect the availability of water for the capital of Chile. The specific impact of this being contamination of the underground water thereby limiting the quality of water available for home consumption.⁴⁴³ Furthermore, the Alto Maipo construction site has replaced land which used to be used by the local people for grazing.⁴⁴⁴

It is evident to see that as a result of the Alto Maipo CDM project the local people have suffered from the infringements of their rights, inter alia, to get access to drinkable water, food, health, life, means of livelihoods, tenure rights, their rights to Free, Prior, Informed Consent (FPIC), their rights to participation in environmental decision making, and their rights to equal benefit sharing.⁴⁴⁵ Moreover, because of the exclusionary benefits sharing exercise of the project,

⁴⁴⁰ Ibid

⁴⁴¹ Ibid

⁴⁴² Ibid

⁴⁴³ "Submission to the First Global Stock take: Human Rights-based Climate Action ", August 2022. Available online at: < <https://us.boell.org/en/2022/08/23/submission-first-global-stocktake-human-rights-based-climate-action> > accessed on 29 June 2023.

⁴⁴⁴ Ibid

⁴⁴⁵ Nathaniel Eisen & Nina Eschke , *Climate Change and Human Rights :The Contributions of National Human Rights Institutions.*(A Handbook, the German Institute for Human Rights and the CIEL, 2019) p. 16 ; ‘ Lessons

there have been engendered social tensions between the local peoples. It is also important to see that the way the Environmental Impact Assessments (EIA) reports are presented, in this case, has made understanding, commenting and giving opinions by the local people as regards the project difficult thereby limiting effective participation and making it difficult for the people to exercise their right to FPIC.

The Alto Maipo CDM project case illustrates a context in which the political-economic position of the Chilean government (where constant increases in energy supplies via foreign direct investments in the sector is seen as a requisite condition for steady economic growth) overrides local authority's requirements for Environmental Qualification (EQ) of a project that has later been witnessed having compromised the right to water, food, means of livelihoods, and the local people's right to FPIC. Need also be noted that the project's, irrespective of local people's opposition, human rights violations and proven failure to observe Environmental Qualification (EQ) requirements of the local authorities, succeeded to get registered and verified as a CDM project by the Executive Board of the CDM under the UNFCCC.⁴⁴⁶ By registering and verifying the project the CDM Executive Board (EB), as a UN entity, failed to live up to its duty to promote and encourage respect for human rights as stated under article-1 (3) of the United Nations charter where it states "the purpose of the United Nations are ...to achieve international cooperation in solving international problems of economic, social, cultural, or humanitarian character and in promoting and encouraging respect for human rights and fundamental freedoms for all ...".⁴⁴⁷ The Executive Board has also failed to "promote universal respect for, and

from CDM- Registered Alto Maipo Hydroelectric project : Impacted Communities Emphasize that Any Agreement on Climate Action Must Protect Human Rights and the Environment' (Center for International Environmental Law, 9 December 2019), < <https://www.ciel.org/news/lessons-from-cdm-registered-alto-maipo-hydroelectric-project-impacted-communities-emphasize-that-any-agreement-on-climate-action-must-protect-human-rights-the-environment/> > accessed on 25 June 2023 ; Jocelyn Timperley, ' Carbon Offsets have patchy human rights record. Now UN talks erode safeguards'. *Climate Home News*.(12 September 2019) < <https://www.climatechangenews.com/2019/12/09/carbon-offsets-patchy-human-rights-record-now-un-talks-erode-safeguards/> > accessed on 25 June 2023; Fabian Andres Cambero, ' Chilean regulator charges AES power plant with environmental violations' Reuters (27 January 2023). Available online at : < <https://www.reuters.com/business/energy/chilean-regulator-charges-aes-power-plant-with-environmental-violations-2023-01-26/> > accessed on 23 August 2023.

⁴⁴⁶ CIEL, "UN Body calls out Alto Maipo Hydroelectric Project for Negative Impacts on Chileans Economic, Social and Cultural Rights ". Available online at : < <https://www.ciel.org/news/un-body-calls-out-alto-maipo-hydroelectric-project-for-negative-impacts-on-chileans-economic-social-and-cultural-rights/> > accessed on 30 June 2023.

⁴⁴⁷ Article-1(3) of the UN Charter.

observance of human rights and fundamental freedoms for all without distinction as to race, sex, language or religion" as stipulated under article – 55 (c) of the UN Charter.⁴⁴⁸

Barro Blanco dam in Panama

The second case, the Barro Blanco dam in Panama, is a hydroelectric power plant project built on *Tabasara* River. The dam which is operated by the Honduran company GENISA created a 258 hectare reservoir within the province of *Chiriquil* flooding 6.7 hectare belonging to the *Ngabe-Bugle comarca* – a semi –autonomous region located a few miles upstream the dam.⁴⁴⁹ Both the construction and operation of the dam did not obtain the Free, Prior, Informed Consent (FPIC) of the local people and also the later attempt, after a decade of conflict, made by the UNDP to conduct a roundtable discussions has been found, by its compliance unit, to itself has violated the communities' Free, Prior, Informed Consent.⁴⁵⁰

Having gone operational, the dam flooded an area of *Ngabe–Bugle* territory including crops, eleven homes, spiritual sites of petroglyphs and three (3) ancestral cemeteries during its test phase of flooding the reservoir in March 2017.⁴⁵¹ The local ecosystems were decaying as the inundated forests were decaying. Moreover, as the 28.84–megawatt dam became fully operational, it permanently flooded three (3) *Ngabe –Bugle* communities including *Kiad* which is the location of the sacred ceremonial site and petroglyphs.⁴⁵² It still has been reported that the flooding of the dam did impede mobility of the local people, flooded their crops, and bred swarms of mosquitoes that have transmitted diseases among the elderly and young children.⁴⁵³

In the subsequent development, the operating company (GENISA) carried a massive ecocide on the *Tabasara* River by draining the entire river to perform maintenance killing the

⁴⁴⁸ Article -55(c) of the UN Charter.

⁴⁴⁹ Cultural Survival, "Observations on the state of Indigenous Human Rights in Panama prepared for the 36th Session of the United Nations Human Rights Council Universal Periodic Review" .Available at: <https://uprdoc.ohchr.org>.> accessed on 12 Oct.2021.

⁴⁵⁰ Pierre-Jean Brasier & Christine Lottje, " how climate projects can lead to human rights violations: the Case of Baro Blanco hydroelectric dam" *Climate Diplomacy* (Latin America and Caribbean, 19 July 2017).

⁴⁵¹ Ibid

⁴⁵² Tracy Barnett, 'Panama Meeting on Human Rights, Environmental Issues Sows Hope and Disappointment' *IC Magazine* (8 April 2017) < <https://intercontinentalcry.org/panama-meeting-human-rights-environmental-issues-sows-hope-disappointment/> > accessed on 1 July 2023.

⁴⁵³ Damilola S. Olawuyi, ' The Human Rights Based Approach to Climate Mitigation: Legal Framework for addressing Human Rights Questions in Mitigation Projects.' (PhD Thesis, Oxford University, 2013).

entire fish population which was left to die in the mud.⁴⁵⁴ The *Ngabe* communities who used to depend on the fish supply of the river were left without a source of protein. Furthermore, the 18 hectares of deep mud that surrounded the river made the river water inaccessible for the people who used to rely on the water for basic purposes. So the Barro –Blanco hydroelectric dam did out rightly violate the Indigenous People’s right to their territory which is protected by the constitution of Panama as well as by Law 10 of 1997 which establishes the *comarca* Ngabe – Bugle.⁴⁵⁵

It has also not allowed meaningful participation of the local communities in violation of their right to FPIC, their rights to health, livelihoods, food and access to water.⁴⁵⁶ Observed it is also that both DNA (Designated National Authority) and DOE(Designated Operational Entity) of Panama did not play any role in ensuring rights protections as they downplayed the company’s neglect of both the procedural and substantive rights of the local people.⁴⁵⁷ Neither was the Environment Ministry of the country protective of the local people’s rights amidst clear breach of human rights as the company drains the water of *Tabasara* River for maintenance of its hydroelectric power plant. This probably validates the observation that when developing countries are faced with the dilemma of competing interests involving rights protection in the context of climate response measures and economic development, they tend to incline to their economic development needs or interest.

Like the case with the Alto Maipo project, the Barro Blanco project exemplifies a situation in which the CDM Executive Board registers a project that compromised the right of the Ngabe – Bugle indigenous people to their FPIC, to their land, housing, life, health, food and like due to the lack in its CDM governance architecture of a mechanism for ascertaining the findings of DOEs (Designated Operational Entities whose primary role is conducting project validation work). As stated earlier the CDM EB does have a duty to ensure that climate mitigation projects observe and comply with international human rights norms as a UN entity as per article -1(3) and 55 (c) of the United Nations Charter. The other important observation, here, is that, in accord

⁴⁵⁴ Ibid

⁴⁵⁵ Wolfgang Obergassel et al, ‘Human Rights and the Clean Development Mechanism: Lessons Learned from three case studies’ (2017) Vol. 8, No. 1 The Journal of Human Rights and the Environment. Available online at: < https://epub.wupperinst.org/frontdoor/deliver/index/docId/6662/file/6662_Obergassel.pdf > accessed on 2 July 2025.

⁴⁵⁶ Ibid

⁴⁵⁷ Ibid

with the CDM policy as stated under article -12 of the Kyoto protocol, a given CDM project is meant to contribute to sustainable development of a project hosting state as determined by the state but let alone the project's contribution to sustainable development, the DNA (Designated National Authority of Panama) was not able to even make sure that a key procedural right of the Ngabe- Bugle people was respected as it failed to ensure that their right to FPIC and other rights are respected by the project implementer. By and large, this is a case that illustrates a context in which an unfairly developed climate policy tool violates the human rights of the indigenous Ngabe–Bugle people in Panama including their right to development while at the same time harming biodiversity, cultural identity and indigenous people's right to self- determination. It is also key to note that the project infringed upon the constitutionally protected right of the Negab- Bugle people to their land interfering with the principle of state sovereignty.

Bajo Aguan in Honduras

The third (3rd) case is the Bajo Aguan project in Honduras. The CDM project has the official title of “Aguan biogas recovery from Palm Oil Mill Effluent (POME) ponds and bio gas utilization – Exportadora del Atlántico, Aguna Honduras”. Exportadora del Atlantico is a subsidiary group of Dinant owned by the family of Miguel Facusse.⁴⁵⁸ Initially the project involved the London based EDF Trading Limited as project participant and the United Kingdom and Northern Ireland as home country of EDF Trading. The palm supplied to the mill comes from palm plantations which are the centers of violent land dispute.⁴⁵⁹ Since 2004, the local peasant organizations claimed that the land of the plantations was illegally appropriated by Facusse and following their accusations a legal commission was established, in 2009, to investigate the case but only to be disrupted by a coup.⁴⁶⁰ Since then there have been serious armed confrontations between the peasants and private and public security forces. At the time, it has been reported that at least 50 peasants were killed in the land conflict by public and private security forces.⁴⁶¹

⁴⁵⁸ CDM Watch , ‘ Unsolicited Letter : Registration request of the Aguan biogas recovery from Palm Oil Mill Effluent Project 3197, Honduras ’, 14 February available at < <http://carbonmarketwatch.org/cdm-project-application-3197-aguan-biogas-recovery-from-palm-oil-effluent-pom-ponds-and-bio-gas-utilization-exportadora-del-atlantico-aguanhonduras/>> ,2011a , accessed on 13 Oct.2021.

⁴⁵⁹ Human Rights Watch, “ *There are No Investigations Here “ : Impunity for Killings and Other Abuses in Bajo Aguan, Honduras* (Human Rights Watch, 2014)

⁴⁶⁰ FIDH, HONDURAS: Human Rights Violations in Bajo Aguan. Available online at : < <http://www.fidh.org/IMG/pdf/honduras573ang.pdf> >

⁴⁶¹ Ibid.

The state of Honduras did, therefore, fail to live up to its obligations. The state was also not able to respect and protect the peasants' rights to liberty and personal security as well as the right to physical, psychic and moral integrity as the peasants were subjected to constant threats, harassment in public and at home through telephone calls and surveillance, burning of houses, armed attacks, illegal arrests, kidnappings, torture and sexual abuses.⁴⁶² Later in its visit of Honduras the Inter-American Commission for Human Rights (IACHR) expressed its concern about a decree that allowed the Secretariat of Honduras's National defense force to provide military personnel for the local public and private security force. The IACHR and the OHCHR have also determined that since the coup d'état both the public and private security forces have committed human rights violations in Honduras including the Bajo Aguan region with impunity, and that victims have no legal recourse⁴⁶³. Moreover, the OHCHR disclosed after a visit to Honduras that human rights violations are not investigated, perpetrators remain unprosecuted and the victims do not have access to remedies⁴⁶⁴.

The link between rights violations and the CDM project is allegedly established on the basis of the fact that the project sources its raw materials from the palm plantations on the land also claimed by the local people. The local population and non-governmental organizations reported that the human rights violations were primarily perpetrated by the security guards of the private company working together with public security forces. In this connection, it has also been documented that Focuses', the project owner, himself admitted that his security men killed five (5) peasants on Nov.15,2010. While this is the case, the CDM process did not take these considerations into account even though it began after the occurrence of the violence. The final version of the PDD was completed from 25 January but makes no mention of the human rights violations or the violence that were linked with the project. This has not also been taken into account in the project validation report.

Though the PDD states that there had been adequate stakeholder consultations carried out which was also confirmed by the DOE validation report, it could not be verified externally as a

⁴⁶² J. Schade & W. Obergassel, 'Human Rights and the Clean Development Mechanisms' (2014) Vol.27 No.4 Cambridge Review of International Affairs. Available on <http://www.tandfonline.com/10.1080/09557571.2014.961407> accessed on 14. Oct.2021.

⁴⁶³ A/HRC/13/66 of 3 March 2010; OEA/Ser.L/V/II of 30 December 2009; OEA/Ser.L/V/II. Of 3 June 2010

⁴⁶⁴ OHCHR, 'Private military and security companies in Honduras need robust and effective monitoring, says the UN expert group, TEGUCIGALPA/ GENEVA ', 25 February, 2013 available online at < <https://newsarchive.ohchr.org>. > accessed on Oct.15, 2021.

key documentation was not publicly available.⁴⁶⁵ Neither did the CDM PDD and validation report include copies of newspaper advertisements that were supposedly published, nor do they contain lists of the invitees and attendants of the stakeholder meeting that was supposedly carried out.⁴⁶⁶ It has also been observed that the validation report does not specify what steps were taken by the validators to assess the validity of the information and the adequacy of the information. NGOs raised the human rights issues with the CDM Executive Board but the board nevertheless decided to register the project in July, 2011. In the reply the board gave, not a formal reply but the news outlets, that the board did not have the means to block the registration since their mandate covered the GHG impacts of the project. And when the UK government is made aware of the situation, it replied stressing that the government of Honduras is primarily responsible. The project has not yet produced CERs but when it does ‘there will be nothing that prevents it from being imported to UK and used in EU ETS’⁴⁶⁷.

The Bajo –Aguan biogas project, as has been shown, illustrates a context in which the state itself is involved in human rights violations of its people through the public security forces and through a decree that allowed reinforcement of the public security force. It is also seen that the CDM Executive board replied, the way it often does, that it is not within its mandate or that it does not have the means to address human rights violations other than its concern with the GHG impacts. It is important to see that the way the carbon market works (particularly how different types of actors are involved) when weighted in relation to how human rights law works makes, by design, difficult to attend to rights protection of local people or fulfilling their interests. In this case, as clearly indicated above, the right to life, liberty, personal security, right to ownership of land, the right to FPIC, the right to participation and the right to access to justice and remedy have all been violated.⁴⁶⁸ And this demonstrates the range of human rights violations associated with climate mitigation response projects.

⁴⁶⁵ J. Schade & W. Obergassel, n.385 p. 11

⁴⁶⁶ Ibid

⁴⁶⁷ Ibid, p.728

⁴⁶⁸ The Inter-American Commission on Human Rights (IACHR), Situations of Human Rights in Honduras. OEA/Ser.L/V/II, Doc.42/15, (31 December 2015.)

Timarpur-Okhla Waste-to-Energy Project in Delhi, India.

The fourth (4th) case is the “integrated waste –to –energy project” which aims to provide a sustainable waste management solution to the city of Delhi by processing 2050 tons of municipal waste per day using a 20.9 MW waste to energy incinerator plant at the Okhla site⁴⁶⁹ The project is said to have harmed local employment, violated industrial sitting laws and laws prescribing emission standards set by regulatory bodies. Furthermore, it has provided misleading and false information about the design and impacts of the activities of the plant⁴⁷⁰. There were also misrepresentation of facts in the EIA report (this is true for example for the distance between the location of the plant from the residential areas which in the report says 5km but actually found to be 30 meters and thus, heavier impacts of emitted gases on the local people), and deviation from the approved technology resulting in emission of toxins beyond the limits.⁴⁷¹

Though the project announced the schedule for holding public hearings via local newspapers, the announcement is said to have failed to disclose information about the nature of the project and excluded crucial facts about emissions and the plants proximity to a residential area.⁴⁷² So instead of being held at the project site the public hearing was conducted 10 km away where no member of the local people appeared leading to the passage of the project without objection. Again, contrary to what it states on the project design document (PDD) for the CDM, the project did in actuality fail to provide employment opportunities, to align with the interests of local residents and support the security of their established lives⁴⁷³. As the result the project was already facing stiff resistance from the residents of Okhla and the waste pickers of Delhi. In addition, the EIA (Environmental Impact Assessment) report was not publicly accessible and when it is made available after a petition it was found out that it distorted facts to make its case. Even later, there was no updated EIA reported mad available neither was held a new public hearing. Despite all these problems associated with the project, the UNFCCC allowed the issuance of over 225,000 CERs between 2011 and 2017.⁴⁷⁴

⁴⁶⁹ Carbon Market Watch , n.359 p.5

⁴⁷⁰ Ibid

⁴⁷¹ Dharmesh Shah, *Delhi's Obsession with “ Waste –to –Energy” Incinerators : The Timarpur –Okhla Waste to Energy Venture.*(Global Alliance for Incinerator Alternatives (GAIA), 2011).

⁴⁷² Ratik Asokan, ‘the Political Economy of Environmental Justice: A Comparative Study of New Delhi and Los Angeles’ (Senior Thesis, Claremont McKenna College, 27 April 2015).

⁴⁷³ Ibid

⁴⁷⁴ Ibid

Again, it is discerned that the project violated the rights of local people to livelihoods, participation in environmental decision making, FPIC, and the right to health.⁴⁷⁵ Noteworthy is also that local people's efforts to getting remedy didn't succeed despite repeated attempts to appeal to higher courts which demonstrates state's tendencies of overlooking human wellbeing and right in favor of industrial expansion. The lack of considerations for possible human rights infringements associated with CDM projects seems to be also observed of the UNFCCC secretariat as attested by the fact that it permitted the issuance of 225,000 CERs for the 2011 and 2017 period. And in this regard, it has been argued that the project has not brought about the increased emission reductions as a result of its implementation when seen in comparison with the already existing practice of a door –to –door collection of municipal waste that used to be carried out by migrants to the area whose livelihoods the project destroyed.⁴⁷⁶ This is to say that the project is not “additional” and that the credits it is said to have earned are “false” credits as is the case with many of the CDM projects.⁴⁷⁷

So this case illustrates another example where the proposed CDM project falsely claims to install technologies that would generate energy with minimal pollution and yet at the same time contribute to climate stabilization while in actual fact they are not additional, compromise procedural and substantive rights of local people and fail to contribute to sustainable development of states hosting them.

Xacbal Hydroelectric in Guatemala

The last case to be dealt with is the *Xacbal* Hydroelectric project in Guatemala. Being the biggest private hydroelectric plant (94MW) in Guatemala, the project was implemented by a Honduran company in the La Perla property which local communities claim to own.⁴⁷⁸ The aim of the project was to use local hydraulic resources so as to reduce CO₂ emission caused by fossil fuel combustion with the resultant effect of improving forest coverage in the river basin and

⁴⁷⁵ “Seeking action against questionable CDM Project Okhla Waste to Energy Plant, Delhi, India” (A Petition by Global Alliance for Incinerator Alternatives (GAIA). Available online at: < <https://www.change.org/p/cdm-executive-board-unfccc-seeking-action-against-questionable-cdm-project-okhla-waste-to-energy-plant-delhi-india> > accessed on 2 July 2023.

⁴⁷⁶ Dharmesh Shah, n.394 p.3

⁴⁷⁷ Ibid

⁴⁷⁸ Carbon Market Watch, n. 359 p. 6

lessening soil degradation. However, the project is said to have damaged the water and forest resources, blocked access to sacred sites and created social tensions among local communities.⁴⁷⁹

The social tension arose as the project disturbed the already fragile peace between *Mayan-Ixil* inhabitants of communities from *Chajul* and *Nebaj* in the surroundings of the project⁴⁸⁰. It also caused deforestation, degradation of water and river resources, and caused landslides. Access to *Ixil* populations' oldest archeological and ceremonial site called *Panchita* has been restricted as the site was included in *Xacbal*'s property. The same restriction has reportedly also affected access to water used for washing coffee, baptism and fishing. Moreover, two young people lost their lives as the water was released from machines which was attributed to the lack of information about how the plant operated.⁴⁸¹ The stakeholder consultations did also prove to be untrustworthy as representatives from the company attended roundtable discussions only until the construction of the project was completed. They later left the discussions showing neglect to the questions, opinions and comments of the local people.

Here, it is seen that local people's rights to religious practices is encroached upon by the operation of the hydroelectric project. Noteworthy is also the fact that failure to adequately communicate how a project operates to local people residing around the project site could be as dangerous as taking away the lives of people.

Rights Implications of CDM projects: *Experiences of Local People in Africa*

This section reviews the experiences of local people in the context of the implementation of two selected CDM projects in Africa. The projects are the *Bujagali* hydropower project in Uganda, and the *Olkaria* geothermal project in Kenya.

***Bujagali* hydropower project in Uganda**

The *Bujagali* hydropower project is a registered CDM project in Uganda. It is located on the Victoria Nile River in the *Buikwe* District in the Central Region of Uganda. It is one of the biggest investment project in Uganda with the total investment of 800 million USD. In the first phase of the project's implementation, the lender, the US-based AES Nile Power (AESNP), withdrew from the project due, inter alia, to allegations of corruption which also led to

⁴⁷⁹ Ibid, p.5

⁴⁸⁰ Ibid

⁴⁸¹ Ibid

unfavorable report by the World Bank's Inspection Panel. The AESNP withdrew from the project before construction began and after having completed the economic, social and environmental assessments and begun resettlement⁴⁸².

So approximately 8,700 people were resettled or lost assets without proper compensation upon project cancellation. Later, a new company named the Bujagali Energy Limited (BEL) took up the project and had another company (RJ Burnside International Limited) conduct a social and environmental impact assessment. It also gave assurance that it will take responsibilities for those displaced in the course of the previous project attempt. It also turned out that the DOE came up with a report stating that 'the Bujagali dam meets all necessary criteria and requirements of the CDM'⁴⁸³. And the DNA of the host Party did confirm that the project assists in meeting sustainable development criteria.⁴⁸⁴ When judged bent on CDM official documentation, the project seems to meet high standards and no major human rights infringements are expected but in actual practice it did cause a significant number of human rights violations⁴⁸⁵.

The project faced opposition from local groups and environmental justice organizations right from the preparatory phase of the project on account of allegations that consultations and resettlement processes were inadequate and the lack of compensation for the affected people who claimed that it destroyed their livelihoods. Furthermore, it was complained that the resettlement site was inadequate in its location and was inferior to the original settlement; houses and services (water, electricity and education) were not finished.⁴⁸⁶ The resettled people did not have their voice heard in the choice of the new settlement site. As the result of remoteness of the new location from the river which the resettled people used to use for fishing, the people suffered from loss of their livelihoods and thus, became unemployed and therefore, unable to pay for schooling.

⁴⁸² World Bank, 'Uganda- Bujagali Hydropower Project' (Implementation Completion and result report, World Bank 2005). Available online at : < <https://documents1.worldbank.org/curated/en/546131539715898602/pdf/Bujagali-ICR-Report-10102018.pdf> > accessed on Oct.19,2021

⁴⁸³ ERM Certification and Verification Services, 'CDM Validation Report '(ERM CVS 2011). Available on <https://cdm.unfccc.int/filestorage/H/A/O/HAOMN2GWX18YJE4IC93R56UFPZ7QDT/1883%20v1%20Bujagali%20FVR%2006Oct.2011signed.pdf?t=eTN8bzVvYnA3fDDPNOf9Q5mlaCRkUnQ1jk7> accessed on 20Oct.2021.

⁴⁸⁴ Ibid

⁴⁸⁵ W. Obergassel et al, n.378 p. 11

⁴⁸⁶ Ibid

In accord with the CDM PDD, consultation with the local people continued during the construction and operation of the dam. BEL also worked with a witness NGO and Inter-Aid Africa with the aim of addressing the grievances of affected people. It was found out that instead of using the grievance mechanisms of the project implementer the local people turned to other NGOs to represent them. Then the NGOs used the grievance mechanism of the multilateral banks that acted as lenders for the project. So in 2006, informed by its fact finding mission, the AfDB's Compliance Review and Mediation Unit (CRMU) recommended the AfDB Board of Directors to conduct a compliance review. The review concluded that the Bujagali investment project had not complied with, inter alia, the requirement of the Bank policies on Involuntary Resettlement, Gender and Poverty Reduction, nor with environmental policies and guidelines.⁴⁸⁷ Complaints were also filed with the World Bank Inspection Panel in the subsequent year where it was found out that the project violated the World Bank policies on environmental, hydrological, social, cultural, economic and financial issues. The panel further criticized the project stating that 'the project did not comply with the mandate of the World Bank policy to improve or at least restore, in real terms, the livelihoods and standards of living of the people displaced by the project'⁴⁸⁸ This has led the project management to develop an action plan with the intent of alleviating the shortcomings of the project. In this regard, it has been learned from the local people that the redress mechanisms were effective and responsive to their complaints.⁴⁸⁹ Also local people have been found out accrediting the World Bank inspection panel as the most reliable reference for hearing complaints and righting failures.⁴⁹⁰

The Bujagali case seems to be complicated as the project was a two phased project with initial project being discontinued leaving more than 8,000 resettled people without adequate compensations and provisions of services. The rights violated included the right to housing, the right to livelihood, the right to health, the right to property, the right to FPIC and the people's right to participation in decision making. It is observed that within the realm of CDM, the project fulfilled all the requirements but in the absence of rules it is up to the host country to enact rules and laws that the project needs to comply with. Such proactive measures do not seem to have

⁴⁸⁷ Bujagali PDD (n 64)

⁴⁸⁸ World Bank, 'Management Report and Recommendation in Response to the Inspection Panel Investigation Report No. 44977-Ug of the Uganda: Private Power Generation (Bujagali) Project '(2008) IDA/R2008-0296.

⁴⁸⁹ W. Obergassel et al. n.378 p.16

⁴⁹⁰ Ibid

been taken by the host country in the Bujagali case. The other observation is also that the multilateral banks' grievance mechanism was important in terms of ensuring rights protection. The problem, from the human rights law perspective, is that entities or financial institutions such as the African Development Bank or the World Bank are not duty bearers, in accord with human rights law, to make sure that the human rights of local people in a host country is respected and protected. While the Bujagali case shows that the stronger compliance requirements of the lenders (of the AfDB and the World Bank) made the companies comply with their respective policies, it does not mean that these actors invariably behave in the same way in all other instances.

***Olkaria* geothermal power project in Kenya**

The second case is the *Olkaria* geothermal power project IV in Kenya. The project is located in Kenya's share of the African Rift close to Lake Naivasha and adjacent to the Hell's Gate National Park. The project is part of the larger Kenya Electricity Expansion project (KEEP) of the World Bank funded by five (5) main lending institutions: the World Bank's International Development Agency (IDA), the European Investment Bank (EIB), the French Development Agency (AFD), the German Development Bank (KfW) and the Japanese International Cooperation Agency (JICA) with investments amounting to 1.4 billion USD in total.⁴⁹¹ At the beginning, Kenya was requested to submit an Indigenous People Planning Framework (IPPF) for KEEP as the World Bank was advised to address the UNDRIP in its cooperation with the African governments by the African Commission on Human and Peoples Rights (ACHPR). This required Kenya to apply the Bank's operational policy OP 4.10 on Indigenous Peoples. This being the case, however, the consent principle of FPIC is officially objected to by the World Bank which particularly rejects a right to veto resettlements if such measures are deemed necessary to implement a co-funded project⁴⁹²

Three (3) Maasai villages had to be resettled to vacate the land for *Olkaria* IV project upon agreement among the lenders that the involuntary resettlement necessary for the project

⁴⁹¹ World Bank, 'Kenya Electricity Expansion Project (English)- Integrated Safeguards Data Sheet' (2010) AC4957 <https://documents.worldbank.org/curated/en/2010/03/11987133/kenya-electricity-expansion-project> accessed on Oct. 21, 2021.

⁴⁹² P. Tamang, 'An Overview of the principle of Free, Prior and Informed Consent and Indigenous Peoples in International and Domestic Law and Practices' (2005) Vol. 9 No. 2 Australian Indigenous Law Reporter. Available online at: < <https://www.jstor.org/stable/26479590> > accessed on 21 October 2021.

would be carried out in accordance with Operational Policy 4.12 of the World Bank. A fourth one had to be resettled because of the projected air pollution. The new settlement site was agreed to provide for modern houses, modern infrastructure (roads, electricity, water pipes), social services (schools and health centers), and additional land for pasturing their cattle at the site. The resettlement of the villages didn't seem to have problems at the planning stage. It did also receive positive validation report and met the requirements of the CDM process. But complaints began to emerge as the people actually started to settle at the new sites. The complaints were submitted immediately to the World Bank Inspection Panel and the EIB Complaint Mechanism (EIB –CM) which started to investigate the case in 2014.

Flaws of the census and lack of houses, the quality of land, lack of title deeds, long distances from previous sources of livelihoods, use of compensation funds to pay for access to electricity grid, shortcomings in livelihood restoration, incidents of intimidation and exclusion of (outspoken) community representatives in Resettlement Action Plan Implementing Committee (RAPIC) and the lack of trust in RAPIC and its grievance mechanism have all been the major complaints raised by the community.⁴⁹³ The allegations were largely confirmed by the investigating bodies of the bank and, furthermore, found out that the donors did not apply the World Bank's Operational Policy 4.10 on Indigenous Peoples, that the world bank insufficiently monitored the resettlement, and that the Mutual Reliance Initiative (MRI), a joint co-financing mechanism of the European lenders, to some extent prevented EIB from complying with its due diligence.⁴⁹⁴

Apart from the rights violations implicated in the implementation of the RAPIC, it has been observed that there were no assessments made to determine whether or not the 1,700 acre of land made available for resettling the villages adequately suffice the 2,400 acre of land taken away when seen in terms of maintaining the cattle of the pastoralist Maasai. Furthermore, the new site of settlement was asked to be fenced limiting the mobility of Maasai pastoralists to look for alternative pasture land in times of drought. When they asked why they were compensated only 1,700 acre, they were told that they didn't have title deeds of the lands they previously built their lives on. It was also true that the community did not unanimously agree to vacate the land as there were opposing group within the community who accused the other members, who gave the

⁴⁹³ W. Obergassel et al. n.378 p.17

⁴⁹⁴ Ibid

permission to vacate, of being compromised and the letter granted thus being illegal. The subsequent election of new representatives of the community, which was supervised by a cabinet minister, was also allegedly compromised. There was also observed no indication of attempt on the part of the government to investigate into the matter or to question the legitimacy of the letter. Given that the allegations that the agreement to vacate the land for the plant was not unanimous or lacks broader community support is true, the indigenous peoples rights to their ancestral lands and, their FPIC are violated apart from breach of their livelihood rights, their right to adequate standard of life, right to liberty and security, their right to participation, and tenure rights.

Rights Implications of REED+ projects: *Global Experiences*

Projects bearing the label of Reducing Emissions from Deforestation and Forest Degradation plus conservation, sustainable management of forests and enhancement of carbon sinks (REED+), in different corners of the world, have been documented to have adversely impacted upon tenure rights, FPIC of indigenous peoples and local communities, caused forced eviction of local people, violated livelihood rights of local people and caused inequitable distributions of benefits as the result of their implementation.⁴⁹⁵ REED+ pilot projects in Vietnam, for example, were observed having failed in providing all the relevant information on REED+ to local people including the risks and costs associated with the program.⁴⁹⁶ The pilot program has, furthermore, been evaluated as not allocating enough time for internal discussions, no grievance and review mechanisms and that local people could not address their concerns or complaints to an independent institution. The people in the FPIC process were simply asked whether they wanted their forests to be conserved where the villagers simply answered “yes”

⁴⁹⁵ M. M. Bayrak & L.M. Marafa, ‘Ten Years of REED+: A Critical Review of the Impact of REED+ on Forest Dependent Communities’ (2016) Vol.8 No.620 Sustainability. Available online at : < www.mdpi.com/journal/sustainability accessed on Oct.17,2021.; see also D.Murdiyarso et al. ‘Some lessons learned from the first generation of REED+ activities’ (2012) Vol.4 Current Opinion in Environmental Sustainability. Available online at: < www.sciencedirect.com> accessed on Oct.18, 2021. ; see also M.Raftopoulos, ‘REED+ and human rights: addressing the urgent need for a full community- based human rights impact assessment’ (2016) Vol.20 No.4 International Journal of Human Rights. Available online at: < https://www.researchgate.net/publication/293190794_REDD_and_human_rights_Addressing_the_urgent_need_for_a_full_community-based_human_rights_impact_assessment > accessed on 18 October 2021.

⁴⁹⁶ Ibid

which shows how ill-facilitated participation in the FPIC process lead to ineffective and meaningful participation of local communities⁴⁹⁷.

Ill-facilitation of the FPIC process is also reported of pilot projects implemented in Peru. Consultation of forest people and local communities about plans of REED+ project occurs not prior to the implementation of the project, local people may be aware of the project but not its specific objectives and details of its activities, there also is reported lack of genuine understanding of the project and more importantly, in at least one of the projects, there does not appear to be a documented consent and its validation of the local people about the implementation of the project.⁴⁹⁸ In cases where there were conducted consultations with the local people and understanding reached about a project, this happens involving only the local community elites and leaders⁴⁹⁹.

In Indonesia, the challenge of facilitating the FPIC process, as part of the processes of implementing pilot projects, took a different form as local NGO activists who were contracted to conduct the FPIC process themselves did not know about what REED+ is and also how they proceed communicating local people about it.⁵⁰⁰ Moreover, the NGOs were uncertain as to who to invite to the workshop, the facilitation of the workshops were carried out inviting only women residents of the local community who did not understand what was being communicated. Furthermore, the workshops were conducted by staff of local NGO with limited fluency of the English language which the local people did not speak and read, the local people were inconsistent in attending the workshop, and the formal Indonesian language employed in later attempts made it difficult for particularly women participants to follow.⁵⁰¹ While these were the challenges observed of pilot projects in Central Sulawesi, Indonesia, the challenges in other cases have even been observed being worse⁵⁰².

⁴⁹⁷ N.Q. Tan, *Evaluation and Verification of the Free, Prior, Informed Consent Process under the UN-REED program in Lam Dong Province, Vietnam*. (The Center for People and Forests, 2010).

⁴⁹⁸ R.E. Llanos & C. Feather, *The Reality of REED+ in Peru: Between Theory and Practice*, (Forest Peoples Program 2011) p.30.

⁴⁹⁹ Ibid

⁵⁰⁰ S. Howel, ‘‘No- RIGHTS –No REED’’: Some Implications of a Turn towards Co-Benefits’ (2014) Vol.41 No.2 Forum for Development Studies. Available online at: <

https://www.researchgate.net/publication/271748450_No_RIGHTS-No_REDD_Some_implications_of_a_turn_towards_co-benefits > accessed on 21 October 2021.

⁵⁰¹ Ibid

⁵⁰² Ibid

Again, so far as the implementation of FPIC process is concerned, several South Asian countries (Nepal, Thailand, and Laos) did not allow representations in REED+ implementing bodies, have not provided adequate information and carried out meaningful consultations with the local communities and indigenous peoples before their submission of the Readiness Plan Idea Note (R-PIN) to their international REED+ funding partners.⁵⁰³

True is also the occurrence of seizures of lands, murders of environmental defenders, violent evictions and forced displacement of local people, violations of Indigenous People's Rights, loss of livelihoods and biodiversity and the desecration of sacred sites in the context of REED+ implementations in countries like Brazil⁵⁰⁴, Indonesia⁵⁰⁵, Ecuador⁵⁰⁶, Vietnam⁵⁰⁷ and Peru⁵⁰⁸. In Brazil, apart from the problems of inflated forest reference level which were used to skew the calculations and claim results and leakage problems, Indigenous Peoples, peasants, Afro-descendant communities and human rights defenders have been under constant attacks by Bolsonaro government where women were disproportionately affected by the treats to the local communities.⁵⁰⁹ Infringements of the human rights of Indigenous Peoples and forest dependent communities have also been documented in the context of the implementation of REED+ projects in Paraguay and Colombia.⁵¹⁰ In Paraguay, the REED+ projects were observed lacking benefit sharing mechanisms that could have allowed women, Indigenous Peoples and peasant communities to share in financial rewards.⁵¹¹

Likewise both in Indonesia and Colombia, there were problems related to inaccuracy in setting forest reference and baseline level and increases in deforestation rates after the period emission reductions had been claimed for other than the lack of respect for the rights of

⁵⁰³ AIPP, *REED+ Implementation in Asia and the Concerns of Indigenous Peoples*. (IWGIA & AIPP, 2010).

⁵⁰⁴ H. Boas (ed.), *NO-REDD Papers* (Volume One, Eberhardt Press, 2011).

⁵⁰⁵ A. Dermawan et al, 'Preventing the risk of corruption in REED+ projects in Indonesia' (2011) Working Paper 80 < https://www.cifor.org/publications/pdf_files/WPapers/WP80Dermawan.pdf > 23 October 2021.

⁵⁰⁶ Global Forest Coalition, *15 years of REDD+*, (REDD+ Briefing, 2020). Available online at : < <https://globalforestcoalition.org/wp-content/uploads/2020/09/REDD-briefing.pdf> > accessed on 26 October 2021.

⁵⁰⁷ C. Hoang et al., "This is my garden": justice claims and struggles over forests in Vietnam's REDD' (2019) Vol.19, Issue S1 Climate Policy. Available online at: < <https://www.tandfonline.com/doi/full/10.1080/14693062.2018.1527202> > accessed on 28 October 2021.

⁵⁰⁸ J.Pablo et al., *Rights abuse allegations in the context of REED+ readiness and implementation: A preliminary review and proposal for moving forward*. (CIFOR 2017) .p.4.

⁵⁰⁹ Ibid

⁵¹⁰ Global Forest Coalition, Op.Cit. p.7

⁵¹¹ Ibid

Indigenous Peoples and local communities and in particular for land ownership rights of local people.⁵¹²

Need it be noted that where there are infringements on livelihood rights, right to life and personal security (which is violated in the context of intra and inter-communities conflict), use rights of forest based resources or the right to adequate compensation in case of resettlement, these happen when tenure rights have not been properly or clearly defined or when governments fail to recognize traditional and customary rights of indigenous peoples and forest dependent communities. By and large, globally, the implementation of REED+ projects did see challenges faced by states in terms of observing their human rights obligations as they fail to properly abide by the principle of FPIC, or respect tenure, livelihoods, participation, and resource use rights of local people and forest dependent communities.

Rights Implications of REED+ projects: Experiences in Africa

As is the case outside the African continent, REED+ projects, in Africa, have made it attractive for companies, state agencies, or big conservation groups to ignore the rights of Indigenous People, forest dependent women, and local communities. There have been numerous reports, over the last decade, that the design and implementation of REED+ projects violated a wide range of human rights of forest dependent and local communities in Africa. The rights violations took the forms of, inter alia, appropriation of local people's land, forced eviction and displacement of local people, murders of lives of environmental defenders, and loss of livelihoods⁵¹³. The Democratic Republic of Congo (DRC), Ghana, Kenya, Sierra Leone, Tanzania, Zambia and Uganda are some of the countries where human rights violations and other significant social problems related to REED+ projects have been documented.⁵¹⁴

In Ghana, fences, guards and anti-poaching patrols have led to the criminalization of the livelihood practices of local communities which created resentment and conflict. The local people had to carry out hunting, foraging and grazing activities under cover owing to the fact that these life supporting activities were made illegal⁵¹⁵. This has, in turn, led to the destruction of local forest ecosystem. In addition, the lack of public participation in decision making did also lead to

⁵¹² Ibid

⁵¹³ Global Forest Coalition, n. 429 .p.5

⁵¹⁴ Ibid

⁵¹⁵ Ibid

significant interference from powerful political figures. Ghana's forestry sector has been observed manipulating, putting pressure on and interfering in policy making and implementation with the intent of accommodating friends and receiving commissions. Decisions, for instance, are not scrutinized which may lead to the selection of REED+ projects with serious social and environmental impacts and benefit only a few people. The other problem relates to uncertainty as regards land tenure, which particularly is observed of the cocoa-growing areas, with a likelihood of making projects susceptible for corruption and land-use planning favoring more powerful interests and political elites.

In Kenya, a REED+ pilot project chose to work in a location where Indigenous Peoples had been evicted from their traditional territories based on the argument that they were responsible for accelerated forest degradation.⁵¹⁶ The local people named *Ogiek* were evicted in 2014 from the Mau Forest as part of forest conservation and reforestation program which the African Court on Human and Peoples' Rights has since ruled was a violation of their land rights.⁵¹⁷ More than 10,000 Sengwer people were evicted from their traditional territories in the Embobut forest and Cherangany Hills in which women were disproportionately affected.⁵¹⁸ And this was also recognized by the World Bank (as it funded the Natural Resource Management Project in Kenya) that it is its own responsibility for failing to protect Sengwer people from eviction in the context of REED+ readiness.

In Tanzania, REED+ projects have been observed to be causes of conflicts (both within villages and between villages)⁵¹⁹, loss of local livelihoods, eviction from settlements and relocation of local people to less fertile areas ⁵²⁰. Moreover, some affected communities have

⁵¹⁶ S. Chomba et al., 'Roots of Inequality: How the implementation of REED+ reinforces past injustices' (2016) Vol.50 Land use policy. Available online at: < <https://www.sciencedirect.com/science/article/pii/S0264837715002926> > accessed on 6 November 2021.

⁵¹⁷ J. Pablo et al. n 431 .p.4

⁵¹⁸ Forest People Program (FPP), Lessons from the field: REED+ and the Rights of Indigenous Peoples and forest dependent communities. (Briefing Series, 2011). Available online at: < <https://www.forestpeoples.org/sites/fpp/files/publication/2011/11/lessons-field-briefing-english.pdf> > accessed on 15 November 2021.

⁵¹⁹ A. Scheba & O. Rakotonarivo, 'Territorializing REED+: Conflicts over market-based forest conservation in Lindi, Tanzania' (2016) Vol.57 Land Use Policy. Available online at: < <https://repository.hsrc.ac.za/handle/20.500.11910/9980> > accessed on 16 November 2021.

⁵²⁰ A. Vatn et al., 'What does it take to institute REED+? An Analysis of the Kilosa REED+ pilot', Tanzania. (2017) Vol. 83 Forest Policy and Economics. Available online at: < https://www.researchgate.net/publication/317312285_What_does_it_take_to_institute_REDD_An_analysis_of_the_Kilosa_REDD_pilot_Tanzania > accessed on 17 November 2021.

received only scant information about the REED+ projects.⁵²¹ Again, though the trail REED+ projects in Tanzania went well in terms of observing social safeguards and implementing a community based forest management approach, it was underlined that the projects were not able to secure reliable carbon–markets for their conservation efforts which in turn adversely affected the income sources of local villagers and caused failure in the provision of alternative livelihoods that it promised to the local people⁵²². Hence, the REED + projects in Tanzania barely met the opportunity costs of forest conservation.⁵²³

In Cameroon,(in the communities of *Ngonga*, *Kopongo*,and *Poutloloma*) there was observed lack of legal recognition of customary right to use forest resources which posed tenure threats preventing local people from using forest resources, caused conflicts, local fishermen were denied fishing rights , communities were denied their settlement rights and they also were not allowed to carry out livelihood activities⁵²⁴. In some of the sites, for example at Tinto site in Cameroon, forest conservators declared farmers, hunters and fishermen *persona non grata* where the apprehension of local farmers, hunters, glaziers, fishermen and wood exploiters in some conservation sites and elsewhere constitutes a source of conflict that shun local communities from participating in conservation⁵²⁵. Furthermore,the nine(9) sub-national projects currently underway lack transparency, meaningful participation, or the free, prior and informed consent (FPIC) of local people and disregard issues of land tenure, customary rights and benefit sharing.⁵²⁶ Again, a review of the national REED+ readiness planning showed that there is no clearly defined benefit sharing mechanisms both in the national and sub-national readiness

⁵²¹ A. Bolin & D. Tassa, ‘Exploring Climate Justice for forest communities engaged in REED+: Experiences from Tanzania’ (2012) Vol.39 Issue 1 Forum for Development Studies. Available online at: < <https://www.tandfonline.com/doi/full/10.1080/08039410.2011.635380?tab=permissions&scroll=top> > accessed on 25 November 2021.

⁵²² A. Sheba, ‘Market –Based Conservation for Better Livelihoods? The Promises and Fallacies of REED+ in Tanzania’ (2018) Vol. 7 No. 119 Land. Available online at: < https://www.researchgate.net/publication/328311848_Market-Based_Conservation_for_Better_Livelihoods_The_Promises_and_Fallacies_of_REDD_in_Tanzania > accessed on 27 November 2021.

⁵²³ Ibid

⁵²⁴ S.Negendakumana et al. , ‘Rethinking Rights and Interests of Local communities in REED+ Designs : Lessons learnt from Current Forest Tenure Systems in Cameroon’ (2013) Vol. 1,ISRN Forestry. Available online at: < <https://www.worldagroforestry.org/publication/rethinking-rights-and-interests-local-communities-redd-designs-lessons-learnt-current> > accessed on 23 November 2021.

⁵²⁵ Ibid

⁵²⁶ E. Freudenthal, S. Nnah & J. Kenrick, *REED AND RIGHTS in CAMEROON: A review of the treatment of indigenous peoples and local communities in policies and projects*. (Forest Peoples Program, 2011).

documents and that planning of REED+ readiness is based on weak social analysis that fails to detail safeguards and rights standards required under national and international laws .⁵²⁷

In a nutshell, both in the context of REED+ readiness and trail pilot projects, local people and forest dependent communities have experienced tenure insecurity and the associated loss of livelihoods, were evicted from their settlements, did not secure sustainable income from the carbon markets, rarely exercised their right to FPIC and meaningful participation in decision making and equitably obtained benefits from protection of forests.

This chapter highlighted instances of local peoples' experiences of human rights violations in the contexts of implementation of the dominant climate mitigation strategies adopted by the international climate regime in different geographical settings of the global South. It is inferred from the discussions of each of the cases that the actors (multi-national and national financial institutions and private parties funding projects, Designated Operational Entities conducting project validations works, Designated National Authorities which are often Environmental Authorities of project hosting States, and the CDM Executive Board) are not deliberately set to ensure that CDM and REDD+ project implementations are sensitive to respect and protect both procedural and substantive human rights of local people and communities. This is evidently because most of the actors, with the exception of the DNA of project hosting states, national financial institutions and the EB of CDM of the UNFCCC, are not duty bound by international human rights law to ensure that implementation of the climate policy tools respect and protect procedural and substantive human rights of indigenous and local peoples and communities.

The DNA of project hosting state has a duty, under article -12 of the Kyoto protocol, to make sure that the projects contribute to the sustainable development priorities of the state. It also has the duty to ensure that the projects do not cause social and environmental harm in locations where they are implemented. In addition, a given state has existing human rights obligations to ensure that climate policy implementation complies with international human right standards. States with national financial institutions granting funding to projects being implemented in other states have duties, under international human rights law, to ensure that the projects which their financial institutions are supporting do not violate human rights, whatsoever, in foreign states. The CDM Executive Board (EB), as a United Nations body, has also a duty to

⁵²⁷ Ibid

promote and encourage respect for human rights as stated under article -1(3) and 55(c) of the United Nations Charter.

It is also read from the discussions of most of the cases that the projects were successfully registered and granted carbon credits by the CDM Executive Board irrespective of actual violations of the indigenous peoples' and local communities' rights, inter alia, to FPIC, their right to land, housing, food, water, and health. In such contexts, governments have often overlooked or downplayed the human rights impacts of the climate mitigation projects and their respective Environmental Authorities also failed to competently carry out their duties of evaluating the Environmental Impact Assessments (EIA) of the projects. The lack of redress mechanism in the CDM governance architecture meant that public comments on validation works of the Designated Operational Entities (DOEs) are overlooked or tactfully avoided so as to allow the registration of projects that violate a range of human rights of indigenous people and local communities.

The REDD+ projects too, as discussed previously, have been associated with, inter alia, forced eviction of people from their inhabitants, loss of livelihoods, lack of public participation in decision making, desecration of sacred sites, prohibition of fishing, violations of the right to FPIC, and inequitable distribution of benefits. So REDD+ projects which will be taking the place of A/R CDM project in the future climate mitigation regime are, more or less, the same in that they work the same way (as they work based on the idea of incentivizing carbon offsetting) as A/R CDM projects excepting that REDD+ is expanded in its scope to include avoided deforestation, forest degradation, conservation, sustainable management of forests and enhancement of forest carbon stocks.

Like A/R CDM project, REDD+ projects also face the problem of meeting the environmental integrity requirements as they face the technical challenges of ensuring permanence of emission reductions, proving additionality of the reductions in the emissions of GHGs, and the problem of leakage. This is relevant because if "carbon offsetting" fails to work, which is likely to be the case, the ultimate goal of stabilizing the climate as set under article -2 of the UNFCCC will not be materialized exacerbating the adverse impacts of climate change upon the full and effective exercise of human rights. Thus, the climate policy tools fail to support protection of human rights at two levels: they fail as climate policy tool to stabilize the climate

and therefore prevent rights impacts therefrom and also fail to respect human rights in the context of their implementation as shown in this chapter. The next chapter takes up this to show how local people in *Humbo Wereda* of *Wolayita Sodo Zone* of the SNNPR of Ethiopia experience violations of both procedural and substantive human rights in the context of the implementation of *Humbo A/R CDM* project.

Chapter –Six

Human Rights Implications of Relevant Legal Frameworks, Policies, and Strategies

This chapter is invested in assessing the human rights implications of relevant climate mitigation legal frameworks, policies and strategies. As such it discusses the rights implications of the global climate regime in which Ethiopia is a party, nationally developed climate mitigation policies and strategies such as the Climate Resilient Green Economic Strategy of Ethiopia (CRGE) and the National REED+ Strategy. The chapter also takes up a critical look into the human rights implications of such policy as the Forest Development, Conservation, Utilization Policy and Strategy. In addition, the chapter also sees into the rights implications of legal frameworks including the FDRE's Constitution, the Rural Land Use and Administration Proclamation, Regional Land Use and Administration Proclamation, Forest Development, Conservation and Utilization Proclamation and Cooperative Societies Proclamation. These legal and policy instruments have been selected for their direct relevance and for constituting comprehensive and integrated policy approaches to address the climate mitigation obligation of the State of Ethiopia and, therefore, do not represent an exhaustive list of basic relevance to the issue under investigation. These, legal and policy documents simply fall within the ambit or scope of this study. Here, the rights implications of the legal frameworks, policies and strategies is assessed in terms of their contribution to mitigating the causes of climate change thereby addressing the threats against human rights of its adverse impacts and the extent to which the human rights-based approach frames the State's climate policy responses.

6.1. Rights Implications of the FDRE's Constitution

Here, the rights implications of the UNFCCC are briefly dwelt on as the convention and related agreements ratified by Ethiopia are taken as the integral part of the Ethiopian constitution in accord with article -9 of FDRE's constitution.⁵²⁸ Ethiopia ratified the UNFCCC on 31 May 1994 and the Kyoto protocol on 21 February 2005 and became a non-Annex -1 party to the convention and its protocol. The country ratified the Paris Agreement on 9 of March 2017. So these international conventions and agreement are taken as integral part of the country's constitution. As such the human rights implications of them will be briefly dealt with here.

⁵²⁸ Article- 9 of FDRE's Constitution.

The UNFCCC and the other related legal instruments set as their ultimate objective the protection of the climate system from “dangerous anthropogenic interference” and the stabilization of GHGs concentrations in the atmosphere at “safe” level.⁵²⁹ Later, the Paris Agreement sought to limit the warming of the planet well below 2°C seen relative to global average temperature of the pre-industrial level and further called upon the global community to strengthen efforts to limit warming to 1.5°C.⁵³⁰ Both of these objectives evidently focus on the scientific and technocratic matter related to determining a point at which the atmospheric concentrations of GHGs is such that the “climate system” is not dangerously intruded into from “anthropogenic” sources of GHG emissions. As such the ultimate objective of the UNFCCC and subsequent instruments fail to address the need to introduce a politico- economic transformation necessary⁵³¹, a shift away from lifestyles characterized predominantly by increased and proliferated consumption patterns⁵³² and reliance on fossil fuels as energy sources to more fundamentally and meaningfully address the problem and thereby mitigate the adverse impacts on human rights of the climate change effects.

So seen from the vantage point of reducing the possibility of threats against the enjoyment of human rights from climate related effects, the UNFCCC does not appear to address, rather, the underlying causes of the problem. The convention, instead, via its Kyoto protocol sanctions “a right to emit” to a level that it determines as a Party’s quantified emission limitation and reduction commitment. By so doing it warranted a right to emit instead of encouraging a shift towards reliance on renewable energy sources, and adoption of energy efficient technologies that would ensure clean and sustainable development path. Moreover, the convention, initially and in its exclusionary approach of its protocol, required commitments from Annex-I parties involving the reductions in the emission of GHGs by at least 5% relative to their

⁵²⁹ Art.2 of the UNFCCC

⁵³⁰ Art.2 of the Paris Agreement

⁵³¹ D.H. Meadows et al, *The Limits to Growth: A Report for THE CLUB OF ROME’S Project on the Predicament of Mankind* (Universe Book, 1972) ; J. McCarthy, *A Socioecological Fix to Capitalist Crisis and Climate Change ? The Possibilities and Limits of Renewable Energy*, Volume 47, pp. 2485-2502,(2015), *Environment and Planning* , available online at : < <https://journals.sagepub.com/doi/pdf/10.1177/0308518X15602491>> accessed on 10 January 2023 ; S. Hall & M. Davis, *Permission to Say “Capitalism”*: Principles for Critical Social Science Engagement GGR Research, Vol.3, 2021, *Frontiers in Climate*. Available online at: < <https://www.frontiersin.org/articles/10.3389/fclim.2021.708913/full>> accessed on 10 January 2023.

⁵³² L. Akenji et al. , *1.5 Degree Lifestyles: Towards A Fair Consumption Space for All* (A Report, Hot or Cool Institute, 2021); H. Bachram, *Climate Fraud and Carbon Colonialism : The New Trade in Greenhouse Gases*, Vol.15, No.4,(2004), *Capitalism Nature Socialism*. Available online at: <<https://www.tandfonline.com/doi/abs/10.1080/1045575042000287299>> accessed on 13 of January 2023.

emissions of the GHGs in 1990 which it took as a base year in the commitment period of 2008 to 2012.⁵³³In addition, the protocol provides under its articles 6,12 and 17 for the possibility of transferring to or acquiring from emission reduction units, emission trading, and carbon offsetting allowing for the possibility of continuing to emit so long as a party doing so increases its assigned amount units via any of these three (3) mechanisms. Both of these provisions compel us to raise questions. In the first place, grandfathering emissions relative to the 1990 chosen as a base year has still favored Annex-I parties as such a commitment would still allow them to continue to emit and develop without addressing the fact that it is, in the first place, their economic development up to the 1990s and later that has caused the climate crisis in which poor developing countries and their vulnerable populations are disproportionately subjected to the consequences thereof and have had their economic development efforts curtailed. Stated differently, the setting of the 1990 as a base year to determine quantified emission limitation and reduction commitments is to excuse the development of Europe, the United States and other Annex-I countries up to that year as not relevant as a cause of the climate crisis despite their responsibility for the warming of the planet whose adverse impacts are now being observed curtailing development efforts of poor developing countries. The argument is that the economic growth of the developed world is materialized at the expense of the atmospheric space of the planet that, now, constitutes a scarce environmental condition for the poor developing states to embark on with the development efforts they, relatively, lately begun with a direct implication for their right to development.

The deduction is that article-3 of the Kyoto protocol did sanction emission rights which is not a step in the right direction of addressing the problem of the climate crisis (did not basically do away with the cause of the problem as explicated by Tim Hayward in his proposal of the fundamental right to ecological space perspective), not in accord with the principle of equity even among participating countries as the Annex-II parties with economies in transition did not have the same level of emissions as Annex –I parties in the year 1990 which it took as a base year⁵³⁴, and did not adequately address the historical responsibility of the developed world as having primarily caused the problem. So it fails to meet any intelligible measure of the notions of

⁵³³ Article -3 of the Kyoto Protocol to the UNFCCC.

⁵³⁴ F. Müller, Kyoto's Grandfathering Principle as an Obstacle to be Overcome, Working Paper, Stiftung Wissenschaft und Politik, German institute for International and Security Affairs, 2005. Available online at: < https://www.swp-berlin.org/publications/products/arbeitspapiere/DiskP2005_04_mlr_sicher.pdf >

equity and fairness in terms of the equal rights of states to enjoyment of the fruits of economic development. Moreover, it was observed to be ineffective in terms of really bringing about reductions in aggregate emissions of GHGs as a result of its emission limitation and reduction commitment of its parties⁵³⁵ and hence failed to increase the possibility that climate change related effects do not threaten the exercise and enjoyment of human rights of people in all corners of the world including local people in Ethiopia. Thus the protocol and its mechanisms of addressing the climate crisis did not address the climate justice concerns of countries in the global South.

Again, in terms of allowing state parties to continue to emit GHGs and failing to address the fundamental causes of the climate crisis, the Paris Agreement of December 2015 is not different from its predecessor. Just the way the Kyoto protocol maintained the right to emit GHGs in the wrong direction when seen in the light of protecting the climate from harms, the Paris Agreement also sanctioned the right to emit as stipulated under its articles 5 and 6.⁵³⁶ While article -5 of the agreement authorizes carbon offsetting mechanism via the implementation of REDD+, article -6 provides for allowances of internationally transferred mitigation outcomes to achieve nationally determined contributions. So, similarly, the Agreement fails to seriously address the fundamental and underlying causes of the climate crisis with a consequence of real threats to the effective enjoyment of human rights.

The Agreement, also, has expanded to include the participation of developing countries to successively come up with their nationally determined contributions to aggregate reductions in emission of GHGs. So each country is, therefore, expected to submit its Intended Nationally Determined Contribution periodically (INDC) where countries are also encouraged to progressively set ambitious nationally determined contribution with the aim of materializing the

⁵³⁵ Effectiveness is understood, here, in terms of meeting the goal of strengthening efforts to limit warming to 1.5° c relative to the average temperature of the planet before the industrial revolution as set under article -2 of the Paris Agreement. In this regard, studies reveal that if all state parties successfully implement their pledges in their INDCs, it would still raise the increase in the Planet's average temperature to 2.7 ° c to 3.5° c beyond and above the very goal that the Paris Agreement set. See Climate Action Tracker, "INDCs lower projected warming to 2.7° c : significant progress but still above 2° c " (1 November 2015). Available online at: <https://climateactiontracker.org/publications/indcs-lower-projected-warming-to-27c-significant-progress-but-still-above-2c/> accessed on 20 January 2023; R. Pearse & S. Bohm, Ten Reasons Why Carbon Markets Will Not Bring About Radical Emission Reductions, Vol.5 (4), 2015, Carbon Management, available at: < <https://www.tandfonline.com/doi/full/10.1080/17583004.2014.990679#:~:text=The%20key%20obstacles%20are%3A%20the,the%20Kyoto%20and%20Post-Kyoto> > accessed on 11 Jan.2023.

⁵³⁶ Article -5 & 6 of the Paris Agreement

goal that the Agreement sets under its article-2.⁵³⁷ So the Paris Agreement expanded responsibility to mitigate the climate crisis so as to include the nations in the global South. Hence, in effect, despite their insignificant contributions to the climate crisis, the countries in the economic “South” are also held duty bound to address the problem in spite of the fact that their commitments are meant to be carried out in the light of the principle of common but differentiated responsibilities that is respective of their capacities as enshrined under article-3 of the UNFCCC.⁵³⁸

On the one hand, the decision to expand responsibility for climate mitigation by including developing countries essentially constitutes a violation of the principle of equality of state parties as it practically held the countries in the global South duty bound in terms of contributing to overall reductions in aggregate emissions irrespective of their insignificant contributions to the problem while being faced with the challenge of pursuing efforts to eradicate poverty and achieve economic growth.⁵³⁹ And this poses serious problems for the poor developing states like Ethiopia seen from the vantage point of meeting the socio-economic rights of its citizens via its economic growth and development. Specifically, such countries like Ethiopia would face the transition towards clean energy based development technologically difficult and economically expensive as its level of scientific and technological development is limited and that it is economically one of the poor developing countries in sub-Saharan Africa.

In this connection, in a report conducted to gauge the INDCs of countries against with what is considered as the least that each country should contribute to fight the climate crisis or its “fair share”, it was found out that “all major developed countries fell well short of their fair share” in which Russia made no contribution to its fair share, Japan contributed one-tenth of its fair share, the United State contributed approximately one-fifth of its fair share and the European

⁵³⁷ Article -4(2) (3) of the Paris Agreement.

⁵³⁸ Article -3 of the UNFCCC

⁵³⁹ C.P. Carlarne & D.J.Colavecchio, Balancing Equity and Effectiveness: The Paris Agreement & The Future of International Climate Change Law, Vol.27, (2019), *New York University Environmental Law Journal*. Available online at: < https://www.nyuelj.org/wp-content/uploads/2019/05/Carlarne_Balancing-Equity-and-Effectiveness.pdf> accessed on 20 January 2023; J. Dehm: Reflections On Paris : Thoughts Towards a Critical Approach to Climate Law, Hors – Série (September 2018) *Revue Québécoise de droit international*. Available online at: <<https://docplayer.net/231095113-Reflections-on-paris-thoughts-towards-a-critical-approach-to-climate-law.html>> accessed on 20 January 2023

Union contributed just over one-fifth of its fair share.⁵⁴⁰ Furthermore, the analysis showed that most of the developing countries have made mitigation pledges that exceed their “fair share” or broadly meet their fair share despite the report’s indications that these countries have mitigation potential that exceeds their fair share.⁵⁴¹ In addition, Oxfam International, showed the existence of “extreme carbon inequality”.⁵⁴² They found that the poorest half of the global population, approximately 3.5 billion people, are responsible only for 10% of global emissions from individual consumption, while 50% of emissions can be attributed to the richest 10%.⁵⁴³ These substantiate the idea that the expansion of the responsibility to address the climate crisis even by those states which have negligible contributions and are at the same time the most vulnerable to the adverse impacts of climate change clearly reflects inequity and lack of fairness in the international climate regime as the regime adopts only a voluntary “pledge and review” approach in governing climate solution.

Thus, the actual distribution of obligations to mitigate the climate crisis as dictated both by the Kyoto protocol and the Paris Agreement defies all of the plausible ways that a justly devised climate policy could be constituted. Both the Kyoto protocol and the Paris Agreement were not able to discourage luxurious emissions, they did not impose “heavier” obligations to cut emissions in the global North with the effect that the obligation to reduce emissions is more precipitate upon the developed world as put forth by the Contraction and Convergence model, neither were the commitments designed to bring about development beyond meeting subsistence in the global South as proposed by the Greenhouse Development Right framework. Emission allowance or “the right to emit” was granted in accord with levels of emissions in the year 1990 (what the level of the development reached in the base year was capable of emitting the GHGs) not bent on division of aggregate ecological space and environmental services, or the CIR calculated in accord with resources endowments of each of the state parties as put forth by Atieno Mboya.

⁵⁴⁰ See Oxfam, *Faire Shares: A Civil Society Equity Review of INDCS: Summary* (October 2015) available online at: < <https://www.oxfam.org/en/research/fair-shares-civil-society-equity-review-indcs> > accessed on 17 January 2023.

⁵⁴¹ Ibid

⁵⁴² Oxfam International, Media Briefing, “Extreme Carbon Inequality” (2 December 2016) which is available online at: < www.oxfam.org/sites/www.oxfam.org/files/file_attachments/mb-extreme-carbon-inequality-021215-en.pdf >

⁵⁴³ Ibid

On a different front, article-3 of the UNFCCC provides for the need for State Parties to ensure that their protection of the climate system is for the benefit of present and future generations of human kind on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities.⁵⁴⁴ However, the actual translation of the principle in the development and implementation of both the Kyoto protocol and the Paris Agreement does not seem to suggest that the principles of “equity”⁵⁴⁵ and “common but differentiated responsibilities and respective capabilities” are complied with.⁵⁴⁶ That the protection of the climate is meant for the benefits not only of the current but is for the future generation is failed to be complied with when the effectiveness of the implementation of the NDCs of parties to the Paris Agreement is seen. In accord with the Climate Action Tracker even if all countries successfully implement their INDCs, the resultant aggregate reduction in GHGs emissions would still increase global average temperature in order of 2.7 to 3.5 °C⁵⁴⁷ inviting not “dangerous” but “catastrophic” interference with the climate system and the resultant adverse impacts upon the full and effective enjoyment of human rights. This demonstrates that climate policy action has not only failed to secure the health of the climate system for the benefits of future generations but also unable to safeguard conditions in which basic human rights like the right to life, personal security, food, water and the like are effectively protected for present generation of human beings.

As regards the principle of “common but differentiated responsibilities and respective capabilities” there still are surfaced concerns by researchers like Julia Dehm that the developed states would carry out their duties of granting climate finance out of their capacities instead of

⁵⁴⁴ Article – 3(1) of the UNFCCC

⁵⁴⁵ D. Ciple, Rethinking Cooperation: Inequity and Consent in international climate change politics, Vol.21, No.2, (2015), *Global Governance*. Available online at: <
https://www.jstor.org/stable/pdf/24526164.pdf?refreqid=excelsior%3A2cc377a6fff6a0b4637110ffdc246b96&ab_segments=&origin=> accessed on 25 January 2023; L. Liu et al, An equity-based framework for defining national responsibilities in global climate change mitigation, Vol.9, Issue 2,(2015), *Climate Change and Development*. Available online at:

<https://www.tandfonline.com/doi/full/10.1080/17565529.2015.1085358?scroll=top&needAccess=true&role=tab> accessed on 13 January 2023; Danny Chivers and Jess Worth , ‘ Paris Deal : Epic Fail on A Planetary Scale ’ (New Internationalist, 12 December 2015) (<https://newint.org/features/web-exclusive/2015/12/12/cop21-paris-deal-epi-fail-on-planetary-scale>) accessed on 13 of January 2023.

⁵⁴⁶ J. Dehm, Carbon Colonialism or Climate Justice? Interrogating the International Climate Regime from a TWAIL Perspective, Vol.33(3), 2016, *Windsor Year Book of Access To Justice*. Available online at: <
<https://wyaj.uwindsor.ca/index.php/wyaj/article/view/4893> > accessed on 13 January 2023.

⁵⁴⁷ Climate Action Tracker, “

culpability or responsibility to contribute to overall efforts of addressing the climate crisis.⁵⁴⁸ And that this would facilitate conditions in which the developed states use aid to intervene in the internal affairs of states or negatively affect the principle of sovereign equality of states.⁵⁴⁹ This is adequately instantiated by the events of the Copenhagen Accord, in 2009, during which the Least Developing Countries (LDCs), the Alliance of Small Island States (AOSIS), and Bolivia had their ambitious demands of getting a legally binding treaty that limit global temperature rise below 1.5°C, \$400 billion of “fast –start finance” from wealthy countries for adaptation to climate impacts of those hardest hit and equitable share of the atmosphere to ensure adequate “development right” is deliberately put aside in favor of a different treaty that reflects the interests of the west where temperature increase was tolerated to below 2° c and new obligations for developing countries were incorporated.⁵⁵⁰ This came about, in accord with representatives of developing and low income countries, as a result of betrayal of these countries by the Danish Prime Minister whom they believed as having abused his role as a chair in the negotiations by being partial to the interests and views of the developed countries in the negotiations of the Copenhagen Accord.⁵⁵¹ So given the differing choices between the developed countries who sought temperature increase to 2 degrees centigrade which the other block (African States, AOSIS, LDC and G-77) regarded “suicidal and genocidal for Africa” and the later block’s advocacy of a safer 1.5 degree centigrade temperature limit, the former was adopted in a process which is regarded as partial to the interests of the developed world.⁵⁵²

Furthermore, the final day of Copenhagen negotiation had it that a secretly held meeting among what was regarded as an “unlikely alliances” of the United States, China, India, Brazil and South Africa was carried out to develop an alternative “Copenhagen Accord” text in which a new mitigation framework that departed from the legally binding nature of the Kyoto protocol was introduced as part of a “take – it or leave –it package tied to unprecedented level of finance but only to be met with refusal of several low-income countries citing problems with

⁵⁴⁸ J. Dehm, Carbon Colonialism or Climate Justice? : Interrogating the International Climate Regime from a TWIL Perspective, Vol.33, No.3, (2016), *Windsor Year Book of Access to Justice*. Available online at: <https://wyaj.uwindsor.ca/index.php/wyaj/article/view/4893> accessed on 25 January 2023.

⁵⁴⁹ Ibid

⁵⁵⁰ D. Ciptet, Rethinking Cooperation: Inequality and Consent in International Climate Change Politics, Vol. 21, No.2, (2015), *Global Governance*. Available online at: https://www.jstor.org/stable/pdf/24526164.pdf?refreqid=excelsior%3A2cc377a6fff6a0b4637110ffdc246b96&ab_s egments=&origin=> accessed on 25 January 2023.

⁵⁵¹ Ibid

⁵⁵² Ibid

both the process and content.⁵⁵³ As regards its content and linked to the climate adaptation fund, for example, the Sudanese delegate Lumumba Di-Aping said, following European Union's announcement of \$10 million to help poor countries cope with climate change that "It is not enough to buy coffins for everyone who will die because of climate change in Africa. I would rather burn myself than accept the peanuts."⁵⁵⁴ On the other hand, the text of the Accord turned out substantively reflecting partial interests of exclusively constituted parties of China, India, and the other BASIC countries and the United States (a total of only 28 countries) in a process that undermined the principle of sovereign equality of states as these countries negotiated a deal in backroom secretly both during and after the Copenhagen negotiations.⁵⁵⁵ The opposition from low-income countries and developing states was met with a resort by the UK's lead delegate, Ed Milliband, to force the countries into supporting the Accord using the climate fund as weapon saying that those who support the Accord should register their support " otherwise we will not operationalize the climate funds".⁵⁵⁶

Later it was disclosed that there had been efforts by the United States to use aid as an instrument to persuade Ethiopia's Prime Minister, Meles Zenawi, Maldives's ambassador Abdul Ghafoor Mohamed and representatives of Bolivia, Ecuador, and Saudi Arabia to support the Copenhagen Accord.⁵⁵⁷ Meles Zenawi was the only representative of Africa in a group of only 28 countries who were shown the terms of the Accord before it was made public. But in disregard to the interests of LDC, AOSIS and Africa and in what was allegedly seen as bribed via humanitarian and military aid from the West, Meles Zenawi announced in a joint press conference full agreement with France and other developed countries.⁵⁵⁸ His tale of the agreement states " on almost all of the issues, I was preaching to the converted...and therefore,

⁵⁵³ Ibid

⁵⁵⁴ Sarthak Gupta, 'Presenting. HT's Stars of the Summit' *Top News* (17 December 2009) < <https://topnews.in/presenting-ht-s-stars-summit-2245235> > accessed on 26 of January 2023.

⁵⁵⁵ D. Ciptet, n.22

⁵⁵⁶ Martin Khor, 'Climate Talks End by only "Noting" An Accord', Third World Network (21 December 2009), < [Climate talks end by only "noting" an Accord \(twm.my\)](https://www.theguardian.com/world/us-embassy-cables-documents/246644) > accessed on 26 January 2023.

⁵⁵⁷ "US Embassy Cables: US Urges Ethiopia to Back Copenhagen Climate Accord," *The Guardian*, (2 February 2010) < <https://www.theguardian.com/world/us-embassy-cables-documents/246644> > accessed on 28 January 2023; "US Embassy Cables: Maldives Tout \$50 Million Climate Projects to US," *The Guardian*, (3 December 2010) < <https://www.theguardian.com/world/us-embassy-cables-documents/251174> > accessed on 28 January 2023 ; "Leaked Cables Show US Pressured Saudis to Accept Copenhagen Accord," *New York Times*, (30 November 2010) < <https://archive.nytimes.com/www.nytimes.com/cwire/2010/11/30/30climatewire-leaked-cables-show-us-pressured-saudis-to-ac-56437.html> > accessed on 28 January 2023.

⁵⁵⁸ Terry Geraldine, "Zenawi Out on His Own in Africa," *TerraViva*, (17 December 2009).

in a very brief period we have come on almost every issue to a complete understanding of each other's position, and in support of each other's positions.⁵⁵⁹ By so doing Zenawi is thought by many to have driven wedge into the ambitious demands of low –income states.⁵⁶⁰ The pressure from the US and the West, during the negotiation, was so clear that one African delegate explained saying “The pressure to back the West has been intense ...It was done at a very high level and nothing was written down. It was made very clear by the UK, EU, France, and the US that if they would not back them then they would suffer.”⁵⁶¹ Moreover, wealthy states were also trying to build strategic allies with low income states with the intent of dividing coalition opposition. This is substantiated, for example, by European Union's commissioner Connie Hedegaard reported communication with the US deputy special envoy for climate change that “the AOSIS could be our best allies given their need for financing”⁵⁶² with the intension of “buying off ” the AOSIS from the group of G-77 and thereby endorse US positions in the negotiations.⁵⁶³

So all the foregoing discussions demonstrate that the UNFCCC negotiations cannot be taken as having taking place under the principle of equality recognized under the convention or the principle of equal sovereign rights of state parties of the UN Charter. It has also been shown that one cannot say that the principle of common but differentiated responsibilities and respective capacities of the convention is observed with the developed world behaving based on recognition of historical responsibility for the climate crisis. The global North instead acted on the basis of its capacity (financial capacity and political power) to have the global South, in the negotiations, accept terms and texts that represented, rather, its exclusive interests and undermined the interests of the South. This has been the case not only in the Copenhagen negotiations but also

⁵⁵⁹ Sarkozy-Zenawi press conference video, Mereja Forum, 16 December 2009, www.ethio.tube.net/video/7053/Joint-Press-Conference-by-Ethiopian-PM-Meles-Zenawi-French-President-Nicolas-Sarkozy—28 January 2023.

⁵⁶⁰ D. Ciptet, n.22, p. 260

⁵⁶¹ John Vidal, ‘Climate Aid Threat to Countries that Refuse to Back Copenhagen Accord’, *The Guardian*, (London, 11 April 2010) < <https://www.theguardian.com/environment/2010/apr/11/climate-aid-threats-copenhagen-accord> > accessed on 28 January 2023.

⁵⁶² Damian Carrington, ‘WikiLeaks Cables reveal how US manipulated climate accord’, *The Guardian*, (London, 3 December, 2010) < <https://www.theguardian.com/environment/2010/dec/03/wikileaks-us-manipulated-climate-accord> > accessed on 28 January 2023.

⁵⁶³ John Vidal & Susanne Goldenberg, ‘Snowden Revelations of NSA Spying on Copenhagen Climate Talks Spark Anger’, *The Guardian*, (London, 30 January 2004) < <https://www.theguardian.com/environment/2014/jan/30/snowden-nsa-spying-copenhagen-climate-talks> > accessed on 28 January 2023.

in Cancun, Durban, Doha, Warsaw, Lima and Paris where the developed countries managed to have the texts of the agreements essentially reflecting their interests in disregard to the principle of sovereign equality of states of the UN Charter and the principle of equity recognized under the UNFCCC.⁵⁶⁴ This, on the one hand, led to ineffectiveness of the climate regime in terms of attaining the temperature goal set under the convention allowing the possibility that the climate related impacts will continue to adversely impact the effective exercise of human rights of people particularly in countries most vulnerable. On the other hand, the developed world still gets to use the already delicately scarce atmospheric space to further luxurious lives while the Least Developed Countries (LDC), African countries and Small Island Developing States have the rights of their peoples to life, health, water, development or even the very existence of the states themselves is compromised or threatened. Ethiopia is no exception to this.

Finally, the adoption of market –based mechanisms of climate mitigation action which both the Kyoto protocol and the Paris Agreement put into use has been rightly critiqued to be ineffective⁵⁶⁵ in terms of meeting the environmental integrity requirement under the UNFCCC with negative implications for human rights from climate change related effects and incompatible with the way the international human rights regime work⁵⁶⁶. Critiques against such market-based climate mitigation mechanisms as the CDM and later REDD+ projects maintain that these do not genuinely contribute to the realization of the goal of limiting temperature rise below 1.5 degrees relative to temperatures in the pre – industrial times because it is impossible to ensure absolutely the additionality of the reductions in GHGs concentrations⁵⁶⁷, the problems of lack of permanence of carbon sequestering capacities of forests and leakage problems because they often are located in sites where local people suffer from poverty and vulnerability to climate

⁵⁶⁴ D. Cipler, n.22

⁵⁶⁵ R. Pears & S. Bohm, Ten reasons why carbon markets will not bring about radical emission reductions, Vol.5, No.4,(2015), *Carbon Management*. Available online at: < <https://www.tandfonline.com/doi/epdf/10.1080/17583004.2014.990679?needAccess=true&role=button> > accessed on 28 January 2023; See also C. Voigt, Is the Clean Development Mechanism Sustainable? : Some Critical Aspects, Vol.7, No.2, (2008), *Sustainable Development Law and Policy*. Available online at : https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1145262 accessed on 28 January 2023.

⁵⁶⁶ A. Mboya, Human Rights and the Global Climate Regime, Vol.58, (2018), *Natural Resources Journal*. Available online at: < https://www.jstor.org/stable/26394775#metadata_info_tab_contents > accessed on 28 January 2023.

⁵⁶⁷ L. Schneider, Is the CDM fulfilling its environmental and sustainable development objectives? An evaluation of the CDM and options for improvement, (Report prepared for WWF, Oko- Institute, 2007).

impacts and lack adaptive capacities in poor developing countries.⁵⁶⁸ This means that the stabilization of the climate which is meant to be realized globally as a result of the implementation of these dominant climate policy responses is not achieved and the severity of climate change related adverse effects is not ameliorated. This, in turn, means that people still will have their effective enjoyment of a range of human rights impeded and threatened as has often been documented to be the case particularly in most vulnerable states like Ethiopia.

On the other hand, these policy measures work bent on the idea of “the right to emit” in so far as to the extent they emit GHGs there simultaneously take place sequestration of the gases through the development and enhancement of sinks or reservoirs. Moreover, this right was initially allotted, via the Kyoto protocol, relative to the level of only developed country’s emission of GHGs in the year 1990 in a regime that exclusively governed Annex -1 countries which later became on the basis of a country’s pledge in its Nationally Determined Contribution (NDC) to aggregate reduction of GHGs in an agreement that expanded responsibilities so as to include non-Annex -1 countries. As such those countries with a relative greater purchasing power get to buy GHGs emission space to further their development activities whereas those which cannot buy the already scarce atmospheric space essentially sale off their right to development.⁵⁶⁹ And this right is bought and sold which is against the very principle of human rights being inalienable. Hence, the “right to emit” which the international climate mitigation regime sanctions is not compatible with the ideas and principles of human rights.⁵⁷⁰

By and large, the international climate mitigation regime, which is an integral part of the Ethiopian constitution, fails to address the underlying causes of climate change and hence, ineffective, infringes upon the sovereign equality of states in the way it purports to resolve the climate crisis and has been used to perpetuate the unequal power relations between states in the economic North and South. And these, in turn, does only exacerbate the threats against the enjoyment of a range of human rights of people in all corners of the world with adverse impacts being severely felt in most vulnerable countries like Ethiopia.

⁵⁶⁸ C. Pan et al, Key Challenges and Approaches to addressing barriers in forest carbon offset projects, Vol.22, (2022), *Journal of Forest Resources*. Available online at: < <https://link.springer.com/article/10.1007/s11676-022-01488-z> > accessed on 28 January 2023.

⁵⁶⁹ Atieno Mboya, n.38

⁵⁷⁰ Ibid

6.2. The rights implications of other provisions of FDRE's Constitution.

All Ethiopians have a constitutionally protected right to a clean and healthy environment.⁵⁷¹ This right could be taken as entailing obligation on the part of the Ethiopian government to ensure that Ethiopians enjoy a healthy climatic conditions in which they ensure sustainable development through the adoption of low carbon emission green economic development. Article-44(1) of the FDRE's constitution hence, provides the legal basis bent on which the Ethiopian government meaningfully contributes to the overall reductions, globally, in the emissions of GHGs that would ensure limitation of global average temperature increase below 2 degrees from the pre-industrial times. The article is key in terms of guiding Ethiopia's pledge in the development of its Intended Nationally Determined Contribution in spite of the fact that the overall effectiveness of materializing the goal as set under article -2 of the UNFCCC is contingent upon the efforts, simultaneously, of the largest GHGs emitters and the contribution of other parties of the convention. This article, therefore, could serve as a legal basis for the Ethiopian state to effectively and meaningfully carry out its duties in the climate mitigation endeavor.

Sub-article two of the same article is also key in terms of protecting the human rights of people in the context of climate action. It states that "all persons who have been displaced or whose livelihoods have been adversely affected as the result of state programs have the right to commensurate monetarily or alternative means of compensation including compensation with adequate state assistance."⁵⁷² This provision protects local people whose rights are violated in the context of climate mitigation projects such as *Humbo A/R CDM* project and other recently introduced REDD+ projects.

As has already been discussed in Chapter- 6 of this work, *Humbo A/R CDM* project has violated this article as the alternative livelihood strategies it developed with the aim of addressing the problem of the livelihood support foregone when the 2,728 hectares of land is enclosed are inadequate and were not sustained⁵⁷³. The fact that at least 490 households located along the foot of the mountainous project site were found to be unable to harvest the crops they have grown as a result of wild animal consumption and destruction attests to the fact that the project violated the right of local residents to adequate livelihoods provided for by the Ethiopian

⁵⁷¹ Article -44(1) of FDRE's Constitution

⁵⁷² Article- 44(2) of FDREs Constitution

⁵⁷³ Field research note, in-depth individual interviews , and FGDs held in *Bosa Wanche Kebele*

constitution. A question that may arise, here, is that how the Ethiopian government is held duty bound while it is World Vision Ethiopia (WVE), an extension of World Vision Australia that is both the project developer and implementer? The answer is that the Ethiopian government is a party to both the UNFCCC, its Kyoto protocol and the Paris Agreement and in accord with the rules, modalities and procedures of the Kyoto protocol, it is within the prerogative of the Federal government of Ethiopia to determine whether or not a project like *Humbo* A/R CDM contributes to sustainable development priorities of the country apart from contributing to aggregate GHGs emission reduction.

Another very important article of FDRE's constitution that protects the human rights of Ethiopians in the context of climate mitigation action is the right enshrined under article -43 encapsulating specific articles under the heading " the right to development". Sub-article -1 of the article states " the peoples of Ethiopia as a whole, and each Nation, Nationality and People in Ethiopia in particular have the right to improved living standards and to sustainable development." While the right to improved living standard entails government's obligation to protect citizens against human rights violations by such third parties assuming the role of implementing climate mitigation action, the right to sustainable development could be taken as entailing the obligation on the part of the Ethiopian government to ensure that international climate regime development is effective and fair so that Ethiopians enjoy development in the context of climatic conditions that ensure the sustainability of the development they enjoyed. So in this regard, the *Humbo* A/R CDM project as a practical translation of a sustainable development strategy has been, found out, instead of improving the living standards of local people and residents, to have adversely crippled the productive capacities of local farmers located along the fringes of the enclosed project site. Moreover, the inadequacy of the alternative livelihood support strategies⁵⁷⁴, interrupted income from the sale of carbon credits⁵⁷⁵ and nominal use value of empowerment of the local cooperatives to sustainably manage and use forest based resources⁵⁷⁶ all signal that the climate policy intervention rather violated article -43 (1) of FDREs constitution instead of helping realizing climate policy and sustainable development objectives.

⁵⁷⁴ In-depth interview with *Bosa Wanche Kebele* agricultural and rural development expert

⁵⁷⁵ In-depth interview with previous leader of *Humbo* Forest Development Union and *Kebele* leader of *Abela Lonegna*

⁵⁷⁶ In-depth interview with *Humbo Wereda* forest resources mobility and utilization expert

Sub-article -2 of article 43 of the Constitution is most important in the light of considerations of human rights standards during implementation of such projects as *Humbo A/R CDM* project. It states that "nationals have a right to participate in national development and, in particular, to be consulted with respect to policies and projects affecting their community."⁵⁷⁷ So local residents in *Humbo Wereda* have a constitutionally guaranteed right to "participate and be consulted" in projects that affect them. In this regard, as has already been discussed in chapter-6, local people in *Humbo* could not be said to have effectively participated in the design and development of the project and also that there has not been conducted genuine consultations in the absolute sense of the terms despite the fact that there is evidence that residents attended meetings held for the purpose.⁵⁷⁸

The lack of adequate consultations with the residents of *Humbo Wereda* is also reflected in the findings that during the introduction of the project and communication to local people of what the project would entail, the local residents not only opposed plans of the project and tried to threaten project proponents with their lives as they tried to physically attack not only the project experts of World Vision Ethiopia but also their *Kebele* administration leader. In accord with in-depth interview held with previous *Abela Longena Kebele* administration leader and later leader of *Humbo* Forest Development Union, during the initial introduction of the project idea *Kebele* residents were fiercely opposed to the project so much as so that they "...blocked passage of vehicles transporting World Vision Ethiopia project experts out their *Kebele*, tried to kill the project the experts with knives locally called "*gejera*", and told a member of *Kebele* leadership to leave the *Kebele* ...".⁵⁷⁹ Several cases of deliberately setting fire on the enclosed forested land in *Bosa Wanche* , *Bola Wanche* and often witnessed conflicts between residents and cooperative leaders caused when residents let their livestock graze in the enclosed forested land all attest to the fact that adequate consultation and effective participation of local communities were not secured and this has resulted in harming the livelihoods of local communities in violation of sub-article -2 of article 43 of the Ethiopian constitution.⁵⁸⁰

⁵⁷⁷ Article 43(2) of FDRE's Constitution

⁵⁷⁸ FGDs held in *Bosa Wanche* with cooperative leadership team of the *Kebele* ; In-depth interview held with previous Forest Development Unions leader

⁵⁷⁹ In- depth interviews with previous leader of *Abela Longena Kebele* administration and later leader of Forest Development Union.

⁵⁸⁰ In –depth interview with a *Wereda* expert of Forest based resources utilization and mobility in *Humbo*.

A still important sub-article of article -43 of the Ethiopian constitution has it that " all international agreements and relations concluded, established or conducted by the State shall protect and ensure Ethiopia's right to sustainable development."⁵⁸¹The human rights implication of this article is that the provision holds the Ethiopian government duty bound in ensuring that the outcome of negotiations in the UNFCCC do actually result in materializing the ultimate objective of the convention since it is only then that Ethiopians could effectively enjoy their right to sustainable development and the resultant security of enjoyment of basic human rights. But as has been shown in the foregoing discussion of the rights implications of UNFCCC negotiations particularly the negotiations in Copenhagen, poor developing states like Ethiopia were not in a position to ensure that the principle of sovereign equality of states is complied with and that fair distribution of burden in mitigating the climate crisis is reached. So the unequal power relations between the economic North and South have actually dictated the bargaining power of the states in climate negotiations resulting in ineffective outcomes in terms of mitigating the climate crisis and the associated worsening conditions in the security of human rights of people in the context of exacerbated adverse effects of climate change.

On the other hand, sub-article 4 of the same article stipulates that " the basic aim of development activities shall be to enhance the capacities of citizens for development and to meet their basic needs." This is relevant because climate mitigation mechanisms such as the Clean Development Mechanism (CDM) can be thought to have as their core objective ensuring the attainment of sustainable development both through effectiveness in bringing about actual reductions in aggregate GHGs emissions and specifically by making sure that the projects really have sustainable development contributions as defined by countries hosting this kind of projects. So, in this connection, while there were observed efforts exerted towards capacitating local people, in *Humbo*, via trainings of different kinds and related to supporting livelihoods, it is difficult to say that they were fruitful in terms of sustainably supporting the livelihoods of local people and that the design of the project is such that it did not competently assess basic infrastructural challenges of the lives of local residents.

In this connection, field research elicited that the project's contribution to sustainable development priorities of the country has not been seen in the area of digging water wells or

⁵⁸¹ Sub-article -3 of article -43 of the FDRE's constitution.

providing the physical infrastructures necessary for making drinkable water available for local communities having assessed the sufferings of women, elderlies, girls and poor households who toil on a daily basis in travelling very long distances to fetch water for basic household consumption.⁵⁸² Moreover, since the project implementer, World Vision Ethiopia (WVE), has been granted full representation to act on behalf of the Federal EPA⁵⁸³, the federal EPA (the Designated National Authority (DOE) in accord with the CDM governance architecture) failed to determine whether or not there is a meaningful contribution of the project to the sustainable development priorities of the country in violation of sub-article 4 of article 43 of the FDREs constitution.

Finally, the country's constitution does have provisions under Chapter-10 where it identifies national policy principles and objectives. Environment related principles and objectives are encapsulated under the title "Environmental Objectives" under article 92 of the constitution. Sub-article 1 of the article states that "government shall endeavor to ensure that all Ethiopians live in a clean and healthy environment".⁵⁸⁴ Sub-article 3 stipulates that "people have the right o full consultation and to the expression of views in the planning and implementation of environmental policies and projects that affect them directly."⁵⁸⁵ And sub-article 4 specifies the duty of government and citizens to protect the environment.⁵⁸⁶ So the Ethiopian constitution places primary importance on the need to have a clean and healthy environment as this has both an independent provision under article -44 and also as an environmental objective under article 92 of the FDRE's constitution. This provides the legal impetus for the Ethiopian government to act proactively in addressing climate mitigation needs sought to be materialized in the Paris Agreement so as to limit temperature increase to 1.5 degrees. This is important irrespective of the fact that, at the international level, there has been documented emission gap between implementation of NDCs and the goal of limiting warming to 1.5 degrees. Again for the reasons highlighted in the foregoing discussions the *Humbo A/R CDM* project has violated a

⁵⁸² FGDs with the high school students of *Abela Faricho* in *Abela Wereda*

⁵⁸³ In-depth interview with the Directorate Director of EPA of Wolayita Sodo Zonal Administration. Upon complaints presented from the local people about the whereabouts of the "5% emergency fund deducted from the income from the sale of carbon credits, and about destructions of crops of farmers located along the fringes of the enclosed project site, the zonal EPD director went to the liaison office of World Vision to seek explanation only to find evidence attesting to the fact that the NGO was granted complete representation to act on behalf of the Federal EPA.

⁵⁸⁴ Sub-article 1 of article 92 of FDR's Constitution

⁵⁸⁵ Sub-article 3 of article 92 of FDRE's Constitution

⁵⁸⁶ Sub-article 4 of article 92 of FDREs Constitution

constitutionally guaranteed right as it failed to adequately and meaningfully consult and integrate the views of local people in project development and implementation.

6.3. Rights Implications of the Environmental Policy of Ethiopia

The overall goal of the environmental policy of Ethiopia seems to place primary importance to the social and economic rights (particularly the right to improved standard of living) as it stresses on improving the health and quality of life of Ethiopians, promoting sustainable social and economic development through “sound” management of the environment to meet the needs of both present and future generations.⁵⁸⁷ Seen from the perspective of addressing the climate crisis and preventing the possibility of impacts against the effective enjoyment of human rights as a result of climate related effects, the country’s environmental policy puts forth specifically relevant objectives indicating that the policy aptly addresses the problems of climate change and its adverse impacts on the exercise of human rights. The following specific objective, for example, is particularly relevant from the vantage point of ensuring the protection of the “climate system” from disruptive interference from the human systems and thereby contributing to lessening the adverse impacts upon the enjoyment of human rights as the result of climate related effects. It states as follows:

The policy seeks to ensure that essential ecological processes and life support systems are sustained, biological diversity is preserved and renewable natural resources are used in such a way that their regenerative and productive capabilities are maintained and where possible enhanced so that the satisfaction of the needs of future generations is not compromised; where this capability is already impaired to seek through appropriate interventions a restoration of that capability.⁵⁸⁸

As indicated in the above quotation, the environmental policy of the country recognizes the existence of “environmental resources’ limits to economic growth⁵⁸⁹” and that economic

⁵⁸⁷ The Environmental Policy of Ethiopia. Available online at: < [https://plasticsdb.surrey.ac.uk/documents/Ethiopia/Republic%20of%20Ethiopia%20\(1997\)%20Environmental%20Policy%20of%20Ethiopia.pdf](https://plasticsdb.surrey.ac.uk/documents/Ethiopia/Republic%20of%20Ethiopia%20(1997)%20Environmental%20Policy%20of%20Ethiopia.pdf) >

⁵⁸⁸ The Environmental Policy of Ethiopia, n.60

⁵⁸⁹ G.H. Brundtland, Report of the World Commission on Environment and Development: Our Common Future. (Oslo, 20 March 1987). Available online at: < <https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf> >

development is conditioned by the need to maintain the sustainability of essential ecological processes (the biogeochemical cycles and most relevant in this context being the carbon cycle) and life support systems. In other words, the policy recognizes that the atmosphere has a limited carbon absorption capacity beyond which it could no longer ensure sustainability of economic growth without compromising the ability of future generations to meet their material necessities of life.

The other important element of the specific objective of the policy is that it recognizes that even renewable resources such as forest and forest-based resources need to be used in such a way that the their regenerative abilities need not be compromised as it is what determines the sustainability of environmental services they provide. This is key when seen in the light of the fact that tropical deforestation is one the major causes of global climate change.⁵⁹⁰ This entails that the Ethiopian government's economic growth endeavors are being undertaken in a manner that recognizes the need to generate material wealth in the context of ensuring the sustainability of both the economic growth and the environmental conditions within the limits of which the growth takes place. This is also vindicated when one sees the government's inclination in investments in the area of generating hydro-electric power generations – big and small projects – to meet the energy infrastructural support that its growth and transformation plans require.⁵⁹¹

Still important components of the objectives of the policy are "considerations of economic, social and environmental costs and benefits of natural resource development into the planning, implementation and accounting processes by the comprehensive valuation of the environment and the services it provides, and by considering the social and environmental costs and benefits which cannot be currently measured in monetary terms", "...prevention of air pollution ...in cost effective way...", and the importance of " ensuring the empowerment and participation of people and their organizations at all levels in environmental management activities."⁵⁹²

Such a policy framework is evidently in congruence with the Human Rights-Based Approach to Climate Mitigation Policy (HRBA-CMP) because it reflects the adoption of a

⁵⁹⁰ J. Houghton, *Global Warming: The Complete Briefing* (Third Edition, Cambridge University Press, 2004).

⁵⁹¹ Growth and Transformation Plan II of the Ethiopian Government. Available online at: < <https://ethiopia.un.org/sites/default/files/2019-08/GTPII%20%20English%20Translation%20%20Final%20%20June%2021%202016.pdf> >

⁵⁹² The Environmental Policy of Ethiopia, p.4

development model that foundationally recognizes the need to strike a balance between social development and environmental sustainability goals so that efforts of ensuring the sustainability of environmental conditions of development activities do not result in any kind of social costs and vice versa. Moreover, prevention of air pollution (which includes emission of GHGs into the atmosphere from varied sources) requires that energy sources relied on be renewable which happens increasingly to be the case in Ethiopia and that the forestry development is given primary importance as exemplified in the Climate Resilient Green Economic Strategy of Ethiopia (CRGE) where the development of forestry is one of the four pillars of the strategy.⁵⁹³ In addition the sight of empowerment and participation of people in environmental management activities as a policy objective of the country shows the strong commitment of the Ethiopian government in seeing the importance of and entitling local people in terms of exercising the right to effectively and meaningfully participate in development and management of such relevant projects as *the Humbo A/R CDM* project.

The deduction from the foregoing discussion of specific objectives of the environmental policy of the country is that at the policy level the Ethiopian government has set its policy advanced when seen from the vantage point of the country's insignificant contribution to the climate crisis and the obligations assigned to the developed world by the climate regulation instruments of the UNFCCC and thereby contributed positively to efforts of mitigating the problem and lessening human rights impacts thereof.

In addition, the environmental policy of the country is also guided by principles which both further climate mitigation and human rights goals. The principles constitute the right of all Ethiopians to a healthy environment, the primary importance of peace and human security vis-à-vis the realization of sustainability and that communities are empowered to decide on matters that affect their life and their environment, planning processes consider environmental costs, sustainable management of renewable resources and minimal utilization of non-renewable ones, and that when a compromise between short-term economic growth and long-term environmental protection is necessary that it is better to err on the side of caution than suffer irreparable loss.⁵⁹⁴ Hence, the right of Ethiopian citizens to a healthy environment is both a constitutionally

⁵⁹³ Climate Resilient Green Economic Development Strategy of Ethiopia (CRGE)

⁵⁹⁴ The Environmental Policy of Ethiopia, p.5

guaranteed right and a principle of the environmental policy of the country entailing an obligation on the part of the government to adequately contribute to the global climate mitigation endeavors with a logical consequence of safeguarding the human rights of its people thereof.

The principle that underlines the precedence of peace and personal security in relation to sustainability of environmental resources and the empowerment of people in decisions that affect their lives and their environment is in line with the notion of the Human Rights-Based Approach to Climate Policy (HRBA-CP) where its principle states that as policies, plans and projects are formulated, the main objectives should be to fulfill human rights⁵⁹⁵. But contrary to this principle, the implementation of *Humbo* A/R CDM project did not uphold the precedence of human wellbeing and security as discussed in chapter six where local people were unable to realize food security and that they were not adequately informed and consulted for approval of the project ideas. The project is also in violation of the principle of respecting local communities as having the ultimate decision making authority in matters that affect their lives and their environment as the project did not only safeguard the right to food of local residents having heard their complaints as regards wild animal destructions of their crops but also failed to respect the communities' ultimate decision making entitlement as exemplified through the refusal of the project proponent to accept the construction of road that cuts through the forest because of its contribution to the development of *Tebella* town as discussed in Chapter Six.

Another key element of the principles of the environmental policy of the country that is upheld in how the market-based climate mitigation mechanisms such as CDM and REDD+ work states that “when faced with a choice that involves a compromise between short –term economic gains and long term environmental sustainability or protection goal, it is better to err on the side of caution than face irreparable damage to the environment.”⁵⁹⁶

The market-based climate mitigation mechanisms have been critiqued as promoting short-term economic gains while compromising the environmental integrity requirement of climate

⁵⁹⁵ R.Mahadew, A Human Rights –Based Approach to Climate Change, Vol.31, (2021), *Revue juridique de l’Océan Indien*, 2021, *Justice Climatique: perspectives des îles de l’océan Indien*. Available online at: < <https://hal.univ-reunion.fr/hal-03328964/document> > accessed on 8 February 2023.

⁵⁹⁶ The Environmental Policy of Ethiopia, p.5

mitigation goal ⁵⁹⁷and hence do not place primary importance on climate mitigation objectives when seen in relation to economic gains or profit. The resultant effect being ineffectiveness is the realization of the emission reduction targets set in international negotiations, and associated worsening of climate related adverse impacts and human rights threats thereof. In addition, the policy recognizes the equality between men and women and the empowerment of women to totally be involved in formulation of programs, policy, and project design and decision making processes in congruence with and reflective of the Human Rights–Based Approach to Climate Policy (HRBA-CP) in which it identifies vulnerable groups like women and redresses discriminatory practices and unjust distribution of power in decision making processes.⁵⁹⁸

It is also the principle of the policy that natural resources and environmental management activities are integrated laterally across sectors and vertically among all levels of organizations and that the implementation of cross sectorial and sectorial policies and strategies are seen as pre requisite for the achievement of the objectives of the policy. This reflects that sustainable utilization of resources and recognition of environmental costs of economic growth are embedded in the planning and implementation of policies and strategies with a positive implications for climate mitigation objectives and human wellbeing therefrom.

As regards forests, woodlands and tree resources the policy recognizes the complementary roles of communities, private entrepreneurs and the state in forestry development.⁵⁹⁹ Another policy principle with regards to forestry development is to adhere to the principle that “sustainable forest management” is achieved “when social acceptability and economic viability have been achieved and the volume of wood harvested in a given period is about equal to the net growth that the forest is capable of generating”.⁶⁰⁰ In this connection, field research has elicited that the social acceptability of *Humbo A/R CDM* project is seriously questioned when seen in the

⁵⁹⁷ R. Pears and S. Böhm, Ten reasons why carbon markets will not bring about radical emission reductions, Vol.5 (4), (2015), *Carbon Management*. Available online at: < <https://www.tandfonline.com/doi/full/10.1080/17583004.2014.990679> > accessed on 9 February 2023; see also I. Stoddard et al, Three Decades of Climate Mitigation: Why Haven’t We Bent the Global Emissions Curve? Vol.46, (2021), *Annual Review of Environment and Resources*. Available online at: < <https://www.annualreviews.org/doi/pdf/10.1146/annurev-environ-012220-011104> > accessed on 9 February 2023.

⁵⁹⁸ OHCHR, Applying a Human Rights –Based Approach to Climate Change Negotiations, Policies and Measures. Available online at :

<<https://www.ohchr.org/sites/default/files/Documents/Issues/ClimateChange/InfoNoteHRBA.pdf> >

⁵⁹⁹ The Environmental Policy of Ethiopia, p.8

⁶⁰⁰ Ibid

light of local *Kebele* resistance involving threats to the lives of World Vision Ethiopia experts and *Kebele* leaders initially and repeatedly observed events of deliberately setting fire on to the forest by *Kebele* residents⁶⁰¹. In this regard, during an interview with elementary school students in *Bosa Wanche*, a boy who got frustrated due to his daily and night time chores of guarding crop lands against wild animals burst out in anger saying that " why not burn the forests altogether" when asked what the solution he thinks is for the problem of missing classes in schools because of his duties during the day and night.⁶⁰²

Findings about the adequacy of the alternative livelihood strategies developed under the project and the income accrued from the sale of carbon credits also indicate that the project is also economically not viable. This is well substantiated when one learns the fact that the annual income that the seven *Kebele* cooperatives get from the sale of carbon credits is now halted for the alleged reason that World Vision Ethiopia decided to look rather for voluntary markets.⁶⁰³ So currently the cooperatives and their members are not being paid their income in spite of the fact that the forests they manage still sequester carbon⁶⁰⁴. Thus, while the continuation of the environmental services value of the enclosed forested land is maintained, the income that the local people were meant to be sustainably paid to compensate for foregone livelihoods of local people is stopped in violation of their right to standard of living adequate for the wellbeing of local residents and their families as recognized under article-11 of ICESCR.⁶⁰⁵ Hence, evidences in the ground are that the *Humbo A/R CDM* project is not also economically viable being divorced from the requisite conditions in which "sustainable management of forests " is conceived to be taking place under the environmental policy of the country. So the project is not in congruence with the forest, woodland and tree resources principle of the environmental policy of the country.

On the other hand, the forest, woodland and tree resources sub-policy seeks to "find substitutes for construction and fuel wood whenever capabilities and other conditions allow in

⁶⁰¹ In-depth interview with the previous leader of *Humbo* Forest Development Union and also with the *Wereda* mobility expert of forest based resources

⁶⁰² FGDs held with primary school students of *Bosa Wanche Kebele*

⁶⁰³ FGDs with the cooperative leaders of *Bosa Wanche* and in-depth interview with the previous leader of *Humbo* Forest Development Union.

⁶⁰⁴ FGDs with cooperative leaders of *Bosa Wanche Kebele*

⁶⁰⁵ Article -11 of the ICESCR

order reducing pressure on forests”.⁶⁰⁶ This is important in terms of addressing the causes of global climate change since it works on reducing rates of deforestation and thereby enhances carbon sinks in an overall contribution to reduction in aggregate concentration of GHGs in the atmosphere which in turn ameliorates adverse effects, on human rights, of the climate crisis.

The same is true to the energy policy principle of the environmental policy of the country as the energy sector policy principles emphasize the importance of relying on renewable energy sources and a move away from dependence on fossil and biomass fuels.⁶⁰⁷ Presently, the primary source of electricity that the country relies on comes from actual hydropower generative potential of its rivers which is about 87% of the country’s energy production capacity⁶⁰⁸. In 2020, total electricity generating capacity of the country was 4,713 MW of which 86% is produced from hydro, 6% from bio-energy, 7% from wind and 1% from non-renewable sources.⁶⁰⁹ Noteworthy in this regard is the construction of the Grand Ethiopian Renaissance Dam (GERD) which will be Africa’s largest hydropower generating dam with the capacity of 6,000MW.⁶¹⁰ So the country is increasingly heavily reliant on hydro power as a predominant source of energy with plans to expand energy generation from other renewable sources including wind, solar, geothermal, and bio-fuel sources. This demonstrates the country’s serious commitment towards the realization green economic growth that contributes significantly to the achievement of climate mitigation goal and helps lessen the adverse impacts of the climate crisis and the threats against the exercise of human rights thereof.

The environmental policy of the country does have specifically formulated policy statements with respect to climate change. Of the most important policy statements include the one that states as follows:

To recognize that even at an insignificant level of contribution to the atmospheric greenhouse gases, a firm and visible commitment to the principle of containing climate change is essential

⁶⁰⁶ The Environmental Policy of Ethiopia, p.9

⁶⁰⁷ Ibid, p.13.

⁶⁰⁸ A. Dingeto, Ethiopia hydropower development and Nile basin hydro politics, Vol.10, Issue 1, (2022), *AIMS Energy*. Available online at: < <https://www.aimspress.com/article/doi/10.3934/energy.2022006?viewType=HTML>> accessed on 10 February 2023.

⁶⁰⁹ IRENA, Renewable Capacity Statistics, (A Report, International Renewable Energy Agency, 2021)

⁶¹⁰ I. Grcheva, ‘Water Urbanism in Trans boundary Regions: The Nile Basin and The Grand Renaissance Dam’, (MA Thesis, Ku Leuven University 2016).

and to take the appropriate control measures for a moral position from which to deal with the rest of the world in a struggle to bring about its containment by those countries which produce large quantities of greenhouse gases.⁶¹¹

So as can be read above the Ethiopian government underlines that “commitment to the containment of climate change is essential” and that “appropriate control” of emission levels that would result in the containment of the problem of climate change is taken as a moral position in reference to which the country deals with other countries while working towards the containment of the climate crisis. At a country level, therefore, Ethiopia’s “firm and visible” commitment to the principle of stabilizing the climate, irrespective of its insignificant contribution to the causes of the problem, shows the country’s recognition that there isn’t such a thing as inter-states competition for economic power and political might in the very absence of a physical condition that makes possible these rival interests. Hence, the containment of the climate problem which the country sees as a moral position in collaboratively dealing with the rest of the world is harmonious with the object of safeguarding human rights of people against the adverse effects of the climate crisis. Another key policy statement recognizes that Ethiopia’s environmental and economic long terms interests and its energy prospect coincide with the need to minimize atmospheric inputs of greenhouse gases. This is because the country has a large potential for harnessing hydro, geothermal and solar energy. In addition, the policy’s goal of “maximizing the standing biomass in the country via reforestation, agroforestry, the rehabilitation of degraded areas, a general re-vegetation of land, the control of free ranging in the highlands and seeking financial support for these from the industrialized countries for offsetting their carbon dioxide emissions” is again important in mitigating the problem and lessening the threats against the exercise of human rights from climate related effects.

As regards community participation and the environment, the policy has directly relevant statements which deal with the importance of decisions of resources users and managers in all phases of environmental and resource development and management from project conception to planning and implementation and monitoring and evaluation; the importance of developing effective methods of popular participation in the planning and implementation of environmental and resource use and management of projects and programs; developing the necessary legislation,

⁶¹¹ The Environmental Policy of Ethiopia, p. 17

training and financial support to empower local communities so that they may acquire the ability to prevent the manipulated imposition of external decisions in the name of participation, and to ensure genuine grassroots decisions in resources and environmental management.⁶¹²

The above policy statement clearly shows how congruent the environmental policy of Ethiopia is with such procedural rights of local people as the right to "seek, receive and impart information" as enshrined under article-19 of the ICCPR and article -19 of the UDHR, right to public participation in environmental decision making as recognized under article-21 of the UDHR and article-25 of the ICCPR where both articles recognize the fundamental right of everyone to take part in the government of their country and in the conduct of public affairs and access to administrative, judicial and other remedies as recognized under the UDHR, ICCPR and ICESCR. Need be emphasized that the environmental policy of the country readily provides a policy framework that would help local people guard their rights and interests in situations where the design, planning and implementation of programs and projects may be manipulated with the intent of imposing external interests and decisions against their will. This is particularly relevant in the context of the implementation of *Humbo A/R CDM* project where field research elicited that there has not been observed built in procedures to adequately address inquiries, complaints, and that there have not been employed any transparent mechanism whereby local people could effectively be informed and reflect on key decisions (for example, as regards the whereabouts of emergency fund, change from fixed to voluntary markets, why annual revenue fluctuate despite same areas of forest management).⁶¹³

The policy statement is also powerful in terms of guarding against the imposition of foreign interests as it necessitates development of relevant legislation, the conduct of trainings and provision of financial support with the aim of empowering local people and residents. This policy statement would have guarded the interests of local people and their government in *Humbo* where the people saw the importance of constructing the road that shortened the travel distance between rural areas and *Humbo-Tebella* town which was opposed by World Vision Ethiopia

⁶¹² The Environmental Policy of Ethiopia, p.20

⁶¹³ FGDs with the cooperative leaders of *Bosa Wanche Kebele*; In-depth interview with previous leader of *Humbo* Forest Development Union

threatening the local government and the people with the deduction of 20,000 birr from the income accrued from the sale carbon credits.⁶¹⁴

Finally, the environmental policy of the country recognizes that the user of land has the right to a secure and uninterrupted access to it and to renewable natural resources on it including trees, water, wildlife, and grazing site.⁶¹⁵ In this connection, article 40(3) of FDREs constitution has it that ownership of rural and urban land is vested in the state and peoples of Ethiopia and that land belongs to the nations, nationalities and peoples of the country and as such is not subject for sale or any other means of exchange.⁶¹⁶ Sub-article 4 of the same article stipulates that " Ethiopian peasants have the right to obtain land without payment and the protection against eviction from their possession."⁶¹⁷ So local people in *Humbo* have both constitutionally guaranteed and policy recognized right to get access to the forest based resources of the land they are organized to manage though field research reveals that the actual use right of the residents varies temporary and currently extremely limited in violation of the policy provision and the constitution of the country.⁶¹⁸ The environmental policy, on the other hand, protects the right of the local residents to meet adequate standard of life of the residents as allowing use right means using the enclosed forested land as a grazing site, for making charcoal to generate income, as a source of fuel wood or obtaining woods for construction of houses.

6.4. Rights Implications of the CRGE and the National REDD+ Strategy.

The Ethiopian government developed a Climate Resilient Green Economic Strategy (CRGE) with the aim of achieving middle income status by 2025 while developing a green economy. The strategy is designed to achieve economic development while at the same time ensuring sustainability.⁶¹⁹ Having adopted a sectoral approach the green economic strategy

⁶¹⁴ In-depth interview with the Directorate Director of *Wolayita Sodo* EPA

⁶¹⁵ The Environmental Policy of Ethiopia, p.20.

⁶¹⁶ Article 40(3) of FDREs Constitution

⁶¹⁷ Article 40(4) of FDREs Constitution

⁶¹⁸ Initially local residents were allowed to collect hay and fallen leaves not only for home consumption but also for sale which changed in time as they currently are not allowed to enter the forest as revealed via in-depth interview with a *Kebele* resident in *Bosa Wanche*. At present the use of forest based resources such as woods is extremely limited as it is only for a highly prioritized and publicly relevant need that selective cutting of woods is allowed .This is also possible after a permit obtained from bureaucratic processes involving assessment of would be cut trees by experts in *Humbo Wereda* EPA office.

⁶¹⁹ EPRDF, Ethiopia's Climate -resilient Green Economy. Available online at : < https://www.preventionweb.net/files/61504_ethiopiacrge.pdf >

identified and prioritized 60 initiatives which it sees as being helpful to the country in achieving its development goals while at the same time limiting the 2030 GHGs emissions to around 150 Mt CO₂ e which is around 250 Mt CO₂ e less than what is estimated under the conventional development path.⁶²⁰ Ethiopian's green economic strategy is based on four pillars which are;

- i) improving livestock and crop production practices for higher food security and farmer income while reducing emissions;
- ii) protecting and re-establishing forests for their economic and ecosystem services including as carbon stocks;
- iii) expanding electricity generation from renewable source of energy for domestic and regional market and ;
- iv) Leapfrogging to modern and energy-efficient technologies in transport, industrial sectors and buildings.⁶²¹

Seen from the perspective of contributing to aggregate reductions in the global emission of GHGs, the CRGE seems to have rightly adopted pillars that address the major causes of the climate crisis. Hence, it is orientated to rightly work on mitigating the causes of climate change and thereby contributing to stabilization of atmospheric concentration of GHGs in the atmosphere in harmony with the ultimate goal of the UNFCCC. This is effectuated via maintaining the reduction in GHGs emission at 150 MtCO₂ e which is 250 Mt CO₂ less than what it would have been had the country underwent economic growth path adopting the conventional development model. Moreover, the CRGE is designed in such a way that the achievement of economic development and climate mitigation objectives are set to be instrumentalized and interdependent. In addition, the government sees the green economic path not only environmentally sustainable but also economically viable (for more than 80 % of the abatement potential, the abatement cost is less than \$15 per t CO₂ e and that many of the initiatives offer positive returns on investment creating additional jobs with high value added).⁶²² The strategy is crafted in such a way that the country's development is paid for by the climate finance that is envisaged to be harnessed from climate finance schemes multi-laterally (as those originated under the UNFCCC negotiations) as well as bilaterally developed.

⁶²⁰ Ibid, p.2

⁶²¹ Ibid

⁶²² FDRE, Climate Resilient Green Economic Strategy , p.2

The government has initially selected four (4) initiatives for fast –track implementation which are –exploiting the vast hydropower potential, large scale promotion of advanced rural cooking technologies, efficiency improvements to the livestock value chain, and Reducing Emission from Deforestation and Forest Degradation (REDD+).⁶²³ These initiatives are seen as having the best chance of promoting growth, capturing large abatement potential, and attracting climate finance for their implementation.⁶²⁴ The strategy also intends to develop concrete proposals from initiatives involving other sectors to ensure economy wide or comprehensive approach to green economic development path.

Noteworthy is also the fact that the strategy recognizes that irrespective of whether or not the country follows sustainable/ green economic path, the country is faced with critical challenges in attracting the investment needed to support its projected growth. The government recognizes that capital from foreign direct investments, domestic savings, grants and transfers will not be sufficient to fund the new investments meant to bring about the projected growth.⁶²⁵ Thus, the funding needed to implement measures for realizing green growth is not readily available and the climate finance is identified as one of the finance sources meant to be harnessed to fill the gap between investments needs for projected growth and available financial capital from the economy.

Here, two things are evident: the Ethiopian government developed a green economic plan that needs \$150 billion for its implementation which in larger proportion is meant to be paid for through climate finance and aids and that the government defined protection and re-establishing forests for their economic and ecosystem services including as carbon stocks (this includes A/R CDM and REDD+ programs and projects) as one of the four pillars of the green economy it strategized to develop. The other note that is worthy of reiteration is the fact that the finance needed is not presently readily available.

In this connection, while it is plausible that the Ethiopian government combined green economic development and climate mitigation objectives so as to utilize the climate finance concurrently for economic development and climate mitigation objectives, it is possible that (and

⁶²³ Ibid, p.3

⁶²⁴ Ibid, p.3

⁶²⁵ Ibid, p.17

as has been observed during the Copenhagen Accord⁶²⁶) the developed world grant the finance out of their “capacity” instead of their greater historical and current responsibility for the climate crisis or out of their “culpability”.⁶²⁷ The problem is that the principle of Common but Differentiated Responsibilities (CBDR) has not been definitively and concretely operationalized so much so that it is not clear on what basis differentiation is to be made between countries: capacity and/or culpability.⁶²⁸ And this poses a real risk, as Antony Angheï underlines, that differentiation based up on Southern lack of capacity rather than Northern responsibility can authorize a reiteration of “a colonial dynamic of difference” compromising the principle of sovereign equality of states and their right to development.⁶²⁹ If differentiation is grounded in the greater current per capita and historical responsibility of the developed world for climate change, Julia Dehm maintains, it operates as a redistributive measure to compensate and ameliorates the North’s unequal appropriation of atmospheric space⁶³⁰ but such an interpretation has been “categorically” rejected by the US which denied any sense of “guilt” or culpability or reparations” for historical emissions instead highlighting the need for all countries to grow and take responsible future climate action.⁶³¹ But if the principle is interpreted as entailing lack of “capacity” to take mitigation measures in the South (this capacity instead being located in the North), it risks being a pretext for significant intervention to assist that themselves would be directed at the expansion of market-oriented neoliberal approaches and the regulation that enables them in disregard to the UN Charter’s principle of sovereign equality of states and also to the right of development of these states.⁶³²

⁶²⁶ J. Vidal, ‘Climate aid threat to countries that refuse to back Copenhagen Accord’ *The Guardian* (United Kingdom, 11 April 2010) < <https://www.theguardian.com/environment/2010/apr/11/climate-aid-threats-copenhagen-accord> > accessed on 26 February 2023. The US, EU, France and UK were clear that they were not going to provide aid in the form of climate finance for the poor developing countries if these countries did not accept the terms of the Copenhagen Accord and the poor countries claimed that they were offered cash to support the terms of the Accord.

⁶²⁷ A. Angheï, *Imperialism, Sovereignty and the making of International Law*. (Cambridge : Cambridge University Press, 2007)

⁶²⁸ L. Rajamani, *Differential Treatment in International Environmental Law*. (Oxford, Oxford University Press, 2006)

⁶²⁹ A. Angheï, n.100

⁶³⁰ J. Dehm, Carbon Colonialism or Climate Justice? : Interrogating the International Climate Regime from a TWAIL perspective, Vol. (2016), *Windsor YearBook of Access to Justice*. Available online at: < <https://wyaj.uwindsor.ca/index.php/wyaj/article/view/4893> > accessed on 26 February 2023.

⁶³¹ P. Bond, ‘Climate Debt Owed to Africa: What to Demand and How to Collect?’ (Post Copenhagen Climate Justice Conference, Durban, South Africa, 5 May, 2010).

⁶³² J. Dehm, p. 141

Secondly, the Ethiopian government identified the environmental services including as carbon stock of the country's forests as a pillar of the green economy it plans to develop. The government purports to harness financial capital from the sale of carbon credits generated through the implementation of A/R CDM and REDD + projects as these constitute activities that enhance forest carbon stock in return for incentives for saved or prevented emissions. "Carbon markets are an institutional response to the problem of climate change that establishes new forms of authority over lands in ways that are experienced as colonial."⁶³³ They work bent on the idea of utilitarian justice in which the "common good" of deep cuts in aggregate emissions is brought about through the facilitation of access to ability of emission reduction wherever it is cheapest,⁶³⁴ in spite of the fact that they have, to the contrary, been shown to have failed in effecting radical emission reductions⁶³⁵ and instead facilitated the distribution of harms and benefits unevenly and in favor of the North.⁶³⁶

The problem to which carbon markets are designed to resolve can be recapitulated by a sentence that goes like " world states are now faced with the climate crisis that disproportionately harms vulnerable states which are but insignificantly responsible for the crisis with the resultant effect of making available atmospheric space (for development) scarce". And the solution (the institutionalization of carbon markets) substantively is such that the effect of aggregate accumulation of GHGs in the atmosphere is to be stabilized at "safe level so as to maintain temperature increase below 2 degrees from that of pre-industrial level "via market –based emission reduction schemes which are to be carried out wherever they are cheapest. Now the logic with which carbon markets seem to operate draws on the assumption that the political and economic realms are distinct and mutually exclusive – that there is a political and economic split to use Julia Dem's language.⁶³⁷ But such a split between the political and economic realms is

⁶³³ J. Dehm, p.143

⁶³⁴ N.H. Stern, *The Economics of Climate Change: the Stern Review*. (Cambridge: Cambridge University Press).

⁶³⁵ R.Pearse & S.Bohm, Ten reasons why carbon markets will not bring about radical emissions reductions, Vol.5, Issue 4 , (2014), *Carbon Management*. Available online at: <https://www.tandfonline.com/doi/full/10.1080/17583004.2014.990679> accessed on 28 Feb.2023.

⁶³⁶ L Lohmann, *Carbon Trading: A Critical Conversation on Climate Change, Privatization and Power* (Uppsala: The Dag Hammarskjold Center, 2006) ; R. Pearse & J. Dehm, " In REDD : Australia`s Carbon Offset Project in Central Kalimantan (Friends of the Earth International, 2011)

⁶³⁷ J. Dehm, p. 143

impossible as would be maintained by TWAIL scholars⁶³⁸ and also is recognized in this research. The use of market mechanism to address climate mitigation objectives is inherently political⁶³⁹ in that it constitutes a capitalist solution to the climate mitigation problem in which what is targeted is abatement of emission at the lowest cost possible without harming the expansion of global economic growth and also using flexibility⁶⁴⁰ mechanisms to protect the profitability of companies in developed states like the US and EU. So the choice of market mechanisms is in effect the promotion of the neoliberal political –economic ideology⁶⁴¹ that sanctions the idea that greening economic growth and environmental sustainability is in congruent with the neoliberal ideology. And this is empirically refuted in the face of evidences that even effective implementation of INDCs of states are bound to result in a temperature increase in order of more than 2.7 degrees⁶⁴² amplifying catastrophic climate change impacts which but disproportionately hits poor vulnerable states.

So carbon markets do not only further the global expansion of neoliberalism as a political – economic paradigm and exacerbate the already prevalent unequal power dynamics between the global North and South⁶⁴³ but also serve to shift responsibilities and sites of emission reduction away from the developed states authorizing regulation and control of lands in the territories of the global South in the way that is experienced by local people as colonial.⁶⁴⁴ This has also been

⁶³⁸ See for example, Sundryha Pahuja, *Decolonizing International Law: Development, Economic Growth and the Politics of Universality* (Cambridge: Cambridge University Press, 20 11). p.20.

⁶³⁹ S. Bohm & S. Dhabhi, Commentary. Fault lines in Climate Policy: What role for Carbon Markets? Vol.11 (6), (2012), *Climate Policy*. Available online at: < <https://www.tandfonline.com/doi/abs/10.1080/14693062.2011.618770?journalCode=tcpo20> > accessed on 4 March 2023.

⁶⁴⁰ The term "flexibility" is meant to protect US companies from risking losses in their businesses since the CDM projects which it refers to allow cheaper reductions in emission by investing what are regarded as sustainable development projects in the global South as sites of the implemented CDM projects. For further discussions see S. Bohm et al, *Greening Capitalism? A Marxist Critique of Carbon Markets*, Vol.0 (0), (2012), *Organization Studies*. Available online at: < <https://journals.sagepub.com/doi/10.1177/0170840612463326> > accessed on 3 March 2023; S.Ullstrom, *The Political Ecology of Carbon: Commodification, Colonialism, and debt in carbon offsetting under the Clean Development Mechanism*, (2017).

⁶⁴¹ Ibid; see also J. Andrew et al, *Carbon Tax: Challenging Neoliberal Solutions to Climate Change*, Vol.31 (2), (2011), *Social and Environmental Accountability Journal*. Available online at: <https://www.tandfonline.com/doi/full/10.1080/0969160X.2011.593838?scroll=top&needAccess=true&role=tab> accessed on 4 March 2023.

⁶⁴² Lily Hess, 'Updated national plans set world on track for 2.7 degrees of warming by 2100' *Landscape News* (German: 27 October 2021), available online at : <https://news.globallandscapesforum.org/55449/updated-ndcs-set-world-on-track-for-2-7-degrees-of-warming-by-2100/#> accessed on 4 March 2023.

⁶⁴³ R. Pearse & S. Bohm, p.330 ; Julia Dehm, p. 143

⁶⁴⁴ J. Dehm, *Authorizing Appropriation? : Law in Contested Forested Spaces*, Vol.24, No.4, (2017), *European Journal of International Law*. Available online at : < <https://academic.oup.com/ejil/article/28/4/1379/4866328> >

observed via field research, in *Humbo Wereda*, that the local cooperatives in each of the *Kebele* associations are only nominally granted the name “community management of forest resources” which in practice means nothing but preserve the forested site without meaningfully utilizing its resources as it has been learnt through field research that though members of the cooperatives were initially allowed to use hay, stalks and fallen branches as a fodder and fuel wood, in time there has been introduced strict measures prohibiting entrance into the forested site.⁶⁴⁵

A clear illustration of the control of land and its resources in a way that is experienced colonial in the case study under investigation is the direct order from World Vision Australia and World Bank passed to the local government to stop construction a road that passes through the enclosed forested land for the reason that the construction of the road compromised 10 hectares of forested land⁶⁴⁶. The order came by way of a warning that if the local government does not stop constructing the road, each of the seven *Kebele* cooperatives will have 20,000 birr deducted from its annual revenue from the sale of carbon credits generated.⁶⁴⁷ At last, though the local government did not stop constructing the road that cuts through the enclosed forested site, it had to submit land 3-4 times larger than the area of forested land that the constriction of the road did compromise in fear that the World Bank and World Vision Australia would stop channeling annually accrued income from the sale of carbon credits.⁶⁴⁸ Thus local people and local government in *Humbo Wereda* of the SNNPR of Ethiopia cannot be said to have control over the land and its resources and also do not practically have power to determine the way they could use the land in a manner experienced as being colonial compromising the right to self – determination of the Ethiopian people and their right to development.

Hence, reliance on REDD+ as a pillar of the CRGE is not without compromise of the sovereign right of the Ethiopian state to use its resources within its territories and also at the expense of both procedural and substantive rights of local people which is likely to be the case in

accessed on 4 March 2023; H. Bachram, Climate Fraud and Carbon Colonialism : The New Trade in Greenhouse Gases, Vol.5, No.4 , (2004), *CAPITALISM NATURE SOCIALISM*. available online at: <https://www.tandfonline.com/doi/abs/10.1080/1045575042000287299> accessed on 4 March 2023.

⁶⁴⁵ In-depth interview with a forest resources mobility specialist of *Humbo Wereda* EPA office ; In-depth interview with previous leader of *Humbo* forest development union

⁶⁴⁶ In-depth interview with the Directorate Director of EPA of *Wolayita Sodo Zonal* administration.

⁶⁴⁷ Ibid

⁶⁴⁸ Ibid

Bale Eco-region REDD+ project⁶⁴⁹. Similarly, the particular A/R CDM project, as has been discussed in Chapter -6, has compromised both procedural and substantive human rights – particularly the right to adequate standard of living of local resident as it failed to adequately provide for alternative livelihood strategies for the local people who have otherwise relied on the previously mountainous land for grazing, making of charcoal, and as source of fuel woods. So while REDD+ may be used to harness climate finance, note needs be taken that these are merely ostensible environmental solutions designed to shift material responsibility of climate mitigation to the South concurrently allowing the North to evade their obligation in the domestic sphere simultaneously allowing the very expansion of fossil fuel extraction, and exploitation fuel the unsustainable development path maintaining ever higher levels of consumptions goods and services.

Rights Implications of National REDD+ Strategy

The vision of the National REDD+ Strategy (NRS) states that “the strategy contributes effectively and to the large part to the CRGE strategy and Ethiopia’s Nationally Determined Contribution (NDC) greening targets in 2030 while maximizing national co-benefits thereby adding to the global climate change mitigation efforts through improving forest resource and land management.”⁶⁵⁰ The strategy’s primary goal is to reduce deforestation and forest degradation while promoting sustainable management of forest resources and enhancing forest carbon stocks through afforestation and reforestation.⁶⁵¹ The implementation of the national REDD+ strategy is guided by a set of principles which “ensure climate benefits along with co-benefits (biodiversity and livelihoods) while respecting the right of local communities and national interests.”⁶⁵² Hence, the strategy has an overall principle of ensuring climate mitigation outcomes while at the same time respecting the rights of local communities as a strategy in congruence with human rights approach to climate change policy. The strategy cites the following as the principles that underpin the implementation of national REDD+ program;

“Relevance: REDD+ should be able to contribute to greening the country’s economy through leadership on addressing land use based emissions.

⁶⁴⁹ In-depth interview with forest resources specialist working in Farm Africa (an NGO presently implementing the Bale Eco-region REDD+ Project).

⁶⁵⁰ FDRE, National REDD+ Strategy (2016-2030) available online at: <https://faolex.fao.org/docs/pdf/eth178847.pdf>

⁶⁵¹ Ibid

⁶⁵² Ibid

Equity: REDD+ contributes to sustainable and equitable development by strengthening the livelihoods of forest-dependent communities.

Effectiveness: REDD+ demonstrably contributes to the greenhouse gas emission reduction by working towards a global objective of climate change mitigation and associated co-benefits.

Transparency: REDD+ activities are transparently undertaken to ensure a clear and easy to understand implementation process for all stakeholders.

Accountability: REDD+ implementation process is fully accountable to the people and government of Ethiopia and the international community in terms of relevance, process, funding, and results obtained.

Commitment: REDD+ implementation demonstrates Ethiopia's commitment to global climate change mitigation efforts.

Efficiency: REDD+ program in Ethiopia constitute long term activities that result in optimal financial, ecological and social benefits.”⁶⁵³

While the principles of “Relevance”, “Commitment” and “Effectiveness” seem to be orientated to contributing to the global aggregate reduction in the GHGs thereby ameliorating the adverse impacts of climate change, all the other principles “Equity”, “Transparency”, “Accountability” and “Efficiency” have to do with both the procedural and substantive rights of local people and communities. So at least at the level of strategy and rhetorically the national REDD+ strategy purports to strengthen the livelihoods of forest dependent and local communities, ensure easy to understand and clear implementation processes, recognizes local people as exercising the ultimate authority as it underlines that implementation processes are fully accountable to the people and government of Ethiopia and that in accord with the efficiency principle the implementation of the REDD+ processes need be optimal in financial, ecological and social benefits in congruence with the Human Rights Based Approach to Climate Mitigation Policy (HRBA-CP). However, none of these principles have been adequately complied with in the implementation processes of *Humbo A/R CDM* project as has been discussed in

⁶⁵³ Ibid, p.23

chapter -6.They have also been not adequately observed during the implementation of the Bale Eco –region REDD+ project that covered 500,000 hectares of land.⁶⁵⁴

In addition, the REDD+ strategy evidently integrates the Cancun safeguards and stipulates that these safeguards be complied with during implementation of REDD+ programs and projects. The Cancun safeguards are deal with consistency of REDD+ projects with the national forest development programs and relevant international treaties;need for transparency and effectiveness of forest resources governance; the right of indigenous communities and members of local communities;full and effective participation of particularly indigenous people and local communities;incentivizing forest resources conservation and enhancing social and environmental benefits;action to address the risks of reversal and actions to reduce displacement of emissions.⁶⁵⁵ So at the strategy level, the national REDD+ strategy recognizes the right of indigenous and local communities, recognizes the principle of full and effective participation which, as has been discussed in chapter-6, has not been adequately complied with and also recognizes the need to balance social and environmental benefits in spite of the empirical evidences in *Humbo* that the CDM project compromised both directly (through “nominally ”designed alternative livelihood strategies) and indirectly (through prevalently felt problems of animal destrutions of crop harvests) the right to livelihoods of local people and communities. The focus on the “perceived” income from the sale of carbon credits along with disregard to the need to monitor the sufficiency and quality of alternative livelihood strategies the project developed and the livelihoods impacts of the project was observed having compromised the

⁶⁵⁴ In-depth interview with project coordinator of Farm Africa (the NGO responsible for having developed and facilitated the implementation of the project) revealed that while there were 150 cooperatives with members living in the vicinity and around the Bale Eco-region REDD+ project, there were only 60 of them exclusively selected for participation in Farmer Managed Forestry development activities which were seen as being eligible for carbon benefits. So processes were arbitrary in that exclusive carbon rights were allotted only to 60 of the cooperatives despite the fact that there were 150 cooperatives near the enclosed forested area. Even after having been exclusive in its selection processes, the 60 cooperatives involved in the forest protection regime had to wait at least for 4 years before they received their initial income from the sale of carbon credits which they received bent on the policy of 40/60 whereby the cooperatives collectively obtain 60% of the income from the sale of carbon credits while the local government receives 40 % of the share. The 60% income was about 89,000,000 birr shared among the 60 cooperatives in accordance with the area of forests they manage, number of members, and effectiveness in protection. The “wait time “did cause the local people to lose hope in the value of their roles. It is also to be noted that the calculation of FREL (Forest Reference Emission Level) and projection of base line was done by experts of the Oxford University and that boundary demarcation has been dealt with by experts of a university in Ghana which necessitated administration costs. In the lights of these facts, it is difficult to rest content that the above set principles were actually complied with in the implementation of the *Bale* Eco-region REDD+ project.

⁶⁵⁵ Decision 1/CP.16, The Cancun Agreements: Outcome of the Work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention, FCCC/CP/2010/7/Add.1.available online at: < <https://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf#page=12> > accessed on 5 March 2023.

livelihood rights of local residents as thoroughly discussed under chapter-6 of this work. Furthermore, field research has indicated that the lack of adequate consent from the part of the residents, the growing population of local people and unemployment rate (a large number of high school students who were not able to pass the tenth grade were observed sitting idle in traditional coffee houses) and dishonesty in the implementation of Farmers Managed Sustainable Forest Development as demonstrated by strictly regulated prohibition of entrance into the enclosed forested space have all contributed to signs of leakages as increasing number of the youth in the *Wereda* and in almost all the *Kebeles* are illegally penetrating the forests to make charcoal for sale.⁶⁵⁶

On the other hand, the REDD+ strategy of the country has not yet devised a REDD+ benefits sharing management framework yet. In practice, the *Humbo A/R CDM* project is said to have allotted 100% of the income generated from the sale of carbon credits directly to local cooperatives recognized under the project in the seven *Kebeles* that the project involved. In this regard, an interview with the federal forest policy analyst at the federal forest and climate change commission office in Addis elicited that there has not been come up a rational for defining the percentage share of benefits between the government and local people but his office has suggested that 70/30: 30% of the income from the sale of carbon credits to the government while 70 % of the income for the local people is what their offices suggested.⁶⁵⁷

6.5. Rights Implications of Forest Development, Conservation and Utilization Proclamation No.1065/2018.

The proclamation discriminates between “private”, “state” and “community” forests. It defines “community forests” as a forest developed, conserved and utilized and administered by the community on its private or communal possession based on bylaws and plans developed by

⁶⁵⁶ In-depth interview with *Humbo Wereda* administrator where he mentioned that the number of youth who are illegally entering the enclosed forested space for making charcoal in the jungle is alarmingly increasing saying that these young people would roughly amount to about 10% of the *Kebele* population in *Bosa Wanche* alone. Important to mention, here, is also the fact that in accord with the bylaw of the forest development cooperatives, if a household head a member of a cooperative then his son or daughter however matured they are could not be members of the cooperatives . Again, in this connection, a conversation with a motor bike rider who has given the researcher transportation to and from *Humbo Tebella* town from the project site shared that the youth are not interested in the forest development cooperatives because they think that the benefits are insignificant.

⁶⁵⁷ Interview with the policy analyst at Federal Forest and Climate Change Commission of Ethiopia.

the community.⁶⁵⁸The proclamation defines “participatory forest management”as a forest management approach executed through the agreement between the state and the community that inhabit inside or around the forest area over the management, protection and utilization of forests owned by the state on the basis of predefined responsibilities and benefit sharing mechanisms.⁶⁵⁹

Humbo A/R CDM project falls in the category of community forests but is managed through participatory forest management approach. The proclamation stipulates that: community forest developers shall have the rights to voluntarily engage in participatory forest management and get support to develop forest on their communal land or areas designated by the government as a forest land; obtain a certificate of title deeds for the forests they are developing; and share benefits from the natural forest surrounding them without affecting their sustainable existence.⁶⁶⁰ Furthermore, the community developers of forests have the rights to get priority for the benefits from forest concessions given by the government;get professional, technical, input support and legal services until they are able to rely on their self –generated income; utilize, transact and add value on forest products in accordance with their management plan.⁶⁶¹

As regards benefits sharing, community forest developers have the right to share any benefits generated from the forest development as per the community by-laws. However, the proclamation is silent on how it could obtain capacity building and technical support benefits with government facilitation and monitoring of relevant actors so as to enable it competently guard its interests, in the international carbon markets, with the objective of selling its carbon credits at a price that could compensate for livelihood opportunity costs forgone in the name of preserving the forest for its environmental services and carbon sequestration objectives. In this connection, field research elicited that the community involved in rehabilitation, conservation, afforestation and protection of the forest developed under *Humbo A/R CDM* project was told (by World Vision Ethiopia) that a unit of carbon credit generated was to be sold at “a fixed” price in a “compliance market” and at a rate of \$4 per a tone of carbon dioxide sequestered for some years but later sold at \$10, \$11 and \$14 per unit of carbon dioxide gas sequestered⁶⁶² illustrating

⁶⁵⁸ Article 2(7) of Forest Development, Conservation and Utilization Proclamation No. 1065/2018.

⁶⁵⁹ Ibid,

⁶⁶⁰ Ibid

⁶⁶¹ Ibid

⁶⁶² Information obtained from in-depth interview held with liaison officer of World Vision Ethiopia in *Wolayita Sodo Zonal* Administration.

the lack of transparency in the management of carbon benefits on the part of World Vision Ethiopia and lack of capacity and exercise of agency on the part of the community to competently look for prices both in the “compliance” and “voluntary markets” that best reflects the community’s interests and could pay for livelihoods rights foregone due to the enclosure of the forested land. In this regard, as part of the government’s obligation of ensuring the sustainable development contribution of the project, as stipulated under article-12 of the Kyoto protocol, the federal EPA has failed to fulfill its duty of ensuring that processes of generating income from the sale of carbon credits are transparent and in effect should sufficiently pay for livelihood opportunity costs forgone due to the enclosure of the forested space under the project.

On the other hand, the proclamation stipulates that in case the community forest is expropriated of possession for reasons of fulfilling public interest that it gets compensation for its loss.⁶⁶³ And this provision appears to be problematic when seen in the light of forestry development for the sale of carbon credits in “compliance markets” under the CDM architecture developed in the Kyoto protocol because in accord with the CDM architecture the forest could not be appropriated by the government in the name of fulfilling public interest (with direct implication for the exercise of the right to development of the community) because introducing changes to the land use pattern established would amount to “undoing” the reduction in the atmospheric buildup of carbon dioxide in the atmosphere brought about following the forestry development with the resultant effect that the CDM project would lose its relevance due the problem of impermanence of carbon dioxide sequestered through forestry development. In the *Humbo A/R CDM* project, for example, neither the World Bank nor World Vision Ethiopia would allow it happen in violation of a constitutionally granted right that if a land is sought for fulfilling public interests and development by a government that citizens are dispossessed of it having been adequately compensated for their loss.⁶⁶⁴ This does have direct implication for the right to self-determination of the people of Ethiopia, enshrined under article – 1 of the ICCPR, through the exercise of which they freely determine their political status and pursue their economic, social, and cultural development.⁶⁶⁵

⁶⁶³ Ibid

⁶⁶⁴ Article -40 (8) of the Ethiopian Constitution.

⁶⁶⁵ Article -1 of the ICCPR

As regards obligations, the proclamation stipulates that community forest developers have obligations including protecting the forest against “damage” due to fire, pests, diseases, invasive species, as well as other damages; urgently reporting the occurrence of these damages to the responsible body; refraining from introducing and reproducing plants, animals, micro-organisms and insects that might cause harm to humans, animals and the ecosystem; observe the laws issued in respect of environmental safety, water shade and biodiversity conservation, development and utilization.⁶⁶⁶ Furthermore, community forest developers are also obliged to respect the important local culture, custom and knowledge, provide the relevant authority with information about the forest, and use the acquired forest land only for intended purpose. Moreover, the community forest developers are obliged to fulfill and respect the criteria of the transaction system in order to benefit from carbon and ecosystem services sales income.⁶⁶⁷

6.6. Rights Implications of Ethiopia’s Rural Land Use and Administration Proclamation No.456/2005.

Rural and urban lands as well as all of the natural resources, in accord with the Ethiopian constitution, belong, exclusively, to the State and the peoples of Ethiopia.⁶⁶⁸ The constitution, further states that land is a common property of the Nations, Nationalities and Peoples of Ethiopia and shall not be subject to sale or to other means of exchange.⁶⁶⁹ The constitution grants Ethiopian peasants the right to obtain land without payment and the protection against eviction from their possession.⁶⁷⁰ It is also a constitutional guarantee that Ethiopian pastoralists have the right to get free access to land for grazing and cultivation as well as the right not be displaced from their own lands. The constitution also recognizes the right of private investors to use land on the basis of payment arrangements.⁶⁷¹

“Rural land”,in accord with the rural land use and administration proclamation no. 456/2005, is defined as any land outside of the municipality holding or a town designated as such by the relevant law⁶⁷². Moreover, it defines “rural land administration” as follows;

⁶⁶⁶ Ibid,

⁶⁶⁷ Ibid

⁶⁶⁸ Article -40 (3) of the Ethiopian Constitution

⁶⁶⁹ Ibid

⁶⁷⁰ Ibid, sub-art. 4

⁶⁷¹ Ibid, sub-art.6

⁶⁷² FDRE’s Rural Land Use and Administration Proclamation No. 456/2005.

“Rural land administration” is a process whereby landholding security is provided, land use planning is implemented, dispute between rural land holders are resolved and the rights and obligations of any rural landholder are enforced and information on farm plots and grazing of land holders are gathered, analyzed and supplied to users.”⁶⁷³

Furthermore, the proclamation discriminates among private, communal and state land holdings. “Private holding” refers to rural land in the holdings of peasants, semi-pastoralists, and pastoralists and others who are entitled by law to use rural land. Whereas “communal land holding” represents land given by the government to local residents for common grazing, forestry and other social services and “state land holding” is defined as rural land demarcated and those lands to be demarcated in the future at federal or regional state holdings, wildlife protected areas, state farms, mining lands, lakes, rivers and other rural lands.⁶⁷⁴

The mountainous land over which *Humbo A/R CDM* project has been implemented amounts to a communal land which has been used by people not only in the vicinity of the site but even from afar as a grazing land, for charcoal making, and as a source of fuel woods. Local people share that the land used to be covered with a wide variety of plants and woods and that people used to use medicinal plants and obtained woods for construction purposes.⁶⁷⁵

So far as acquisition and use of communal land is concerned, the proclamation stipulates that communal land holdings could be changed to private holdings as many be necessary. And as regards dispute resolution “where dispute about rural land holding right arises effort shall be made to resolve the dispute through discussion and agreement of the concerned parties. Where the dispute could not be resolved through agreement it shall be decided by an arbitral body to be elected by the parties or be decided in accordance with the rural land administration laws.”⁶⁷⁶ In this connection, field research elicited that in instances, for example, where residents of *Bosa Wanche* and *Bolla Wanche Kebeles* fought over the limited grazing land along their boundaries, it was not an arbiter body developed under *Humbo A/R CDM* project that tried to have these groups of residents agree on terms of shared uses of the limitedly available land for grazing (the project did not adequately address the alternative to the grazing land lost when the previously

⁶⁷³ Article -2 (2)

⁶⁷⁴ Article -2 (12) and (13) of the Ethiopia’s Rural Land Use and Administration Proclamation No.456/2005.

⁶⁷⁵ In-depth discussions with cooperative leaders of *Bosa Wanche Kebele*.

⁶⁷⁶ Ibid, article -12

grazing site is enclosed under the project), it was the local *Kebele* administration that intervened not for reconciliation but identification for criminal liability of those who allegedly have tried to set fire to the forest in anger that “if it were not for the project the conflict would not have happened over the now extremely limited space for animal grazing”⁶⁷⁷.

At the regional level, land use and administration is governed by the Southern Nations, Nationalities and People’s Region (SNNPR) land use and administration proclamation no. 110/2007. The regional proclamation further recognizes the right of getting land for communal use of both peasants and pastoralists involving use for grazing, social, cultural and religious affairs.⁶⁷⁸ Furthermore, the proclamation stipulates that “government, being the owner of rural land, can change communal rural land holdings to private holdings as may be necessary.” It has been noted in the foregoing discussion that in accord with the Ethiopian constitution, land belongs to the State and the Nations, Nationalities and Peoples of Ethiopia and that private entities only have use rights. The regional land use and administration proclamation also affirms that the government could create or undo communal ownership of rural land as it could transfer land holding from communal use to use by private entities.

However, field research has elicited evidences to the contrary as it was learnt that World Bank and World Vision Australia actually warned the local government to stop constructing a road that cuts through the enclosed forested space (a road being built for facilitating development in the *Wereda*) via a threat that “ what is being done is being followed via satellite images and that if the local government continues constructing the road that the World Bank will be forced to cut 20,000.00 birr from the annual revenues of each of the seven *Kebele* cooperatives”. In reply to the threat, the local government (fearing that the World Bank would stop paying the income from the sale of carbon credits) compensated a 10 hectare lost through the road construction by granting 24 hectares of land.⁶⁷⁹ This does not, de facto, show that the government exercises authority over land use illustrating how colonial the experience of local government and people is in terms of the governance of resources involved in climate mitigation schemes with direct implication for the right of self-determination of the peoples of Ethiopia in terms of

⁶⁷⁷ In-depth interview with the forest resources mobility specialist of *Humbo Wereda*.

⁶⁷⁸ Article -5((10) of The Southern Nations, Nationalities and Peoples Regions Proclamation No.110/2007

⁶⁷⁹ In-depth interview with the Directorate Director of *Wolaiyta Sodo* Zonal Administration EPA Office.

use of natural resources within the limits of their territories as stipulated under article -1 of the ICCPR.

As regards dispute resolution, in accord with SNNPRs land use and administration proclamation, when disputes arise over rural land holding right, the case shall be brought to *Kebele* land administration committee which shall let the dispute be resolved by negotiation and arbitration through local elders set by the choice of the two parties.⁶⁸⁰ The proclamation further stipulates that appeals could made to the *Wereda* court if a party is not satisfied with the decisions of the arbiters , then to the Higher Court and if the higher court could resolve the case final decision could be sought at the regional Supreme Court of cassation.⁶⁸¹

6.7. Rights Implications of Cooperative Societies Establishment Proclamation No. 985/2016.

The *Humbo* A/R CDM project established primary cooperatives under each of the seven *Kebele* administrations surrounding the project site. The cooperatives have legal ownership of the 2728 hectares of community land.⁶⁸² The cooperatives are tasked with the management of the forest based resources and beneficiaries of income steams accruing from the sale of carbon credits generated via the project. These cooperatives have been established in accord with the Cooperative Societies Establishment Proclamation No. 985/2016 of Ethiopia. This section seeks to see the human rights implications of the proclamation.

The proclamation defines “cooperative societies” as “an autonomous association having legal personality and democratically controlled by persons united voluntarily to meet their common economic, social and cultural needs and other aspirations, which could not be addressed individually, through an enterprise jointly owned and operated on the basis of cooperative principles.”⁶⁸³ The proclamation distinguishes between different levels of organizations of cooperative societies including “primary cooperative societies”, “cooperative societies union”, “cooperative society’s federation”, “cooperative society’s league and other levels. While “primary cooperative societies” refers to a cooperative society established by individuals having similar interest and objective, with a minimum number of members prescribed in the proclamation, to produce, provide services or to engage in both activities, “ cooperative societies union” refers to

⁶⁸⁰ Article -12 (1) of the SNNPR land use and administration proclamation.

⁶⁸¹ Ibid (2),(3) &(4).

⁶⁸² PDD of Humbo A/R CDM project

⁶⁸³ Article -2(1) of Cooperative Societies Establishment Proclamation No. 985/2016

a secondary level cooperative society established by primary cooperative societies having similar objectives with a minimum number of members prescribed in the proclamation to produce, provide services or to engage in both activities that are beyond the capacity of primary cooperative societies.”⁶⁸⁴ The minimum number of members of a primary cooperative society is prescribed to be not less than fifty (50) and that for a cooperative society union is two (2) primary cooperative societies.⁶⁸⁵ The residents of the seven *Kebeles* that surround the 2,728 hectares of land were called on to organize themselves under primary cooperative societies which amalgamated themselves to form *Humbo* forestry and agro-forestry development union.

The proclamation, furthermore, identifies and defines objectives and principles under the guidance of which cooperative societies are meant to function. The objectives for the realization of which cooperative societies are established include, inter alia, overcoming economic and social problems, orchestration of collective knowledge, labor and resources to meet collective goals, promotion of self –reliance among members, reduction of costs of inputs for production and ensuring accessibility of markets for the produce of members, support for entrepreneurship and develop social and economic capacity of members.⁶⁸⁶ The principles of cooperative societies include, inter alia, membership on voluntary basis, democratic participation, sharing dividends from surplus in accord with shares and participation, the need to maintain their autonomy and ensure the sustainable development of their community through policies approved by members.⁶⁸⁷ Cooperative societies are expected to uphold such values as self-help, self-responsibility, promoting the culture of democracy, equality and solidarity.⁶⁸⁸

As regards the human rights implications of the proclamation, it is key to note that cooperative societies are established to overcome, on their own, the economic and social problems which they would have failed to do, had their members strived individually. Now, in accord with article -12 of the Kyoto protocol a CDM project has a triple objectives of allowing the developed world involved meet its emission reduction commitment cheaply, bring about reduction in overall emissions of GHGs contributing to the global goal of stabilizing GHGs at

⁶⁸⁴ Ibid , sub-art.(2)&(3)

⁶⁸⁵ Article -7 & 14 of the Proclamation

⁶⁸⁶ Article -4 of the Proclamation

⁶⁸⁷ Article- 5 of the Proclamation

⁶⁸⁸ Article – 6 of the Proclamation

safe level and meeting the sustainable development priority of a host state.⁶⁸⁹ Hence, the social and economic challenges of the residents of the seven *Kebeles* (or the fulfillment of livelihood rights of the residents) was meant to be directly fulfilled by the project developer and implementer by way of meeting the requirement of sustainable development contribution of *Humbo A/R CDM* not through the active engagement, labor, knowledge, and other forms of participation of the members of the cooperative societies. The cooperative society's proclamation objectives and the objectives of article -12 of the Kyoto protocol could be taken aligning in terms of working on the forest rehabilitation and reforestation and the resultant generation of carbon credits. This is to say that the sustainable development contribution of the project is meant to pay for the fulfillment of livelihood rights foregone due to enclosure of the site directly emanating from the obligation of the project developer and implementer under article -12 of the Kyoto protocol not through the establishment of the primary cooperative societies. Differently stated, the local residents did not have to establish primary cooperatives to address their foregone right to adequate standard of living due to enclosure of the land, this right is meant to be fulfilled directly through the sustainable development contribution of the project.

Secondly, while the idea of aligning the objective of establishing primary cooperative societies and the utilization of farmer managed forestry and agro-forestry development climate mitigation project seems to be skillfully crafted, it is not in congruence with government's human rights obligations of safeguarding and fulfilling the right to adequate standard of living in the context of fighting climate change as the by-laws of cooperatives are expected to set requirements for membership. For example, field research elicited that membership fee for *Humbo* primary cooperatives was initially 10 birr but later became 110 birr where 10 birr is a registration fee and a 100 birr is spent to buy coupon (share).⁶⁹⁰ Thus it is not only those who are voluntary that become members but those who, in addition to being voluntary, have to pay for membership fees and also buy coupons or shares to be members. So when each of the primary cooperatives generate income from the sale of carbon credits annually the income obtained is not distributed among all *Kebele* residents but only among those who are members of primary cooperatives. But the income stream obtained as a result of sale of carbon credits was meant to pay for the right to adequate standard of living of each of the residents of the *Kebeles* involved in

⁶⁸⁹ Article -12 of the Kyoto Protocol

⁶⁹⁰ Interview with a previous *Kebele* cooperative leader of *Abela Longena* primary cooperative.

the project. So the very organization of local residents under the umbrella of primary cooperatives established on the basis of cooperative societies establishment proclamation no.985/2016 does not ensure that fulfillment of the right to adequate standard of living of local residents which the implementation of *Humbo A/R CDM* compromised via enclosure of the land previously used for livelihood support of the residents.

As regards the rights implications of *Humbo* forestry and agro-forestry by-law, two issues are noteworthy: i) the provisions about the utilization of forest based resources and; ii) as regards the management of income generated from the sale of carbon credits and the union's role of negotiating terms of agreement with the buyer of generated carbon credits. The by-law forbids the utilization of forest-based resources by members unless such provisions are stipulated by the general assembly.⁶⁹¹ The by-law prohibits felling in the enclosed forested land, collecting fuel wood (collecting dead woods is allowed), grazing, making charcoal, collecting woods or practicing hunting.⁶⁹² Wherever possibility of use of forest –based resources is permitted it is in accordance of regulation and plans formulated by the forest –based resources management committee. As has been discussed in chapter -6 , actual use of forest based resources is highly prioritized and even those proposals of use for realizing public interests such as those for building schools and furniture in schools have to pass through a long chains of bureaucratic processed involving relevant *Wereda* EPA offices.

The rights implications here is that the *Humbo A/R CDM* project does not, in practice, rely on community management of sustainable utilization of forestry to meet the livelihood demands of local residents as it does not allow the residents to collect fodder for their livestock, collect fuel woods, construction woods, or let cattle graze in a manner that does not harm the forest. This, therefore, constitutes the compromise of the right to adequate standard of living of local residents. Secondly, in accord with the by-law, the union not only manages the utilization of the income generated through the sale of carbon credits but also plays the role of negotiating with buyer in the international markets. In this connection, field research elicited that there has not been transparency in how the carbon credits generated was sold in the international markets. It was said that initially the price for a tone of carbon sequestered via the project was \$4 which is said to later become \$10 and \$11 after having been told that for a given ton of carbon

⁶⁹¹ Article -18 (6) of *Humbo* forestry and agro-forestry development union by-law.

⁶⁹² Ibid , Article – 18 & 19

sequestered the price was fixed and that it was set to be \$4.⁶⁹³ So the union was clueless about at what rate the Certified Emission Reduction Unit was sold and neither did it have the capacity to ensure that purchase agreements are transparent and that the interests of the primary cooperatives are protected during negotiations. The union's request for clarity about the whereabouts of the emergency funds which the World Vision Ethiopia said would be accumulated and finally given for the primary cooperatives when the crediting period ends was reportedly left unaccounted for and was the reason why the union's previous leader had to resign.⁶⁹⁴ The point, here, is that the income which the primary cooperatives and their members get from the sale of carbon credits (which constitutes a payment for the forgone livelihood rights due to enclosure of the land) has been manipulated by players involved in the implementation of the project and that the union is not capacitated to competently monitor purchase agreements and ensure the protection of the local residents' interests during negotiations with the buyers (in this case World Bank) in the international markets. This produces the effect of cheaply sold carbon credits and limitedness in adequately protecting the right to adequate standard of living of local residents.

By and large, the people in the seven *Kebele* administrations of *Humbo Wereda* have compromised their right to development as their government ratified the UNFCCC and its market-based climate mitigation mechanisms. The ratification of the instruments of the UNFCCC has also compromised the right to development, the right to a clean and healthy environment and the right to self-determination of peoples enshrined under article-1 of the ICCPR. Though it could not be specifically explained as in direct causal relationship the ratification of the instruments of the UNFCCC by the Ethiopian government has not led to effective reductions in the buildup of GHGs, stabilization of climate and prevention of human rights harms linked to the adverse effects of climate change.

⁶⁹³ In-depth interview with a climate change and environmental risk management specialist working as a liaison officer for World Vision Ethiopia in *Wolayita Sodo*.

⁶⁹⁴ In-depth interview with the previous leader of *Humbo* forestry and agro-forestry development union.

Chapter Seven

The Human Rights Implications of *Humbo* A/R CDM Policy Tool

Humbo A/R CDM Project: Introduction

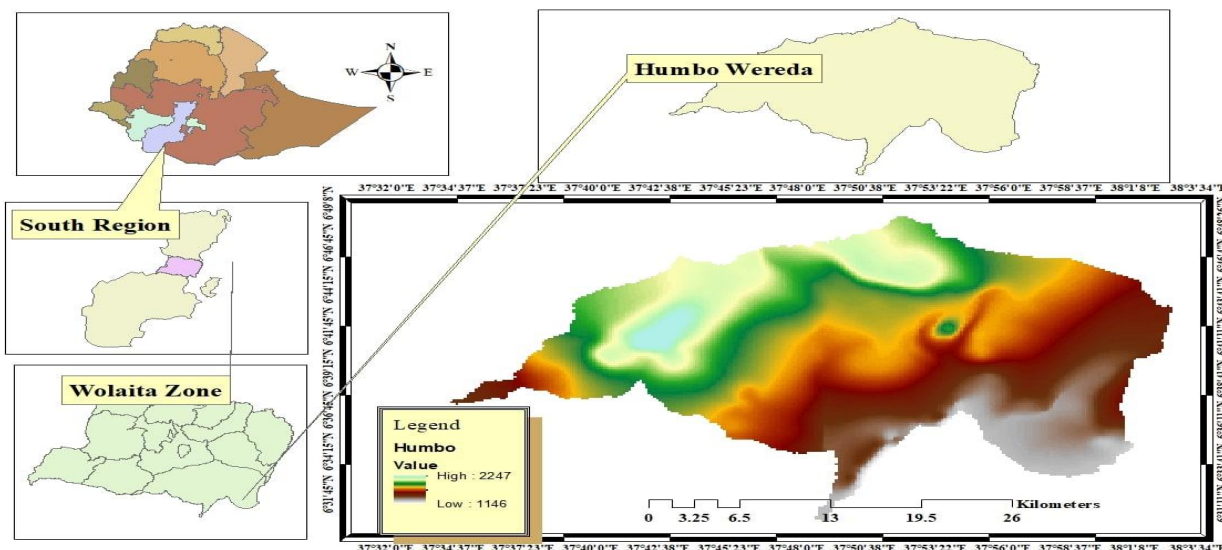
Humbo Afforestation /Reforestation (A/R) Clean Development Mechanism (CDM) project, in Ethiopia, is a large scale policy implementation of one of the Kyoto protocol's three (3) flexible mechanisms operationalized to contribute to the achievement of the climate mitigation goal set under article 2 of the UNFCCC. It is a CDM project that covers a mountainous area spreading over 2,728 hectares.⁶⁹⁵ The project has been implemented in a district, which now has been divided into three autonomous districts⁶⁹⁶, in the *Welayita* zonal administration of the Southern Nations Nationalities and Peoples Region (SNNPR) of Ethiopia. The district is located 25kms from the zonal capital *Sodo*, 195 km from the regional state capital *Hawassa* and about 430 km from Addis Ababa (the capital of Ethiopia). The relative location of the district is such that it is bordered by *Kindo Kosha* district in the East, *Sodo Zuria* district in the North and *Boloso Bombe* district in the South. Astronomically, the district (*Humbo Tebella*) is located between 6°46' 48.47 N and 6° 41' 04.28 N latitudes and 73° 48' 35.44 to 73° 55' 14.5 E.⁶⁹⁷ The following maps show the relative location of Ethiopia in the African Continent, *Wolayita Sodo* in the SNNPR region in Ethiopia and the project site in *Wolayita Sodo* Zonal Administration. Map -2. Location of Ethiopia in Africa, Southern region in Ethiopia and *Humbo* in *Wolyita* Zone.



⁶⁹⁵ PDD of the *Humbo* Project

⁶⁹⁶ *Humbo* used to be an autonomous *Wereda* administration of the *Welayita Sodo* zonal administration of the SNNPR region of Ethiopia which presently is sub-divided into *Humbo*, *Abela* and *Hobbicha* *Weredas*. Despite the changes in the geographic scope of the administrative *Weredas*, the project area spreads across all the three newly formed administrative *Weredas*.

⁶⁹⁷ Ibid



The *Humbo* Assisted Natural Regeneration of Native Species of trees project involves the restoration of indigenous tree species in a mountainous region of the SNNPR region in Ethiopia with the aim of contributing to the attainment of the objective set under article 2 of the UNFCCC⁶⁹⁸. It is proposed to do so through assisted natural reforestation and afforestation activities thereby sequestering carbon via enhancement of sinks. The project is said to have employed the farmer managed assisted natural regeneration of indigenous tree species technique to achieve its goal of mitigating GHGs emissions through enhancement of removals. Moreover, the project aims, states the project design document, to contribute to sustainable development via regeneration of native forest, enhancement of removals by sinks, promotion of native forest and biodiversity, reduction in soil erosion, flooding, and maintain the supply of subterranean streams to support the region's water supply⁶⁹⁹. In addition, the project also identifies the provision of income streams for local communities through sustainable harvesting of forest resources as a sustainable development contribution⁷⁰⁰.

The project design document (PDD) enlists the following as how it sets out to achieve its goal of climate mitigation and contribute to sustainable development;

Restoration of approximately 2,728 hectares of bio diverse natural forest in *Humbo Wereda* using indigenous and naturalized species; community management

⁶⁹⁸ Ibid

⁶⁹⁹ Ibid

⁷⁰⁰ Ibid

of public land with multiple objectives of promoting natural resource management, poverty alleviation and biodiversity enhancement; development of a model of community land use that would enhance GHGs removals by sinks from regenerating native vegetation which can be replicable in other regions of Ethiopia; formation of Seven(7) community cooperative societies and securing legal title to manage the proposed regeneration area, adopting a constitution and by-laws to manage the project; establishment of institutional structure with right to the Certified Emission Reductions (CERs) generated from the site; establishment of a system to monitor the carbon stocks and recording and reporting on the changes in carbon stocks; and establishment of a system to monitor the environmental and social issues relevant to the project.⁷⁰¹

The project participants are the Federal Democratic Republic of Ethiopia's (FDRE's) government, Federal Environmental Protection Authority (FEPA), World Vision Ethiopia and World Vision Australia, the World Bank (The World Bank Bio carbon Fund), the government of Canada, Regional Government Departments (Bureau of Agricultural and Rural Development Office and same department of *Humbo district*), Farmers Forests' Union and Jaco CDM Limited.⁷⁰² The FDRE's government is the host state while WVE and WVAU are the primary proponents and project developers. The World Bank is the buyer of carbon credits generated through the project where its fund for the project is paid for by the government of Canada. The Federal EPA is the Designated National Authority (DNA) of Ethiopia and the Jaco CDM is the Designated Operational Entity (DOE) which validated the PDD and its implementation⁷⁰³. The federal and regional government agricultural and rural development bureaus are relevant in ensuring development and formulation of forest management and utilization of forest based resources apart from monitoring the implementation of land use and administration proclamations at their respective levels. Farmers' Forest Union is entitled to the rights of the

⁷⁰¹ Ibid

⁷⁰² PDD of *Humbo*; B. Biryahwaho et al., Institutional Innovations in African Smallholder Carbon Projects : The Case Study of Humbo Ethiopia Assisted Natural Regeneration Project, (2012), CCAFS Report No.8, CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS) available online at: <https://assets.publishing.service.gov.uk/media/57a08a85e5274a27b2000639/AfricanAgCarbon-CaseStudy-Humbo.pdf> > accessed on 9 December 2022.

⁷⁰³ Ibid

Certified Emission Reductions (CERs), manages the conservation and sustainable utilization of forest –based resources within the project boundary.

The project began on December 1, 2006 which also is the beginning of the first crediting period with an expected operational life time of more than 60 years.⁷⁰⁴ And the length of the fixed crediting period the project spans is 30 years of which more than 16 years have already elapsed. Certified Emission Reductions (CERs) or carbon credits generated in each of these years have already been sold and income accrued from the sale of the credits has been distributed to the bank accounts of the Seven (7) *Kebele* cooperatives via Word Vision Ethiopia and the Farmer’s Forest Union⁷⁰⁵. The project has, presently, ceased its contractual agreement with the World Bank, which used to be the buyer of the carbon credits it has been generating, and is planning of selling carbon credits in the international voluntary markets.⁷⁰⁶

The Human Rights Implications of *Humbo A/R CDM* project: *Findings from Bosa Wanche, Abela Longena and Hobbica Bada Weredas*

A. Implications for Procedural Human Rights

The Implications for the right to Free, Prior, Informed Consent of Local People

Though not yet legally binding, the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) recognizes the right of indigenous peoples to a free, prior and informed consent in the context of implementation of projects affecting their lands or territories. This is enshrined under article 32(2) which states that;

States shall consult and cooperate in good faith with the indigenous peoples concerned through their own representative institutions in order to obtain their free and informed consent prior to the approval of any project affecting their lands or territories and other resources, particularly in connection with development, utilization, or exploitation of mineral, water or other resources.⁷⁰⁷

⁷⁰⁴ PDD of the *Humbo* Project

⁷⁰⁵ Interview with the leader of Farmers’ Forest Union

⁷⁰⁶ Interview with the climate change and Environmental Risk Management Officer serving as a senior expert at World Vision lesion office in *Wolaiya* zonal administration of the SNNPR region.

⁷⁰⁷ Article 32(2) of the UNDRIPs

A relevant question, here, relates to whether or not local people in *Bosa Wanche*, *Abela Longena* and *Hobbicha Bada Kebeles* of the present *Humbo*, *Abela* and *Hobbicha Weredas* qualify the definition of indigenous people. In this connection, while the UNDRIP does not offer a definition as to what constitutes an indigenous people or what qualifies the description of indigeneity to a people, the ILO Convention 169 on the rights of Indigenous and Tribal People of 1989 identifies tribal people;

as people in independent countries whose social, cultural and economic conditions distinguish them from other section of the national community and whose status is regulated wholly or partially by their own customs or traditions or by special laws or regulations or as people in independent countries who are regarded as indigenous on account of their descent from the population which inhabited the country or a geographical region to which the country belongs at the time of conquest or colonization or the establishment of the present state boundaries and who, irrespective of the their legal status, retain some or all of their own social, cultural and political institutions.⁷⁰⁸

The Convention further enshrines, under the same article sub-article 2 that, self-identification as indigenous or tribal shall be regarded as a fundamental criterion for determining the group to which the provisions of the convention applies.⁷⁰⁹ The self-identification criterion is expressed in the UNDRIP via the right of indigenous individuals and peoples to belong to an indigenous community⁷¹⁰ as well as through the parallel right of indigenous people to determine their own identity and membership according to their customs and traditions.⁷¹¹ This thesis also relies on the self –identification criterion to qualify the local or tribal people in *Bosa Wanche*, *Abela Longena* and *Hobbicha Bada* as belonging to indigenous people bent on their responses to an inquiry about how they describe their settlement to the areas. Accordingly, it was found out that in *Bosa Wanche Kebele* about 90 % of the research participants said that they are indigenous inhabitants of the area as shown in the table below.

⁷⁰⁸ Article 1(a) and (b) of the ILO Convention on the rights of Indigenous and tribal peoples.

⁷⁰⁹ Article 1(2) of the ILO Convention 169

⁷¹⁰ Article 9 of the Declaration

⁷¹¹ Article 33 (1) of the Declaration

Table 2. Indigeneity of Local People in Bosa Wanche Kebele of Humbo Wereda.

Age Categories (f)		How do you describe the nature of your settlement in the area ?											
		I came here through settlement			I am an indigenous inhabitant			I came here due to job transfer			I am here temporarily		
		Gender			Gender			Gender			Gender		
C.	f	M.	F.	Total (%)	M.	F.	Total (%)	M.	F.	Total (%)	M.	F.	Total (%)
20-25	4			-	3		4.3%		1	1.4%	-	-	
25-30	3			-	-	5	7.1%	2		2.9%	-	-	
30-35	9	2		2.9%	4	3	10%			-			
35-40	-		1	1.4%	11	1	17.1%	1		1.4%	1		1.4%
40-45	20			-	17		24.3%	-		-			
45-50	10	-		-	-	6	8.6%	-					
50-55	8			-	1	-	1.4%	-					
55-60	7	-		-	-	2	2.9%	-					
>60	9	-		-	9	1	14.3%	-					
Total	70	2	1	4.3%	45	18	90 %	3	1	5.7%	1	-	1.4%

Source: Survey Questionnaire

It is also seen in the table above that 4.3% of the respondents shared that they came to the area through settlement, 5.7% through job transfer and 1.4% of them as only temporary residents of the area. In *Abela Logena Kebele*, about 98% of the research participants identified themselves as indigenous inhabitants while 1.4 % of them said they came to the area as settlers and other 1.4% indicated that they only are temporary residents of the area. In *Hobbicha Bada Kebele* of *Hobbicha Wereda*, it was found out that 99% of the research participants identified themselves as indigenous inhabitants with ancestral origins in the area while 1.4 % shared that they only were temporarily residing in the area.

Thus, it is learned via the inquiry that the great majority of the residents of the three *Kebeles* in the *Weredas* are indigenous inhabitants with ancestral origins in the area. This is also ascertained through the FGDs held with leaders of *Bosa Wanche Kebele* cooperative (a member of forest union association) where it was discussed that the great grandfathers of the participants used to use a wide variety of tree species for various purposes including medicinal plants for

their livestock, for the people, hard wood trees for construction purposes, fuel woods and as grazing fields for their cattle⁷¹². It was highlighted that the ancestors of the FGDs participants did not suffer from depletion of forest based resources and that they had a rich tradition of using the various tree species as medicine, for construction purposes and that they used to have indigenous wisdom in managing the forest-based resources. Therefore, it is taken, in this research, that the local people in the *Kebeles* qualify an indigenous people both in accord with the ILO Convention 1989 , No.169 definition of indigenous people and the self –identification criterion it recognizes and the interpretation of the relevant articles of the UNDRIP indicated above.

Thus local people in the three *Kebeles* are entitled to the right to free, prior and informed consent as regards planning, development, and implementation of the Afforestation/ Reforestation Clean Development Mechanism (CDM) Project. Furthermore, Articles 19 of the ICCPR and the UDHR recognize the right of all persons “to seek, receive and impart information” as regards ideas of all kinds.⁷¹³ The right to receive information is also recognized under article -9 of the African Charter on Human and Peoples Rights.⁷¹⁴ In this connection, both the ICCPR and the UDHR require states to provide public access to any government information of public interest.⁷¹⁵ This right is very important because it is viewed as a requisite right to the exercise of other procedural rights relating to public participation and access to remedies which themselves have been interpreted as being critical to the exercise of such substantive human rights as the right to life, health and privacy.⁷¹⁶

In addition, the UNFCCC defines similar obligations with respect to assessing and disclosing information related to climate change. More definitively, Art.4(1)(h) requires states to “promote and cooperate in full, open and prompt exchange of relevant scientific, technological, technical, socio-economic and legal information related to the climate system and climate change, and to the economic and social consequences of various response strategies.”⁷¹⁷ The right to information and corresponding obligation to acquire information through environmental impact assessments (EIA) and other mechanisms, and to communicate that information to the public are

⁷¹² FGDs with leaders and members of *Bosa Wanche* Forest Union cooperative.

⁷¹³ Article 19 of the ICCPR ; Article 19 of the UDHR

⁷¹⁴ Article -9 of the African Charter on Human and Peoples Rights

⁷¹⁵ Human Right Committee , General Comment No. 34, pp.18-19 , UN Doc. CCPR/C/GC/34 (12 Sept.,2011)

⁷¹⁶ See ICESCR General Comment No.14 , p.3 UN Doc. E/C 12/2000/4 (11 August 2000)

⁷¹⁷ Article 4 (1)(h) of the UNFCCC

also included in the Rio Declaration⁷¹⁸, the Aarhus Convention⁷¹⁹, and a variety of other Multilateral Environmental Agreements (MEAs).⁷²⁰ The question, then, is have these rights of the local residents to a free, prior, informed consent; to seek, receive and impart information been respected before the implementation of the project. In this regard, there have been collected contradictory findings from the field research as the information found out via the survey does not reconcile with the in-depth individual interviews and FGDs held in each of the *Kebeles* the study covered. Survey questionnaire elicited that most of the research participants took part in several meetings where they were informed and discussed about the plan of implementing the project activities in meetings organized by local government representatives and the project implementing NGO (World Vision Ethiopia) representative as shown in the table below.

Table 3. Information Communication about the Plan of the Project in Bosa Wanche Kebele of Humbo Wereda.

Age Categories (f)		Have you been informed about the plan of implementing the project in the area in any way from a local government agent ?											
		No, No body told us about the plan .			Yes, we were informed and discussed about the project properly			I don't remember about meetings and discussion as regards the plan of the project.			The plan might have been shared with some selected residents but not to all of us .		
		Gender			Gender			Gender			Gender		
C.	f	M	F	T (%)	M.	F.	Total (%)	M.	F.	Total (%)	M.	F.	Total (%)
20-25	4				4		5.7				1		1.4
25-30	3				3		4.3						
30-35	9				9		12.8						
35-40	-												
40-45	20				20		28.6						
45-50	10				10		14.3						
50-55	8				8		11.4						
55-60	7				7		10						
>60	9				8		11.4						
Total	70			-			98.5						1.4

⁷¹⁸ Rio Declaration on Environment and Development

⁷¹⁹ Articles 4, 5, 6, 7, 8 & 9 all are relevant in the context of climate change and response measures. Though the convention involves European states it is believed that it could be taken as constituting customary international law or as *Jus Cogens*.

⁷²⁰ Convention on Biological Diversity (CBD), Art. 13; UN Convention on Law of the Sea (UNCLOS), Art. 244; Protocol on Environmental Protection to the Antarctic Treaty, Annex I; Convention to Combat Desertification (CCD), Arts. 5(d), 10(f); Montreal Protocol on Substances that Deplete the Ozone Layer, Art. 9

Source: Survey Questionnaire

The above table shows that most of the research participants in *Bosa Wanche Kebele* of *Humbo Wereda* (98.5%) of them said that they were informed and discussed about the plan of implementing the project in the project area. The percentage of research participants who were informed and discussed about the plan of implementing project activities in the project area in *Abela Longena* and *Hobbicha Bada Kebeles* of *Abela* and *Hobbicha Weredas* is 97 % and 95% respectively. So survey research showed that local people in the sample *Kebeles* were informed and discussed about the plan of implementing the project activities in the project area. Whereas in-depth individual interviews and FGDs held in the sample *Kebeles* elicited information that appears to be contradictory to that elicited via the survey questionnaire.

An in-depth individual interview with a *Kebele* administration leader in *Abela Longena* who took part in the task of introducing the plan of implementing the project activities to local residents with World Vision Ethiopia experts elicited that local people, in the first attempts of introducing the plan of the project, were fiercely opposed to the plan of the project. The *Kebele* administration leader who took part in the campaign of introducing the project plan recapitulated what he encountered as follows;

When the project idea was introduced to the local people, it was met with fierce resistance from the local people because it entailed enclosure of the 2,728 hectares of mountainous land the local people used to use for various purposes. The opposition to the project idea, in *Abela Longena*, was so fierce that in the initial meetings held with the *Kebele* residents, the residents came with local swords (locally called *Gejera*) in trying to kill the World Vision Ethiopia expert who only managed to escape with my help in which I facilitated his safe way out of the *Kebele*. The threat was not only to his life but also to my life too. Having heard that the project involved enclosure of the area, the residents got angered, left out of the meeting hall, tried to block our way out of the *Kebele* and tried to kill us. I had to sleep

hiding in nearby banana plantations for six (6) days in trying to save my life before I left the *Kebele* safely.⁷²¹

So as can be read from the above response to an in-depth interview, it cannot simply be said that there had been prior information communicated to the local people and effective discussions held about the plan of implementing the project in the area. Thus, it is seen that the process of providing information and holding discussions about the plan of the project is more complex than what the data from the survey questionnaire would suggest.

In this connection, FGDs held with cooperative leaders in *Bosa Wanche* elicited that there had to be conducted three to four repeated meetings with the residents of each *Kebele* involved to convince them of the benefits of the project to the local residents. Even after having these repeated meetings to try to convince local people of the benefits of the project, those who were receptive of the project ideas were threatened with their lives and rejected from the social lives of the residents.⁷²² In one of the *Kebeles* which the project encompasses, the *Kebele* leader was told to leave the *Kebele* having regarded his acceptance of the idea of the project as “alien”.⁷²³ This shows that despite the recognition by the local residents that there have been repeated meetings held where information about the plan of the project is communicated and discussions about it held as elicited via survey questionnaires, there exists a clear evidence to see that there has not been a unanimous support of the project plan and idea and that there hasn’t been a genuine consent granted to the project developer and implementer to proceed with the implementation of the project activities.

The allegedly successful attempt of convincing the local residents, as discussed by World Vision Ethiopia liaison officer in *Wolayita Sodo*, is the approach of using selected religious leaders, senior residents with positive minds about the project, women and the youth to try to convince local residents to accept the plan and idea of the project. In accord with the liaison officer, these people were given intensive trainings which enabled them understand the benefits of the project to local people. These people, in turn, were sent to convince local residents in their respective *Kebeles* about the advantages and importance of the project plan which he believes

⁷²¹ In-depth interview held with the then *Abela Longena Kebele* administration leader who later became the leader of Farmers’ Forest Development Union formed out of the Seven (7) local cooperatives the project encompasses.

⁷²² Interview with a Climate Change and Environmental Risk Management Specialist serving as the liaison officer of World Vision Ethiopia in *Wolayita Sodo* zone.

⁷²³ FGDs with leaders of the *Bosa Wanche Kebele* Forest Development Cooperative

ended up being successful.⁷²⁴ World Vision Ethiopia and local *Kebele* leaders were, even said, to have used the protestant churches in the *Kebeles* to try to convince local people about the importance of the project. This could be taken as an attempt to use religion to shape minds of local residents about the benefits and advantages of the project. However, it appears that the weight of the evidence leads the researcher to conclude that the project is rather imposed upon the local residents instead of being willfully adopted and consensually implemented. This is reflected in the light of the fact that there are sporadically witnessed attempts of deliberately setting fire on the enclosed forested project area by local peasants in such *Kebeles* as *Bosa Wanche*, *Bolla Wanche* and *Hobbica Bada*.⁷²⁵

The other related finding is again witnesses of fights between local farmers and members of cooperative leaders in several *Kebeles* (including *Bosa Wanche*, *Abela Longena*, and *Hobbicha Bada*) over utilization of grazing fields for their livestock. Grazing land in the study *Weredas* is a very limited resource compared to livestock population. So farmers are forced to let cattle graze not only in the enclosed project land but also crossing boundaries of land they are not entitled to use and manage under the project i.e. crossing the boundaries of land allotted for other adjacent *Kebele* cooperatives established under the project. This often brings about conflicts between, on the one hand, local residents and cooperative leaders and, on the other, peoples in adjacent *Kebele* cooperatives.⁷²⁶ This shows that there had not been adequate discussions conducted about how the need for pasture lands after enclosure of the project site is going to be addressed during implementation of project activities. This does, therefore, limit the exercise, by local residents, of their right to a means of subsistence. It also reflects the fact that social and environmental impacts of the project has not been communicated by the project developer, it has not been evaluated by the DNA of the federal state⁷²⁷ and has not been agreed upon by the local people and communities.

⁷²⁴ Interview with World Vision Ethiopia liaison officer in *Wolayita Sodo*

⁷²⁵ Interview with a monitoring expert of forest resources utilization and distribution.

⁷²⁶ In-depth interview with Humbo Wereda forest resources mobility monitoring specialist and the agriculture and rural development officer in *Bosa Wanche Kebele*.

⁷²⁷ In this regard, the researcher's attempt to conduct an indepth interview with the Federal EPA's projects' environmental impacts assessment specialist was constrained by simple responses that the office does not conduct Environmental and Social Impacts Assessments for such "small project" as Humbo A/R CDM project while the office being the DNA (Designated National Authority) in accord with the governance structure of CDM projects is duty bound to ensure that the environmental and social impacts of the project are adequately addressed and consensually negotiated by the local people substantiating the failure on the part of the federal government of

Despite convictions on the part of the project developer (WVE) and the federal EPA⁷²⁸ about the conduct of adequate discussions with the local people and the receipt of their consent, field research suggests that however the consent is managed to be received it was not done so via proper discussions of how the livestock's need for pasture land after the enclosure of the project site and the problem of leakage is going to be addressed. Proper discussion of the matter would have included exhaustive presentations of the environmental and social impact assessments (ESIA) of the project which the Ethiopia's Designated National Authority (DNA): Federal Environmental Protection Authority (FEPA) has approved and all questions posed by members of the local communities adequately responded to and a negotiated consent reached. But contrary to these findings survey research tends to shape the view that there have been conducted discussions with the local people which led local people to grant their consent for the implementation of the project activities as illustrated in the following table.

Table -4. Local People's Participation in granting their consent to the plans of the project in Bosa Wanche Kebele.

Age Categories (f)		How do you assess the participation of local people in giving their consent to the implementation of the forest rehabilitation scheme ?											
		All kebele residents had adequate info. and were willing .			It was only those who were chosen to participate that gave their consents to the scheme .			There had not been the platform where we participated to decide on the matter .			It was only those who were willing to participate that decided on the matter.		
		Gender			Gender			Gender			Gender		
C.	f	M	F	T (%)	M.	F.	Total (%)	M.	F.	Total (%)	M.	F.	Total (%)
20-25	4	4		5.7							1		
25-30	3				3		4.3				-		
30-35	9	9		12.9									-
35-40	-												
40-45	20	20		28.6									-
45-50	10	9		12.9					-				
50-55	8				8		11.4		-				-
55-60	7				7		10		-				-
>60	9	3		4.3	6		8.6		-		-		
Total	70	64.4			34.3			1.4					

Source: Survey Research

Ethiopia to observe its obligations to respect and protect human rights amidst the implementation of climate policy it endorsed.

⁷²⁸ In-depth interview held with the national coordinator of REDD+ program elicited information confirming that there are signatures of assemblies of all *Kebele* residents ascertaining the alleged fact that local people gave their consent to the project ideas and activities.

As can be seen from the table about 64.4 % of the research participants say that “all *Kebele* residents had adequate information and were willing to have the project plan be implemented” and 34.3 % of them saying that “it was only those who were chosen to participate that gave their consent to the scheme” in *Bosa Wanche kebele*. The percentages of those who said all *Kebele* residents had adequate information and gave their consent in *Abela Longena* and *Hobbicha Bada* are 66 and 63 respectively.⁷²⁹ Whereas those who said “it was only those who were chosen to participate that gave their consents to the scheme “constituted about 34 % and 37 % in *Abela Lonegna* and *Hobbicha Bada* respectively.⁷³⁰ So while the information that the majority of the residents along the project site were summoned in meetings still holds true in accord with the table above, there are evidences both from the survey and qualitative data sources that absolutely all residents of the *Kebeles* involved were not given chances to hear about the plan of the project.

The legal underpinning recognizing the right of everyone to take part in the government of his country and conduct of public affairs is enshrined under Article 21 of the UDHR, Article-13 of the Banjul Charter and Article 25 of the ICCPR. Article 25 (a) of the ICCPR, for example, states that “every citizen shall have the right and opportunity to take part in the conduct of public affairs, directly or through freely chosen representatives.” The right, hence, entitles local people the right to take part in making decisions as regards the worthwhileness of such climate mitigation responses as A/R CDM projects. Moreover, human rights treaty bodies have established that governments have obligations to facilitate public participation in environmental decision- making in order to protect human rights against environmental harm.⁷³¹

In the light of the foregoing discussion, it is suggested that the plan and implementation of the project did not respect the right of the local and indigenous people to a free, prior and informed consent as recognized under article 32(2) of the UN Declaration on the rights of Indigenous Peoples. Moreover, though there are evidences, as shown above that the *Kebele* residents are aware about the plan of implementing the project, it is difficult to say that the residents were communicated of all positive and probable negative social and economic impacts of implementation of the project illustrating a compromise of the right of the local people to get access to information about the social and environmental impact assessment of the project. In the

⁷²⁹ Survey research questionnaire

⁷³⁰ Ibid

⁷³¹ See ICESCR General Comment No.15, p.56, UN Doc. E/C 12/2002/11 (Jan.20,2003)

light of evidences that substantiate the inadequacy of alternative livelihood strategies which local people mentioned about during field research, sporadic conflicts between adjacent *Kebeles* over scarce grazing fields whose areal expanse was constrained by the introduction of the project and witnesses of repeated deliberately set forest fires it is rather sensible to say that the project is imposed upon the local communities.

Implications for the right to get access to Administrative, Judicial and Other Remedies

The implementation of *Humbo* A/R CDM project across *Humbo*, *Abela* and *Hobbicha Weredas* was concomitantly witnessed to have brought about a widely felt violation of the right of local residents to adequate standard of living. This happened as an indirect effect of the success of the project in restoration of the ecological resources of the area it covered. As the result of the implementation of the project activities, the 2,728 hectares of previously degraded mountainous land was able to recover its forest resources via afforestation and reforestation activities. Success in restoration of forest resources, in turn, brought about the emergence of a wide range of wild animals including monkeys, baboons, hyenas, tigers, boars, bears, pigs etc. In time the wild life grew both in variety and number so much so that they began leaving the forest and causing destruction to farm crops and hunting livestock of communities residing along the fringes of the enclosed mountainous land.

All residents who live along the fringes of the mountainous project land became exposed to wild life destruction of their crops and their livestock falling prey to the antelope, hyena and other carnivores from the forest. This problem is so permeating across all the *Kebeles* along the fringes of the mountainous project and deeply destructive that only in *Bosa Wanche Kebele* of *Humbo Wereda* about 316 households, who already are being supported through a development aid for lack of food self-sufficiency, have had their harvests (specially maize) literally destroyed by monkeys and baboons coming out of the jungle during the day and repeatedly suffered from hunger and food insufficiency.⁷³² Furthermore, 15 elderly households, in *Bosa Wanche Kebele*, were documented to have suffered repeatedly from destruction of the crops and harvests. Since they were physically weak, they were unable to guard their farm plots from wild animal destructions and their livestock from falling prey to them. As the result, they abandoned their farm plots and left their residence for Addis Ababa, *Wolayita Sodo* and to *Tebella* town to be

⁷³² Interview with the *Kebele* Agricultural and Rural Development Officer in *Bosa Wanche*

hired as daily laborers, guards and even began begging in the streets.⁷³³ This illustrates a compromise of the right to property of the local people. Since farmers living along the fringes of the mountains were unable to harvest their crops and also raise livestock due to the wild animals of the forest, as illustrated in the foregoing discussions, they called on each other and decided to take the matter to *Sodo* Zonal Administration and Zonal Level Environmental Protection Authority (EPA). These were about 490 households residing in all *Kebeles* including *Bosa Wanche*, *Abela Longena* and *Hobbicha Bada* who were severely affected by the wild life.⁷³⁴

In a meeting organized by the Zonal Administration and Zonal level EPA in order to address the complaints from the 490 residents, the people were told to grow fruits such as banana, mango and avocado in the nearby forests as an ecological solution to keep the wild animals in the forest.⁷³⁵ They were also advised to use planting of a tree species as a natural fence that would keep the wild life within the premises of the forest.⁷³⁶ The local people took the problem to the zonal level administrative bureau and zonal EPA hoping that the administrative office would have the project developer and project implementing NGO (World Vision Ethiopia) build fences around the fringes of the mountainous project site or dig ditches along the fringes so that rain water accumulates in the ditches providing water for the wild life and preventing them from entering the farm plots of peasants in the vicinity. But none of these suggested solutions were accepted and the 490 household heads had returned back without any meaningful solution to their problems in violation of article 2(1) of the UN Declaration on the right to development where it states " the human person is the central subject of development and should be the active participant and beneficiary of the right to development "⁷³⁷. Though the restoration of the native species of trees and the forest rehabilitation work is stated under the Project Design Document (PDD) as a contribution to the sustainable development of local people it failed to live up to the balanced view of the notion of sustainable development in which social and environmental sustainability overlap as targeted goal of sustainable development adopting absolutely an eco-centric view on the matter.

⁷³³ Ibid

⁷³⁴ FGDs with cooperative leaders team of *Bosa Wanche Kebele*

⁷³⁵ Interview with Zonal level EPA administrative officer of *Wolayita* ; FGDs with High Schools Students of *Abela Longena*

⁷³⁶ Ibid

⁷³⁷ FGDs with cooperative leaders of *Bosa Wanche*; In-depth interview with Zonal level EPA Leader of *Wolayita Sodo*

In this connection, it needs to be noted that before the local people tried to seek solution to the problem by presenting their complaints to the zonal level administration and the office of Environmental Protection Authority (EPA), they notified the project developer and implementing NGO (i.e. World Vision Ethiopia) about the problem but were given only promises that the NGO is going to build fences around the project site which it never kept⁷³⁸. In this regard, a climate change and environmental risk management expert working as a liaison officer for the NGO said “the emergence of the wild life and the growth in number and species signals the success of the project and that this needs to be understood by the local people who need to look rather for ecological solutions to the problem”.⁷³⁹ Having fallen on “deaf ears”, the complaints of the local people did not lead to resolving the problem or any other remedial measures. The resultant effect is that most of the households along the fringes of the mountainous project site suffered from food insecurity and famine.⁷⁴⁰ It has also led school children to suffer from hunger and malnutrition⁷⁴¹.

The local people did not undergo the formal litigation procedures to have the matter resolved through the available justice system (i.e. through courts) because it is widely feared that it would result in loss of the annually accrued revenue from the sale of carbon credits that the project generates⁷⁴². There is a general fear among the local people that questioning the way the project is being run or seeking clarity in the way benefits are generated and distributed among people might bring about undesirable consequences that gets its expression in the form of loss of the revenue from the sale of carbon credits.⁷⁴³ This is illustrated, for example via the zonal administration’s submission to the demands of World Vision Ethiopia and World Bank saying that the people and the local government have to compensate for the loss of 10 hectares of land as the result of the construction of a road through the forest which the local government and people believed would contribute to development by shortening travelling distance to and from rural *Kebeles* of *Humbo* and *Tebella* town. The zonal government did nothing but submit 24 hectares of land (3 to 4 times larger than the area of land affected by the constructed road) to the

⁷³⁸ FGDs with cooperative leaders of *Bosa Wanche Kebele*

⁷³⁹ In-depth interview with World Vision’s climate change and environmental risk management specialist serving as the NGO’s liaison officer in *Wolyita Sodo*.

⁷⁴⁰ FGDs with High School students of *Abela Wereda*; FGDs with the cooperative leaders of *Bosa Wanche*.

⁷⁴¹ *Ibid*

⁷⁴² In-depth interview with Agriculture and Rural development Officer of *Bosa Wanche Kebele* administration; In-depth interview with the zonal level Environmental Protection Directorate Director.

⁷⁴³ In-depth interview with Sodo Zonal EPA office directorate director.

project fearing that the local people would lose the annually accrued revenues from the sale of carbon credits the project generates.⁷⁴⁴ This substantiates the idea that “carbon offsetting” shifts the site and material responsibility of unjustly assigned obligation to mitigate the climate crisis in a way that local people experience as being colonial in nature.

The other issue about which the local people tried to seek administrative solution or response is linked to where the 15 % of the revenue accrued from the sale of carbon credits, which World Vision Ethiopia said will be kept for emergency purposes, went when the project ended its sale of credits in the fixed markets and decided to join voluntary markets. Again, the local people did not take part in the process of making the decision to switch to voluntary markets instead of subsisting on the fixed market for the emission reductions results generated from the project. When the project began in 2006, local people were told that 25% of the revenue from the sale of carbon credits is going to be used for administrative purpose and also will be kept for emergency purposes.⁷⁴⁵ But now after almost 10 years of the life time of the project and sale of carbon credits, they have no idea where the money which has been accumulating over 10 years for emergency purposes has gone. And when they ask its whereabouts, they are not given adequate information about it. In fact, in accord with the previous *Kebele* leader of *Abela Longena*, who later became the leader of the Forest Development Union into which the Seven *Kebele* cooperatives grew, he was discouraged and harassed when he tried to seek where the emergency fund which has been accumulating over the ten years has gone⁷⁴⁶. He said that since he was not able to obtain adequate justification about where this money went and how the administrative cost has been covered he had to leave his duty as a *Kebele* cooperative leader.

The fact that no one from the primary *Kebele* cooperatives nor from the Forest Development and Rehabilitation Union (FDRU) takes part in the negotiations involved in the sale of the Certified Emission Reductions (CER) credits, is directly informed about the revenues annually obtained from the sale of the credits or actively takes part in issues that involve such important decisions as whether or not to switch to voluntary markets and when to do so it is difficult to see that all *Kebele* primary cooperatives or the FDRU they formed do actually

⁷⁴⁴ In-depth interview with the Directorate Director of Zonal level Environmental Protection Authority Office in *Wolayita*.

⁷⁴⁵ In-depth interview with the previous leader of Forest development and rehabilitation union of the project.

⁷⁴⁶ In-depth interview with the previous leader of the Forest Development Union and also leader of the *Kebele* Administration of *Abela Longena*.

exercise their right to ownership of the Certified Emission Reductions credits of the project. Nor is it possible to think that World Vision Ethiopia adopts transparent and accountable vehicles of ensuring the exercise of ownership rights of the local cooperatives to the benefits of carbon credits generated as the result of the project. This is where the DNA of Ethiopia is implicated as it is its mandate to ensure that *Humbo A/R CDM* does actually contribute to the sustainable development priority of the project hosting state. And in this account it failed to live up to its duty of ensuring that the project contributes to sustainable development seen from the vantage point of the livelihood support that the carbon revenue envisages to fulfill under the project.

Still a very important question that local people, specifically residents of *Abela Longena Kebele*, raised is about how the annually accrued revenue which their *Kebele* cooperative is paid declines in time when it is expected to grow. According to the leader of the cooperative, the area of land that their cooperative manages is the largest when compared to the areas of land that other cooperatives manage. The area of land that residents of *Abela Longena* manage is 1043.45 hectare compared to 372.77 hectare of *Hobbicha Bada* or 343.6 hectare of land of *Bosa Wanche* residents.⁷⁴⁷ So the question is that while the area of land they manage is greater when seen relative to the land areas other cooperatives manage, it is not clear why what they are paid annually is smaller. So because their leader could not get the right justification he asks in many of the meetings he is asked to attend, he had to resign from his duties leaving the matter unsettled. He said that he was repeatedly harassed and discouraged when he raises these questions.⁷⁴⁸ The following table illustrates how the incomes from the sale of carbon credits have been but inconsistently accruing in the accounts of each of the Seven (7) *Kebele* cooperatives.

⁷⁴⁷ Archived in the documents of the Forest Development Union.

⁷⁴⁸ In-depth interview with the previous *Kebele* leader of *Abela Longena*

Table 5.Total amount of money accrued to each of the *Kebele* cooperatives annually over Nine (9) consecutive years in Ethiopian Birr.

Cooperatives	Y.1	Y.2	Y.3	Y.4	Y.5	Y.6	Y.7	Y.8	Y.9
1. <i>Abela Longena</i>	216,442	295,403	402,402	973010	502 430	191,270	502,273	217,000	387296
2. <i>Hobbicha Bada</i>	82,844	128 495	169,893	415794	182 116	410 557	155567	162,000	241,579
3. <i>Hobbicha Bongota</i>	77,498	100448	136,832	320,000	128226	415387	170376	177590	109462
4. <i>Abela Shoya</i>	25,428	35,797	51754	125512	47706	96601	75663	78,000	166080
5. <i>Bola Wanche</i>	74,974	101,253	137,929	333497	121032	187021	148,501	146,847	53,248
6. <i>Bosa Wanche</i>	76,773	70241	95683	231,352	89228	138140	87,877	91554	73334
7. <i>Abela Gaffata</i>	25,067	133,180	179866	433,237	191330	501460	218419	227,000	563,487

Source: Field Research Note

As can be seen from table-4 above the amount of money paid to *Abela Longena* cooperative annually is inconsistent over time and also less, at least in two cases, than the income paid to such cooperatives as *Hobbicha Bada* and *Hobbicha Bongota* which manage a forest area of 848 and 813 hectares of land respectively. This is shown in the payments made to these cooperatives in the 6th years where *Abela Longena* received only 191,270 birr for managing a forest area of 1043 hectares of land while *Hobbicha Bada* is paid 410,557 birr for managing a forested area of 848 hectares of land. So as the leader of the cooperative in *Abela Longena* shared the way payments are made for the different cooperatives and over time for a given cooperative is not clear. And when such a question is asked in meetings with the project developers and implementers, no justification is given and that those who are inquisitive and curious are often harassed and intimidated. This clearly shows lack of any complaint and grievance handling mechanism for redressing problems and grievances during the life time of project implementation. It needs also be noted that the local people are not receiving payments anymore because World Vision Ethiopia (WVE) said that it ceased its contractual agreement with the World Bank and has decided to enter into voluntary markets about which local people and

residents are clueless. This again surfaces evidences that local people don't take part in key decisions that affect their rights as owners of the carbon credits generated through the project. Furthermore, here we have a material evidence attesting to the fact that while the 2,728 hectares of forested land continues being used as a carbon sink with a very strict regulation of use of forest based resources by local people, the payment for its use as a carbon sink is interrupted, now for over three (3) consecutive years, with the direct compromise of the livelihood support it envisaged to offer for the local people in the form of payments for CERs which the local people are entitled to. In this connection, it was learned during field research work that the grain mill machine that *Bosa Wanche Kebele* cooperative bought using previous revenues from the sale of carbon credits stopped working due to technical failure which the cooperative did not yet fix by the time the field research was conducted and therefore the young girls were returned back to the time when they had to travel to *Sodo* to get the service of a grain mill spending, at least two days, depending on where they begin their journeys from. In accord with the Project Design Document (PDD) provision of income stream is one major way via which the project contributes to the sustainable development of the local people which as is seen from the foregoing discussions was not materialized.

In this connection, it was found out, during the in-depth interview held with the Directorate Director of *Sodo* EPA office, that the serious attempt on the part of the office to learn about why questions like the whereabouts of local people's emergency fund, their questions about the problems of wild life and the abated income from the sale of carbon credits not adequately responded by World Vision Ethiopia, was faced with the finding by the office that the Federal EPA of Ethiopia (the DNA of Ethiopia in CDM governance architecture) did actually give an official letter to WVE that certifies it to wholly represent the Federal EPA in matters that relate to execution of *Humbo A/R* CDM project activities.

The other way of saying the same thing is that World Vision Australia which manipulates World Vision Ethiopia has actually been playing the authority of the Federal EPA of Ethiopia over the last 10 years of the life span of the project. This, when seen in the lights of failure to address violations of the right to food, means of subsistence, and adequate standard of living, inhibition of construction of roads and associated subjugation of local government (expressed by way of submission of land for compensation of lost forested space due to construction of the

road) to the demands of WVE, failure to allow participation of primary cooperatives in critical questions related to management of income from the sale of the carbon credits and the disconnect of the sale of carbon credits in the name of a switch towards voluntary markets all substantiate the fact the country compromised its sovereign right and its right to self-determination in relation to exploiting its resources for the uses of its own people which poor developing states fought for during the climate negotiations previously.

B. Implications for Other Substantive Human Rights

The implications for the right to adequate standard of living

The right to adequate standard of living is protected under Article-25 of the Universal Declaration of Human Rights (UDHR), Article -11 of the International Covenant on Economic, Social and Cultural Rights (ICESCR) and Articles – 41 and 43 of the Constitution of the Federal Democratic Republic of Ethiopia (FDRE's Constitution). Furthermore, though the right is not explicitly recognized under the African Charter on Human and Peoples' Rights, it is guaranteed protection implicitly via the recognition of articles 4,5,6,14,15,16,(18(1),(2),(4)),22 of the Charter.⁷⁴⁹ Article-25 of the UDHR states that “everyone has the right to a standard of living adequate for the health and wellbeing of himself and of his family including food, clothing, housing, medical care and necessary social services and the right to security in the event of ...lack of livelihood in circumstances beyond his control.”⁷⁵⁰ Article -11 of the ICESCR extends the recognition of this right to “...the continuous improvement of living conditions...” and also adds that every individual has the right to freedom from hunger.⁷⁵¹

The right to an adequate standard of living is included in several other human rights treaties. Under Article- 27 of the CRC, ‘States Parties recognise the right of every child to a standard of living adequate for the child’s physical, mental, spiritual, moral and social development’⁷⁵². Article-14 of CEDAW states that ‘States Parties shall take all appropriate measures to eliminate discrimination against women in rural areas [...] to ensure [...] the right [...] to enjoy adequate living conditions, particularly in relation to housing, sanitation, electricity and

⁷⁴⁹ ACHPR, Principles and Guidelines on the Implementation of Economic, Social and Cultural Rights in the African Charter on Human and Peoples' Rights. Available online at: < https://www.achpr.org/public/Document/file/English/achpr_instr_guide_draft_esc_rights_eng.pdf >

⁷⁵⁰ Article-25 of the UDHR

⁷⁵¹ Article 11 (1) &(2) of the ICESCR

⁷⁵² Art.27 of the Convention on the Rights of the Child

water supply, transport and communications [...].⁷⁵³ The CERD, on the otherhand, recognises the right of everyone, without distinction as to race, colour, or national or ethnic origin, to enjoy, inter alia, the right to housing, and the right to social security and social services. Article 28 CRPD sets out the right to an adequate standard of living and social protection.⁷⁵⁴

In accord with the Committee on Economic, Social and Cultural Rights, the right to adequate food, which is one of the most important elements of the right to adequate standard of living, is indivisibly linked to the inherent dignity of the human person and is indispensable for the fulfillment of other human rights enshrined in the International Bill of Rights. It affirms that the right to adequate food includes physical and economic accessibility of food, adequacy of food available, able to meet dietary needs, it should be free from “adverse substances” and it should be culturally acceptable.⁷⁵⁵ Physical accessibility is interpreted as accessibility of adequate food to everyone including those physically vulnerable including infants and children, the elderly, people with disability, the terminally ill and persons with persistent medical problems.⁷⁵⁶ Economic accessibility implies the ability of acquiring food without financially limiting the ability to pay for acquisition of other basic needs. On the other hand, dietary needs imply that “the diet as a whole contains a mix of nutrients for physical and mental growth, development and maintenance, and physical activities that are in compliance with human physiological needs at all stages throughout the life cycle and according to gender and occupation”⁷⁵⁷.

While the Committee on Economic, Social, and Cultural Rights affirms that the precise meaning of adequate food is determined by the prevailing social, economic, cultural, climatic, ecological and other conditions, sustainability of the food is interpreted as its availability for both present and future generations. In addition, food should be free from adverse substances which sets the requirements for food safety and for a range of protective measures by both public and private means to prevent contamination of foodstuffs through adulteration and/or through bad environmental hygiene or inappropriate handling at different stages throughout the food chain; care must also be taken to identify and avoid or destroy naturally occurring toxins. Furthermore, cultural acceptability of food implies “the need also to take into account, as far as

⁷⁵³ Art-14 of the Convention on Elimination of All forms of Discrimination Against Women

⁷⁵⁴ Art.28 of the Convention on the Rights of Persons with Disabilities

⁷⁵⁵ General Comment 12 of ESCR

⁷⁵⁶ Ibid

⁷⁵⁷ Ibid

possible,perceived non nutrient-based values attached to food and food consumption and informed consumer concerns regarding the nature of accessible food supplies.”⁷⁵⁸

The other right which derives from the right to an adequate standard of living and is of central importance for the enjoyment of all economic, social and cultural rights is the right to adequate housing.The right to adequate housing is enshrined in most major human rights instruments adopted by the United Nations. It is included under article-25 of the UDHR; article -11of the ICESCR; article -14 of CEDAW; article- 5 of CERD; article -27 of the CRC; article -43 of CMW; and article -28 of the CRPD. In addition, it is included in article-31 of the revised European Social Charter and article -21 of the Convention Relating to the Status of Refugees.

The right to housing means more than just a roof over one’s head. It should be seen as the right to live somewhere in security, peace,and dignity.The requirements for adequate housing have been defined in General Comments 4 and 7 of the Committee on Economic, Social and Cultural Rights. According to the Committee the core content of the right to adequate housing includes the elements of security of tenure, affordability, habitability, accessibility, location, and cultural adequacy.⁷⁵⁹ On the other hand, the right to health, another key element of the right to adequate standard of living, is recognized under the ICESCR.The Committee on ESCR identifies safe drinking water and adequate sanitation, safe food, adequate nutrition and housing, healthy working and environmental conditions, health related education and information and gender equality as the underlying determinants of health.⁷⁶⁰ The right to health contains such entitlements as the right to a system of health protection providing equality of opportunity for everyone to enjoy the highest attainable level of health; the right to prevention, treatment and control of diseases;access to essential medicine;maternal, child and reproductive health and equal and timely access to basic health services.⁷⁶¹

Another very important element of socio-economic right that is, at the same time, the focus of this research is the right to education.Education is both a human right in itself and an indispensable means of realizing other human rights. The right is protected under article -26 of the UDHR; article-13 of the ICESCR; article-28 of the CRC; article -10 of CADW; article-5 of

⁷⁵⁸ Ibid

⁷⁵⁹ General Comments 4 and 7 of the CESCR.

⁷⁶⁰ OHCHR, The Right to Health, Fact Sheet No.31. Available online at : < <https://www.ohchr.org/sites/default/files/Documents/Publications/Factsheet31.pdf> >

⁷⁶¹ Ibid

CADRD;article-24 of CRPD; article- 22 of the Refugee Convention;article -18 of the ICCPR and article-14 of the DRIP. Furthermore, the right is protected under article-11 of the ACRWC and article-17 of the ACHPR. General Comment 13 of the Committee on Economic, Social and Cultural Rights clarifies that education in all its forms and at all levels shall exhibit the features of availability, accessibility, acceptability, and adaptability.⁷⁶² Furthermore, the provisions against discrimination in article 2(2) of the ICESCR is affirmed to be subjected to neither progressive realization nor availability of resources as it applies fully and immediately to all aspects of education and encompasses all internationally prohibited grounds of discrimination.⁷⁶³

The right to education, like all other human rights, imposes three types of obligations on the State parties:the obligation to respect, protect and fulfill. The obligation to fulfill, in turn, incorporates both an obligation to facilitate and an obligation to provide.In relation to article 13(2) of the ICESCR, States have obligations to respect, protect and fulfil each of the “essential features” of the right to education. General Comment 13 of the CDESCR illustrates that, a State must respect the availability of education by not closing private schools; protect the accessibility of education by ensuring that third parties, including parents and employers, do not stop girls from going to school;fulfil or facilitate the acceptability of education by taking positive measures to ensure that education is culturally appropriate for minorities and indigenous peoples, and of good quality for all;fulfil or provide the adaptability of education by designing and providing resources for curricula which reflect the contemporary needs of students in a changing world;and fulfil or ensure the availability of education by actively developing a system of schools, including building classrooms, delivering programmes,providing teaching materials,training teachers and paying them domestically competitive salaries.⁷⁶⁴

The African Charter on Human and Peoples’ Rights (ACHPR) protects the right to adequate standard of living through its protection of the right to life, health, property, protection accorded to the family, liberty and work and the right to economic and social development.⁷⁶⁵ In Ethiopia, the FDRE’s constitution recognizes the right under Article-41 (1) stating that “Every Ethiopian has the right to engage freely in economic activity and to pursue a livelihood of his

⁷⁶² General Comment 13 of the CDESCR available online at : < https://www.right-to-education.org/sites/right-to-education.org/files/resource-attachments/CDESCR_General_Comment_13_en.pdf > accessed on 3 August 2024.

⁷⁶³ Ibid

⁷⁶⁴ Paragraph 50 of General Comment 13 of the CDESCR

⁷⁶⁵ ACHPR, n.49

choice anywhere within the national territory.”⁷⁶⁶ Sub-article 2 of the same article further states that “Every Ethiopian has the right to choose his or her means of livelihood, occupation and profession.”⁷⁶⁷ So the right to adequate standard of living including the right to food, clothing and housing is provided for and recognized under international, regional and domestic human rights instruments. The right is how the life, security and dignity of human beings is guaranteed and human survival secured and is, therefore, fundamental to all human beings. Thus, it is indispensable that all kinds of policy response that aim at protecting the climate be guided by and orientated to realize it. In this respect, the implementation of *Humbo A/R CDM* project has been found out, rather, violating the right of the local people to adequate standard of living in two different ways. In one way, the project compromised the right via enclosure of the 2,728 hectares of land thereby preventing access to grazing land for the livestock of the local residents, inhibiting the making of charcoal for sale, outlawing collection of fuel woods and woods for construction purposes. The local people have always been dependent on the resources of the enclosed mountainous land for various purposes including as a grazing field for their livestock, as a source of fuel woods, for making charcoal for sale and as a source of woods for construction purposes as evidenced through survey data summarized in the table below.

⁷⁶⁶ Article -41 (1) of FDRE’s Constitution

⁷⁶⁷ Article -41 (2) of FDRE’s Constitution

Table -6. Local People's Reliance on the Resources of the Enclosed Project Site in Bosa Wanche Kebele.

Age Categories (f)		How did you use to use the project area before its enclosure ?*														
		As source of fuel woods			for making chracoal			As a grazing area or land			As a farm field			As a source of wood for construction of houses		
		Gender			Gender			Gender			Gender			Gender		
C.	f	M	F	T.(%)	M.	F	Total (%)	M.	F.	Total (%)	M.	F.	Total (%)	M.	F.	Total (%)
20-25	4	3		4.3	2	1	4.3	4		5.7				5		7.1
25-30	3	2		2.8	2		2.8	8		11.4						
30-35	9	6	3	12.8	22		31.4	9		12.8			-	9		12.8
35-40	-							-								
40-45	20	7	9	22.8	17		24.3	19		27			-	19		27
45-50	10	9		12.8	10		14.3	7	-	10				7		10
50-55	8	8		11.4	5		7.1	8	-	11.4	1		1.4	5		7.1
55-60	7	7		10				-	-				-	7		10
>60	9	3	6	12.8	4		5.7	9	-	12.8	-			9		12.8
Total	70			89.7			89.9			91.1			1.4			86.8

Source : Survey Research

*Note that a respondent **uses** the enclosed project area for multiple purposes so the frequencies of uses of the project area is greater than the number of respondents and hence the percentages of utilization add up to more than 100 .

As can be seen from table-5 above in *Bosa Wanche Kebele* alone, 89.7% of the research participants used to use the enclosed land as a source of fuel wood, 89.9 % as a source of wood for making charcoal, 91.1 % of the research participants used to use the land as a grazing field and 86.8 % of them used the land as a source of woods for construction purposes. Here, a very important finding is that the local residents used to use the resources of the enclosed land for multiple purposes. This is to say that respondents used the land based resources for multiple purposes simultaneously which showed the high level of dependence of local people on the resources of the enclosed land.

Such a high degree of dependence of local people on the resources of the elongated chain of mountainous land has also been found out in *Abela Longena* and *Hobbicha Bada Kebeles* of *Abela* and *Hobbicha Weredas*. In *Abela Longena*, it has been found out that 82 % of the respondents used to use the land as source of fuel wood, 79 % of them for making charcoal, 94% as a grazing field and 72% for collecting woods used for construction purposes. In *Hobbicha*

Bada 80% of the respondents said that they used to collect fuel woods from the land, 79% said they used to make charcoal collecting woods from the land, 95% of them said they used to use the land as a grazing field and 70 % of them said they used to collect construction woods from the enclosed land. Again, a key observation of the responses to the survey questionnaire of the participants is that they used to use the land for multiple purposes showing how important the land is in terms of providing indispensable support for the various facets of the lives of local residents. The following table shows how enclosure of the land has affected the local residents, for example, in terms of limiting availability of pasture land for their livestock.

Table -7. Choices Local People were compelled to resort to in getting grazing field due to enclosure of the land in Bosa Wanche Kebele.

Age Categories (f)		Where do you let your livestock graze pasture after the enclosure of the previous grazing field ?														
		We buy fodder			Somewhere else			We abandoned raising animals due to lack of grazing field			We let our cattle graze in the ecnlosed area prohibition			We use fodder from the project site sustainably		
		Gender			Gender			Gender			Gender			Gender		
C.	f	M	F	T. (%)	M.	F	Total (%)	M.	F.	Total (%)	M.	F.	Total (%)	M.	F.	Total (%)
20-25	4															
25-30	3	2		2.8							-					
30-35	9				6		8.6						-			
35-40	-															
40-45	20	14		20	23		32.9						-			
45-50	10	8		11.4					-							
50-55	8	2		2.8	2		2.8		-				-			
55-60	7		-		4		5.7	3	-	4.3			-			
>60	9	4		5.7	5		7.1		-		-					
Total	70	42.7			57.1			4.3			-			-		

Source: Survey Questionnaire

So as it is seen in Table -6 above as the result of the enclosure of the land,42.7% of the respondents said that they were forced to buy fodder for their cattle,57.1% of them were compelled to graze their cattle somewhere else and about 4.3 % of them abandoned raising livestock as a result of lack of grazing field in Bosa Wanche Kebele. In Abela Longena, 70% of the respondents said they were forced to buy fodder, 17 % said they were forced to graze their

livestock somewhere else and 12.7 % of them said that they had to abandon raising their livestock due to lack of grazing field. In *Hobbicha Bada*, 48 % of the respondents shared that they were compelled to buy fodder for their livestock, 22% of them said they had to let their livestock graze somewhere else and about 30% of them had to give up raising livestock for lack of grazing field. Thus, it is evident that residents along the fringes of the mountainous land have had their right to adequate standard of living directly affected as a result of enclosure of the land. So apart from the injustice done at the international level via the climate regime in sanctioning emission rights for industries and countries that have been most responsible for the warming of the planet and endorsing market –based climate mitigation that are not verifiably ascertained as effective climate mitigation mechanisms, climate policy at a local level is, here shown, to have somewhat compromised existing livelihood strategies of local people without adequately compensating it as shown in the foregoing discussions.

Another instance of the threats to the livelihood rights of local people of the implementation of the project is seen by way of its prevention of access to fuel woods of the local people from the land as indicated in the table below.

Table -8. The Choices Local People were compelled to make in getting fuel woods after enclosure of the land in Bosa Wanche.

Age Categories (f)		Where have you begun getting fuel wood from after enclosure of the land ?											
		We buy fuel woods			Energy efficient stove we got from the project			We are forced to collect fuel woods from other places			We have electricity		
		Gender			Gender			Gender			Gender		
C.	f	M	F	T. (%)	M.	F	Total (%)	M.	F.	Total (%)	M.	F.	Total (%)
20-25	4						-	2		2.8			
25-30	3						-	1		1.4			
30-35	9	2		2.8			-	7		10			
35-40	-						-						
40-45	20	10		14.3			-	18		25.7			
45-50	10	1		1.4			-	9	-	12.9			
50-55	8	4		5.7			-	4	-	5.7			
55-60	7	7		10			-		-				
>60	9	3		4.3			-	6	-	8.8			
Total				38.5						67.3			

Source: Survey Research

It is evident that getting access to fuel woods in rural areas of poor countries like Ethiopia is indispensable in the preparation of food (in the baking of a staple food locally called *Injera* and also in the preparation of a commonly eaten meal called “*Wet*”). So access to or availability of fuel wood is an integral part of making food available for direct consumption making it a basic resource required for survival. But as a result of the project, local people in *Bosa Wanche* were compelled to buy fuel woods (38.5%) or forced to collect fuel woods from somewhere else (67.3%). The percentages of those respondents saying they had to buy fuel woods in *Abela Longena* and *Hobbicha Bada* are 57% and 63% respectively. Those who shared that they were made to fetch fuel woods from somewhere else in *Abela Longena* and *Hobbicha Bada Kebeles* made up 43% and 37% respectively. So it is clear that in the sample *Kebeles* local residents were forced either to buy fuel woods or had to collect fuel woods from somewhere else as a result of enclosure of the land.

So as can be discerned from the foregoing discussion, it is evident that the enclosure of the 2,728 hectares of land did violate the rights of local people to adequate standard of living by inhibiting access to grazing land for their livestock, preventing charcoal making which the local people sale to earn income, disallowing collection of fuel woods and also outlawing collection of woods for construction purposes. Local people either directly use their livestock (such as sheep, goats, oxen) as a source of food or sale them to buy grains for home consumption. So when they are prevented from using the land as a grazing field, it will curtail their ability to raise their livestock thereby preventing them from exercising their right to food. This is also true to prevention of access to fuel wood and outlawing the activity of making charcoal. In accord with FGDs with high school students in *Abela Longena*, people in their *Kebele* used to make charcoal in the forest which they sale to earn a living which now is prohibited by the bylaws of the *Kebele* cooperatives which are entitled to manage the forest based resources.⁷⁶⁸ So the prevention of making charcoal results in loss of income to support lives which in turn is in violation of the right to adequate standard of living of the residents.

So far as collection of woods for construction purposes is concerned, no resident, whatever his/her position is even in the *Kebele* cooperatives established, is allowed to enter the enclosed land and collect cut down woods for construction purposes. Local residents are strictly forbidden

⁷⁶⁸ FGDs with High School Students of *Abela Longena*

to cut down woods for construction purposes. In trying to explain how strictly forbidden the act of collecting woods from the enclosed forest site is *Humbo Wereda* monitoring expert of mobility and utilization of forest resources explained that;

Let alone individual residents who are members of *Kebele* cooperatives, even when leaders of cooperatives under the Forest Development Union seek to obtain woods for the construction of schools (as one of the benefits of the forest development project), they are required to submit a formal request letter for the *Wereda* office of forest resources utilization and mobility. And then upon receipt of the request letter, the experts of the office conduct a field assessment research with the intent of determining which of the woods in the forest have grown too old to remain standing. Then the experts identify the trees to be cut for construction purposes. In this way, for example, our office gave about 40 standing trees to be cut by the *Kebele* cooperative in *Bosa Wanche* which they needed for constructing class rooms of the high school in *Bosa Wanche*. They were able to obtain the woods because of the purpose for which they were going to use the woods and because they asked in the name of the cooperative they were leading. It is otherwise not allowed to use woods for construction purposes if based on individual request made by a *Kebele* resident.⁷⁶⁹

Therefore, though the project adopted the Farmer Managed Natural Regeneration of Forestry (FMNRF) approach, even farmers with membership status to the *Kebele* cooperatives do not have meaningful and adequate access to the forest based resources of the land. This is to say that enclosure of the land meant strict conservation of the forest based resources with primary emphasis placed on enhancement of forest carbon stocks and reservoirs. In this connection, the initial project leader of World Vision Ethiopia shared that local people use the hay or dry grasses via “cut and carry” method for sale as a fodder for livestock or use it to feed their livestock. He said “local people do not only use the hay as a fodder for their own consumption but also sale the surplus in the markets.”⁷⁷⁰ But by and large, the use of the forest

⁷⁶⁹ In-depth interview with a monitoring expert of forest utilization and mobility at *Humbo Wereda* administration office.

⁷⁷⁰ In-depth interview with the initial project leader of World Vision Ethiopia (WVE).

based resources from the enclosed forested land is not assessed to be adequate and sustainable by the local people as indicated in the table below. Such a factual illustration of prohibition of use of forests and forest-based resources by local people clearly demonstrates how carbon offsetting, in effect, allows the evasion by the primary polluters of the obligation to mitigate the climate via a switch away from relying on fossil fuel burning as energy source towards renewable energies in a manner that deprives local people in the global South (in this case in Ethiopia) of their right to self-determination in terms of use of their natural resources and simultaneous compromise of their rights to means of subsistence. The doubly pronounced climate injustice illustrated, here, is that the local people's lives are insignificant in terms of causing the climate crisis but are actually disproportionately impacted (delayed seasonal rainfall limited seasonal harvesting of maize and associated food insecurity in the area) while the countries responsible for the crisis are allowed via carbon offsetting to evade their obligations to cut emissions of GHGs by using territorial land and its forest resources to sequester carbon in a clear violation of the sovereign rights of the people of Ethiopia and in a manner that manifests itself as being colonial appropriation of land in the global South.

Table -9. Local people's assessment of the adequacy of utilization of forest based resources from the enclosed project site in Bosa Wanche Kebele.

Age Categories (f)		If you are a member of the project's cooperative, how do you describe your utilization of the forest resources ?											
		We adequately use the forest resources for all purposes .			Compared to our needs the way we use forest resources is not enough .			We are not encouraged to use the forest resources .			We use forest resources to some extent but I don't think it is enough.		
		Gender			Gender			Gender			Gender		
C.	f	M	F	T (%)	M.	F.	Total (%)	M.	F.	Total (%)	M.	F.	Total (%)
20-25	4				2		2.8				2		2.8
25-30	3							3		4.3			
30-35	9				7		10	2		2.8			
35-40	-												
40-45	20				17		24.3				3		4.3
45-50	10							3		4.3	7		10
50-55	8				8		11.4						
55-60	7	2		2.8				5		7.1			
>60	9				5		7.1	1		1.4			
Total	70			2.8			55.6			19.9			17.1

Source: Survey Questionnaire

The table above attests to the claim that local people's use of forest based resources is not adequate and sustainable. This is to say that sustainable utilization of the resources, even by members of the *Kebele* cooperatives, is not practically translated as ascertained by evidences of the table above. As can be seen from the table, the majority of the respondents in *Bosa Wanche Kebele* (55.6%) said compared to our needs the way we use forest resources is not enough while about 20% of them saying that they are not encouraged to use the forest based resources. Moreover, 17.1% of the respondents shared that there is use of forest based resources to some extent but they don't think that it is enough. In *Abela Longena Kebele*, 68% of the respondents said that compared to their needs the way they use the resources is not enough whereas 18% saying that they are not encouraged to use the forest based resources. About 14 % of said they use the forest based resources but they don't perceive that it is enough. In *Hobbicha Bada Kebele*, while 74 % of the respondents said compared to their needs the actual use of the resources is not enough 15% said they are not encouraged to use the forest resources. 9.4 % said they don't perceive that their use of the resources is enough though there is use to some extent. What follows from the foregoing discussion is that the claim, by the local residents, that the use of forest based resources is inadequate is substantiated. Hence, the entitlement of local farmers to manage the utilization of forest base resources in a manner that sufficiently addresses their needs while generating carbon credits is not an objective that is effectively realized. The implications is that the livelihood support or the realization of the right to adequate standard of living of local residents while combating climate change is not an objective that has come to fruition when seen practically in the real lives of local people in the ground.

In this connection, the project designed to provide alternative livelihood strategies with the aim of addressing its interference with reliance of local people on the forest based resources that is currently foregone due to the enclosure of the land. The alternative livelihood strategies it developed include apiculture, poultry, animal ranching, tailoring, agro-forestry, home gardening, forest protection and management.⁷⁷¹ But those who were given relevant trainings and start –up

⁷⁷¹ FGDs with cooperative leaders of *Bosa Wanche Kebele* of *Humbo Wereda* ; In depth interview with the agricultural and rural development officer in *Bosa Wanche* ; In-depth interview with *Abela Wereda* deputy leader

capital were those who were only members of the Seven (7) *Kebele* cooperatives and those who were lucky in being picked up from the general members of the cooperatives. In accord with the in-depth interview conducted with previous *Abela Longena Kebele* leader who later became the leader of the forest development union, the number of members of cooperatives picked for technical trainings ranges from 15 to 50 people in all the *Kebele* cooperatives. The idea was that after having received trainings, these people will be given initial capital and technical support in order to run their businesses be it in poultry, animal ranching, tailoring or apiculture.

However, it has been found out that it is only members of *Kebele* cooperatives who could qualify to receive trainings and initial capital or loans and these are even picked from the general members of the cooperatives. Furthermore, even those who have benefited from these opportunities have not been wholly successful as most of the beneficiaries were not successful in running their businesses. There were, for example, residents who gave their sewing machines to their relatives, those who failed to succeed in animal ranching, home gardening, and poultry farming.⁷⁷² In accord with the agricultural and rural development officers in *Bosa Wanche*, *Abela Longena*, and *Hobbicha Bada* many of the residents who received trainings and were given start-up capital to engage in the alternative livelihood strategies developed under the project were not able to pay back their loans due to failure in successfully implementing the livelihood strategies they were trained to lead. The following table (with data from *Bosa Wanche Kebele*) illustrates how insignificant the alternative livelihood strategies were in terms of substituting the forest resources bent on which local residents used to lead their lives.

⁷⁷² In-depth interview with a agricultural and rural development officer at *Bosa Wanche*

Table – 10. Beneficiaries of Alternative Livelihoods under the Project in *Bosa Wacnhe Kebele*

No.	Livelihood Strategies (Co-benefits)	Recipients of the Benefits		Total
		Male	Female	
1	Animal Ranching (2 Oxen)	6	-	6
2.	Animal Ranching Goats	36	7	43
3.	Poultry (Hens)	10	-	10
4.	Poultry (30 One –day chicken)	All Farmers	All Farmers	All Farmers
5.	Tailoring (Sewing Machines)	3	1	4

Source: Extracted from *Kebele Agricultural and Rural Development Report of Bosa Wanche*

The table above shows how insignificant the number of beneficiaries are. What is worse is that even these individuals who are said to have benefited from the project have not been successful in building on their initial capital with which they began their businesses. This is attested by the fact that most of the peasant farmers were reported to have failed in successfully growing and breeding their one day old chickens.⁷⁷³ Moreover, in *Bosa Wanche*, it has been found out that only 1/4th of the loans granted to the beneficiaries have been paid back to their cooperatives.⁷⁷⁴ This ascertains the claim that the alternative livelihood strategies developed under the project are insignificant and hence, could not substitute the livelihood benefits foregone as a result of the enclosure of the project land.

The livelihood support from the project is seen through the income from the sale of carbon credits which is paid to each of the Seven (7) *Kebele* cooperatives established under the project. Similar patterns are have been documented in the use of the annually accrued income from the

⁷⁷³ In –depth interview with *Wereda* level agricultural and rural development officer; Interview with the current Forest Development Union Leader in *Humbo Wereda*.

⁷⁷⁴ In-depth interview with an agricultural and rural development officer in *Bosa Wanche*

sale of carbon credits by the cooperatives. In three (3) sample *Kebeles*: *Bosa Wanche*, *Abela Longena*, and *Hobbicha Bada*, the income from the sale of carbon credits have been used to build grain mills, storehouse for grains, schools, and shops.⁷⁷⁵ The same income is also used to pay monthly salaries of about 30 guards who are assigned at different sites to protect the forest from illegal intruders. It is also said that with the available financial capital leaders of cooperatives buy grains (maize for example) when it is cheap and sale it when it gets expensive. In addition, members of the cooperatives also obtain loans from the income from the sale of carbon credits. Otherwise all administrative costs of the *Kebele* cooperatives is covered from the income gained through sale of carbon credits.

However, field research elicited that the grain mill in *Bosa Wanche* is no longer working and it has not yet been fixed, where cooperatives said they built schools they only contributed in buying corrugated iron and woods and also the 30 guards assigned to protect the forest have often complained about delayed payment of their salaries and lack of support in terms of uniforms, weapons and tools⁷⁷⁶. This is to say that the income from the sale of carbon credits, which is now stopped being generated, has not been used to systematically address the needs of all *Kebele* residents in the form of, for example built up of infrastructure for the supply of drinkable water which is lacking in all *Kebeles* or buildup of equally distributed clinics and sustainable funding for their administration or a systematic support in advancing processes of agricultural production in the area⁷⁷⁷. There have only been sporadically built grain mills, shops, schools or businesses which are run by cooperative leaders and these cannot be said to have adequately substituted the loss of benefits from the forest based resources as the result of enclosure of the land. The following table about assessment of the benefits from the project and income generated through protecting carbon sinks and reservoirs by way of afforestation and reforestation shows how inadequate and limited the benefits are.

⁷⁷⁵ FGDs with High School Students of *Abela Longena*; FGDs with leaders of *Bosa Wanche* cooperative; In-depth interviews with the leader of Forest Development Union.

⁷⁷⁶ Ibid

⁷⁷⁷ In this connection, the researcher was able to witness an elderly woman crying out before *Abela Longena's Kebele* Agricultural and rural development officer looking for insecticides because her farm field had been invaded by insects destroying the crops. She was told that his office was in short supply of insecticides which led the woman cry out questioning the worthwhileness of the agricultural development office. A systematic and sustainable support for rural agricultural development activities could have been one meaningful area of intervention on the part of the *Humbo A/R CDM* project.

Table -11. Assessment of the adequacy of income generated as a result of engagement in the project activities.

Age Categories (f)		If you participate in the projects' activities , how do you assess the income you are earning from the activities ?											
		It enabled my family lead a better life			I am not even able to lead a subsistence life .			It very well compensates the income I would have earned by farming .			It is not enough to support my family .		
		Gender			Gender			Gender			Gender		
C.	f	M	F	Total (%)	M.	F.	Total (%)	M.	F.	Total (%)	M.	F.	Total (%)
20-25	4				1		1.4				4		5.7
25-30	3										3		4.3
30-35	9				7		10				2		2.9
35-40	-												
40-45	20				13		18.6				7		10
45-50	10				10		14.3				4		5.7
50-55	8				3		4.3				5		7.1
55-60	7										7		10
>60	9				4		5.7				5		7.1
Total	70						54.3						52.8

Source: Survey Research Tool

As is seen in the table above 54 .3% of the respondents in *Bosa Wanche* said that they are not even able to lead subsistence life leave alone adequate support of livelihoods of the residents and about 52.8 % of them said that the benefits or income from the project is not enough to support their families. In *Abela Longena*, 56% of the respondents said they were not even able to lead a subsistence life while 46 % of them stressed that the income they get from the project is not enough to support family life. Similar pattern is observed of respondents of *Hobbicha Bada Kebele* where 55% of them shared they were not able to lead even a subsistence life whereas 45% underscored that the income from the project could not support a family life. This shows that the right of local people to adequate standard of living which the project intended to address through the farmer managed natural regeneration of forest and its resources, the alternative livelihood strategies it developed and through income from the sale of carbon credits has not been respected and protected. It can, therefore, be concluded that the enclosure of the 2,728 hectares of land and the protection of its forest and forest based resources as carbon sinks and reservoirs with the intent of contributing to global mitigation of climate change and contributing

to sustainable development of Ethiopia has compromised the right of local residents of *Humbo*, *Abela* and *Hobbicha Weredas*.

The other way (rather an indirect way) that the project violated the right to adequate standard of living of local residents living along the fringes of the mountainous project site across the three (3) sample *Kebeles* is related to the re-emergence of a variety of wild life in the forest. Due to the rehabilitation of the forest via reforestation and afforestation activities there began re-emerging a wide variety of wild animals including monkeys, baboons, hyena, antelope, wild boar, tiger, deer, lions, porcupine, pigs etc. In time, the wild animals grew in number and began coming out of the forest and cause destructions to the farm plots of households living along the fringes of the mountainous project land. Initially, it was only the monkeys, baboons and the wild boars that emerge out of the forest and feed on the maize plantations of peasants located along the fringes of the mountainous project site. Farmers often suffered from complete destructions of ripen maize plantations. In accord with interviews with high school students of *Abela Longena* and primary school students in *Hobbicha Bada*, peasants, along the foot of the mountainous project site, prepare their farm plots, sow seeds, and take care of seedlings only to finally lose their harvests.⁷⁷⁸ Later, the problem got worse and it reached a point where farmers were literally unable to harvest the fruits of their labor and suffered from food insecurity.⁷⁷⁹ It became impossible to grow and harvest maize along the fringes of the mountainous project land due to its complete destruction by the baboons, monkeys and wild boars.⁷⁸⁰ It is said that in an attempt to mitigate the problem, peasants along the foot of the mountain began planting cassava trees since the wild animals could not dig deep to reach the roots of the plant.

Later, such wild animals as hyena, antelope and lions began emerging out of the forest and hunting the livestock grazing along the foot of the mountains. Those farmers raising livestock started losing their cattle (sheep, goats, and oxen) in the field as their cattle fall prey to the wild animals. Local people say that the reasons why the wild animals are emerging out of the jungle is that their population is growing at a rate faster than the carrying capacity of the mountainous land they live in⁷⁸¹, the wild animals get thirsty but they couldn't get water in the forest which

⁷⁷⁸ FGDs held with the High Schools Students of *Abela Faricho* ; FGDs held with primary school students of *Hobbicha Bada*

⁷⁷⁹ Ibid

⁷⁸⁰ Ibid

⁷⁸¹ FGDs with the High School Students of *Abelan Longena Kebele*

explains why they come out of the jungle,⁷⁸² and the monkeys, and baboons in the jungle have exhausted what they feed on in the forest so they come out of the forest and eat whatever is available in nearby farm fields.⁷⁸³ These were some of the explanations given to the problem of wild life destructions of farm crops and livestock. As has been discussed in the earlier part of this chapter, in *Bosa Wanche Kebele* alone 316 households suffered from destruction of their farm fields and the resultant loss of harvests along the fringes of the mountain⁷⁸⁴. No household located along the fringe of the mountainous project land harvests crops cultivated. All farmers who happened to live along the foot of the mountains covered under the project suffer from destruction of their crops and the resultant food insecurity.

As the result of this problem peasants were forced to abandon their plots of farm lands and were forcedly evicted from their land. In *Bosa Wanche* alone, about 15 households were evicted from their lands and migrated to *Tebella* town, *Wolayita Sodo* and even fled to Addis Ababa to work as daily laborers, guards (in *Wolayita Sodo* university for example), construction workers and even began living in streets as beggars.⁷⁸⁵ Because of the prevalence of the problem among the residents who live along the fringes of the mountainous project land, as has already been discussed in the earlier part of this chapter, about 490 households decided to present complaints to the *Wolayita Sodo* zonal administration but only to receive what could be described as an “inconsiderate” response that completely neglected the lives of the peasants as the zonal administrators only told the peasants to grow fruits for the monkeys and baboons and pursue efforts to plant tree species that would serve both as fences around the enclosed land and trees as carbon sinks and reservoirs.⁷⁸⁶ In this regard, the same complaint was presented to World Vision Ethiopia (WVE) which only promised to build fences around the project land which it never kept.

⁷⁸² FGDs with cooperative leaders in *Bosa Wanche Kebele*

⁷⁸³ Ibid

⁷⁸⁴ In-depth interview with the leader of agricultural and rural development administration of *Bosa Wanche Kebele*

⁷⁸⁵ FGDs with the cooperative leaders of *Bosa Wanche Kebele* ; FGDs with members of the cooperative in *Abela Longena Kebele*

⁷⁸⁶ Interviews held with residents of *Bosa Wanche*, *Abela Longena* and *Hobbicha Bada Kebeles*; Interview with a monitoring expert for forest resources utilization and mobility of *Humbo Wereda EPA Office*.

Implications for the Right to Development of local people of *Humbo* A/R CDM project

Though it is the United Nations Declaration on the Right to Development that recognizes the right to development as an inalienable human right encompassing the right of every human person and peoples to the full utilization of natural wealth and resources, such a right has already been recognized under common article -1 of both the ICCPR and the ICESCR. The common article recognizes a right which the UN Declaration on the Right to Development enshrines under its article -1(2) stating that “the human right to development also implies the full realization of the right of peoples to self-determination which includes, subject to the relevant provisions of both International Covenants on Human Rights, the exercise of their inalienable right to full sovereignty over all their natural wealth and resources.”⁷⁸⁷

In its article -1, the Declaration underscores that the right to development is an inalienable human right by virtue of which every human person and all peoples are entitled to participate in, contribute to and enjoy economic, social, cultural and political development, in which all human rights and fundamental freedoms can be fully realized.⁷⁸⁸ Furthermore, sub-article 2 of common article -1 of both ICCPR and ICESCR says “...In no case may a people be deprived of its own means of subsistence.”⁷⁸⁹ In addition, the African Charter on Human and Peoples Rights (ACHPR) recognizes under its articles -21 and 22 the right of peoples to freely dispose of their natural wealth and resources and defines the duty of State parties to the Charter to protect the right to development respectively.⁷⁹⁰ At the domestic level, the rights of every Ethiopian national to improved standard of living and sustainable development are provided for under article -43(1)⁷⁹¹. So every Ethiopian has a constitutionally guaranteed right to sustainable development.

The other key article of the Declaration on the Right to Development which is most relevant when seen in light of the object of climate mitigation policies and measures is recognized under article -2 (1) stating that “the human person is the central subject of development and should be the active participant and beneficiary of the right to development.”⁷⁹² Therefore, the right is most relevant to be observed and complied with in the context of climate

⁷⁸⁷ Article -1 (2) of the UN Declaration on the Right to Development

⁷⁸⁸ Article -1 of the UN Declaration on the Right to Development

⁷⁸⁹ Common article -1 (2) of the ICCPR and ICESCR

⁷⁹⁰ Articles 2 and 22 of the African Charter on Human and Peoples Right

⁷⁹¹ Article -43 (1) of FDRE’s Constitution

⁷⁹² Article- (1) of the UN Declaration on the Right to Development.

policy actions geared at alleviating the crisis while at the same time seeing to it that the sustainable development priorities of host states are aligned with. The implementation of *Humbo A/R CDM* project, however, cannot be said to have complied with the right to development of local people.

Firstly, as has been discussed earlier, the implementation of the project did not place the rights of local people at its center as would have been the case had the policy measure been guided by the right –based approach to climate policy. This is attested by the fact that the means of livelihood of local residents (i.e. crop production and the raising of livestock by peasants along the fringes of the mountainous project site) has been completely neglected placing primary importance, rather, on the generation of carbon credits and securing the associated monetary value instead of the protection of the right to adequate standard of living of local residents. The resultant effect is that 316 households in *Bosa Wanche*⁷⁹³ alone and 250 households in *Hobbicha Bada Kebele*⁷⁹⁴ were unable to grow food crops to feed themselves leading to the problem of food insecurity in violation of their right to development enshrined under article-1 of the UN declaration on the right to development, article -2 of the declaration, article -21 and 22 of the African Charter on Human and Peoples Rights and article- 43 of the Ethiopian constitution.

Secondly, in this connection, it has been found out that residents of *Bosa Wanche* and *Bolla Wanche*, two adjoining *Kebeles*, were led into conflict as a result of the wild life attack of their livestock which in turn angered the residents who, later, deliberately set fire that destroyed about 7.5 hectares of forested land and in return the local people had to submit about the same hectares of land in addition to the reforestation of the forest due the fire they deliberately set. The full story is captured in the quote given below;

One day a boy was shepherding his herd of cattle in a grazing field located between *Bosa Wanche* and *Bolla Wanche Kebeles*. And when he is about to bring his cattle together to lead them back home after a daylong grazing of the pasture land, he finds out that he does not have one of his calf .He, then, tried to look for it around and even farther crossing the boundary of *Bolla Wanche* and into the grazing field in

⁷⁹³ In-depth interview with an agricultural and rural development officer of Bosa Wanche Kebele;

⁷⁹⁴ In-depth interview with the previous leader of the Forest Development Union to which the seven (7) Kebele cooperatives grew.

Bosa Wanche where he asks several of the shepherds about the whereabouts of his lost calf but was not able to locate it. But his repeated inquiries and searches in the area got wrongly interpreted by the shepherds in *Bosa Wanche* as if he is looking for problems with them. So the shepherds in *Bosa Wanche* beat him up and sent him back. Later having learned about what happened to the boy, about 20 families in *Bolla Wanche* went to the boys in *Bosa Wanche* and fought with them and even took their cattle away. This, later turned into a conflict between the residents of *Bosa Wanche* and *Bolla Wanche*. Then having been angered by the fights the residents in the *Kebeles* began deliberately setting fire to the forested project land which led to the destruction of about 7.5 hectares of forested land. Finally, the *Wereda* EPA office went together with the *Wereda* police men to subdue the fights and settle the matter. The result was that the local people were to submit an additional 6 hectares of land to compensate for the lost forested space in addition to the reforestation of the forest land they burnt.⁷⁹⁵

In later inquiries about why the local residents deliberately set fire on the forested space by the police and the *Wereda* EPA experts, the local people gave two reasons, One is that if the calf was not really stolen by the shepherds in *Bosa Wanche*, it must have been eaten by a wild animal (most probably hyena) without the knowledge of the shepherd who was watching his cattle.⁷⁹⁶ So it must have been the wild life coming out of the jungle that caused the problem in the first place. And the other reason they gave is that while it is known that the available grazing land in the *Weredas* (*Humbo, Abela and Hobbicha*) is limited which a common knowledge they were angered about why the project enclosed the land which they would have otherwise used as a grazing field and also prohibited them to sustainably use it as a grazing ground⁷⁹⁷.

As can be discerned from the foregoing discussion, the local people had to submit an additional 6 hectares of land for afforestation apart from engaging in reforestation of trees on the

⁷⁹⁵ In-depth interview with the a monitoring expert for forest resources utilization and mobility of *Humbo Wereda* EPA office ; FGDs with the cooperative leaders of *Bosa Wanche Kbele* of *Humbo Wereda*

⁷⁹⁶ Ibid

⁷⁹⁷ Ibid

burnt land. This is a clear violation of the common article -1 of the ICCPR and the ICESCR, article – 1& 2 of the UN Declaration on the Right to Development, articles 21 &22 of the African Charter on the Human and Peoples Rights and also article -43 of the Ethiopian constitution. Local people's inviolable right to freely dispose of their natural resources, their right not to be deprived of their means of subsistence and their right to sustainable developed recognized under the Ethiopian constitution are all compromised when the local government and World Vision Ethiopia decide that the people submit 6 hectares of land in the form of compensation for the burnt forested space covered under the project.

Thirdly, in another very interesting story, the local government, the *Wolayita Sodo* zonal administration, in collaboration with local residents planned to build a road that would link people in rural areas directly with *Humbo Tebella* town thereby resolving the difficulty, distance, and cost of travelling to *Tebella* town by first travelling to *Wolayita Sodo* and then returning back to *Humbo Tebella* town in a rather lengthened and indirect path. The road is believed to play an important role for rural farmers in *Humbo* to make their farm products available in market places of *Tebella* town where they also get access to various kinds of supplies. So the local government and the people build a road that happened to pass through the forested space taking away about 10 hectares of the project land. But while the road was under construction, people from World Vision Ethiopia (WVE) came to the *Wolayita Sodo* zonal office and told the zonal leaders to stop constructing the road which they said they were monitoring and observing using satellite imageries. The people warned that if the construction of the road is not stopped, they would deduct 20,000 birr from each of the revenues of *Kebele* cooperatives accrued from the sale of carbon credits.

The zonal administrators tried to discuss the importance of the road for the development of the area and its importance for the local people but only to fall rather on deaf ears. Then fearing that the local residents are going to lose the income from generation of carbon credits, they gave away a land 3 to 4 times the area of land that the construction of road took away from the forested project space again in a crystal clear violation of the right to self-determination of people including the full utilization of their wealth and natural resources, and the right to development of the people enshrined in the ICCPR, ICESCR, the African Charter on Human and Peoples Rights and the Ethiopian constitution as specified in the foregoing discussion. The

Humbo A/R CDM project is, therefore, said to have violated the right to development of the local people and residents.

The implications of the project for the rights of Women, Children and the Elderlies.

The implications for the rights of Women of *Humbo* A/R CDM project.

Here, it is purported not to discuss the implications for the rights of women as human beings which have already been discussed earlier as they are constituted under the discussion on the general human rights implications of *Humbo* A/R CDM climate policy actions. The focus, here, is the implications for the rights of women protected under the Convention on the Elimination of All forms of Discrimination against Women (CEDAW) adopted in 1979 and entered into force in 1981. Article -1 of CEDAW defines the term “discrimination against women” as;

any distinction, exclusion or restriction made on the basis of sex which has the effect or purpose of impairing or nullifying the recognition, enjoyment or exercise by women, irrespective of their marital status, on a basis of equality of men and women, of human rights and fundamental freedoms in the political, economic, social, cultural, civil or any other field.⁷⁹⁸

So in accord with the above given definition a discriminatory act is said to be so when it does have the effect of nullifying or impairing the exercise or enjoyment of internationally recognized human rights and fundamental freedom. A discriminatory act, thus, essentially deny its recipients the exercise of internationally recognized human rights. Furthermore, Article -14(1) of CEDAW states that “State parties shall take into account the particular problems faced by rural women and the significant roles which rural women play in the economic survival of their families, including their roles in the non-monetized sectors of the economy and shall take the application of all appropriate measures to ensure the applications of the provisions of the present convention to women in rural area”. In this connection, sub-article 2 of the same article states that “State parties shall take all appropriate measures to eliminate discrimination against women in rural areas in order to ensure, on the basis of equality of men and women, that they participate in and benefit from rural development and, in particular, shall ensure to such women the right to

⁷⁹⁸ Article -1 of the Convention on the Elimination of All forms of Discrimination Against Women (CEDAW)

participate in the elaboration and implementation of development planning at all levels ...”. At the domestic level, article 35(6) of the Ethiopian constitution provides for the right to women to full consultation in the formulation of national development policies, the designing and execution of projects, and particularly in the case of projects affecting the interests of women.⁷⁹⁹ Thus, apart from the recognition and protection of their fundamental human rights under the UDHR, ICCPR and the ICESCR, the rights of women in the context of climate policy action is also recognized under the CEDAW and the Ethiopian constitution.

When it comes to the discussion of how the implementation of *Humbo* A/R CDM project addressed the rights of women, field research has found out contradictory information. The following table provides information as regards respondents’ assessment of the participation of women in the forest development scheme i.e. in the *Humbo* A/R CDM project.

Table -12. Assessment of Women’s Participation in *Humbo* A/R CDM project.

Age Categories (f)		How do you assess the participation of women in the forest development scheme (FDS)?								
		The FDS encouraged the active participation of women .			The forest development scheme did not encourage the active participation of women .			Only women household heads did participate in the forest development scheme .		
		Gender			Gender			Gender		
C.	f	M	F	T (%)	M.	F.	Total (%)	M.	F.	Total (%)
20-25	4									
25-30	3				18		25.7			
30-35	9	9		12.9						
35-40	-									
40-45	20	12		17.1	8		11.4			
45-50	10	7		10					-	
50-55	8	8		11.4					-	
55-60	7	6		8.6					-	
>60	9				1		1.4	1	-	1.4
Total	70	60			38.5			1.4		

Source: Survey Research

As can be read from the table above 60% of the respondents, in *Bosa Wanche Kebele*, said that the Forest Development Scheme (the A/R CDM project) did encourage the participation of women whereas 38.5 % of them took the position that the project did not encourage the active

⁷⁹⁹ Article -35(6) of the Ethiopian Constitution

participation of women. It is only 1.4% of the respondents who said that only women household heads took part in the project. The responses of respondents in *Abela Longena Kebele* is different as only 30% of them shared that the project encouraged women to take part in the project while 58% of them noted that the project did not encourage women to take part in its activities. About 12 % of the respondents indicated that the project only encouraged women household heads to take part in the project activities. In *Hobbicha Bada*, those who said that the project encouraged women to take part in its activities constituted about 36 % of the respondents while those who shared that the project did not encourage women to take part in its activities made up 50% of the respondents. Those agreed to the position that the project only gave women household heads opportunities to take part in its activities constituted about 14% of the respondents.

On the other hand, FGDs held with women high school students in *Bosa Wanche* elicited the information that the women high school students were not invited in any of the *Kebele* meetings and consultative workshops or trainings conducted in their *Kebele*.⁸⁰⁰ The same information was obtained from individual interviews held with women residents of *Bosa Wanche Kebele* where when they are asked whether or not they took part in any of the repeatedly held *Kebele* meetings or consultative workshops, the women said they were not invited to any of the meetings.⁸⁰¹ So far as participation of women residents, at any phase of the project activities, is concerned a document analysis also reveals that the particular circumstances of rural women, their roles, knowledge stocks, and the particular impacts of the project activities against women has not been reflected on even in, for example, the preparation of the participatory rural appraisal report (PRA). The PRA, for example, says “in line with the project objective, to ascertain the trends of deforestation, 5 persons, regardless of gender, were nominated from each of the seven (7) cooperatives based on their age, experience, ability of expressing, and analyzing things they observed to explore the spatial and temporal information of the enclosed forest area”.⁸⁰² Thus,

⁸⁰⁰ FGDs with women high school students in *Bosa Wanche Kebele of Humbo Wereda*. It needs be noted that the high school students interviewed were observed to be older than the age group of girls which otherwise would be classed as high school girls in towns, and cities of Ethiopia. This is to say that the women interviewed either started schooling at their later ages or resumed their formal education after having discontinued it at some point during the school ages. Three (3) of the FGDs participants were at the same time mothers which children learning in the primary school of the same *Kebele*.

⁸⁰¹ Individual interview held with a *Bosa Wanche Kebele* resident who even said that she did not know if other residents also have had such kind of meetings facilitated jointly by experts of World Vision Ethiopia and *Kebele* office leaders.

⁸⁰² J.K. Kamara et al , World Vision *Humbo* Community Reforestation Project in *Humbo* , Ethiopia :Participatory Rural Appraisal Documentation of Trends (World Vision Australia , PRA Project Report, 2008)

selection of participants in each of the *Kebele* cooperatives for the purpose of understanding trends of deforestation in the project site was carried out “regardless” of gender.

Where due emphasis was placed rather on age, experiences, ability of expression, and analyzing things surfacing the implication that gender differences was not understood as contributing to fuller understanding of casual factors and the dynamics in the lives of households as it is related to the trends in dependence on the forest based resources of the enclosed forested area. Simply put the importance of participation of women, as carriers of important knowledge and distinctive experiences, was not seen in as important in procedures involved in the preparation of participatory rural appraisal for understanding trends of deforestation in the area. This would definitely produce the effect of insufficient understanding of what forest based resources means for women members of *Kebele* households and such a lack of understanding gets reflected in the development of what is called social mitigation action plan of the project which is meant to address the alternative livelihood needs or the right to adequate standard of living of households reliant on indispensably roles of women in rural areas.

Furthermore, it is difficult to say that there has been exerted efforts to make sure that women are equally given opportunities to take part in discussions in which they are informed about what the project is all about, what impact it is going to bring about to residents living adjacent to the project site, what benefits there are for them, how they are planned to take part in the activities, how it is going to affect their livelihoods and bent on adequate information and understanding to decide about whether or not they accept the project idea and are willing to participate in it. In this connection, the following table provides insights as to how both genders are provided equal opportunities to understand about the project and decide whether or not they are willing to participate in the project activities.

Table-13. Participatory Approach in Community Decision Making

No.	Kebele	Cabinet and Dev.t. workers	Community Representatives	Women Representatives
<i>Humbo , Abela and Hobbicha Weredas</i>				
1	<i>Hobbicha Bada</i>	12	22	8
2	<i>Hobbicha Bongota</i>	7	16	6
3	<i>Bosa Wanche</i>	5	32	10
4	<i>Abela Longena</i>	20	24	8
5	<i>Abela Gaffata</i>	7	27	8
6	<i>Bola Wanche</i>	8	37	11
7	<i>Abela Shoya</i>	10	16	4

Source: Extracted from Social Aspects Pre-feasibility Study & Social Mitigation Action Plan⁸⁰³

As can be seen in the table, in a FGDs and consultations held on a key area of the project women constituted about only a third of the male participants in each of the *Kebeles*. Under such condition it is difficult to say that the women residents of the *Kebeles* were given equal opportunities to decide on whether or not the project is important and give their consent to participate in the project activities. So, by and large, in the light of the evidences given the foregoing discussions and the FGDs the researcher held with the high school students of *Abela Longena* it is difficult to say that women were not discriminated against in terms of their participation in the project activities. The implication is that the rights of the women to particularly adequate standard of living of the study *Kebeles* were likely to have been compromised as the result of the enclosure of the project sites. This is also attested by individual interviews held with residents of the *Kebeles* where women residents said that in terms of economic gains meant to compensate for foregone benefits we only took part as temporary daily laborers in the initial years of the project where we were hired to water seedlings, build sheds for them, take care of the nurseries and afforestation activities. Otherwise, only few selected cooperative members benefited from apiculture, poultry, pottery, animal fattening, and home gardening. Thus, the social mitigation actions were definitely discriminatory and did not address

⁸⁰³ M. Admasu, *Humbo Community Managed Natural Regeneration Project : Social Aspect Pre-feasibility Study & Social Mitigation Action Plan*, Sept.14,2007.available online at : <https://cdm.unfccc.int/Projects/DB/JACO1245724331.7/history> accessed on 3 January 2023

all women residents compromising the rights of those who use to depend on the forest based resources for leading their livelihoods.

The Implications for the Rights of Children of the Implementation of Humbo A/R CDM project.

Of the indirect threats to rights of the children of households along the fringes of the mountainous project site include the threat to the rights of children to education. Those households that have continued to work on the farm fields cultivating not maize, which is a stable food but is difficult to be saved from consumption by the wild lives, but fruits and vegetables which are easier for protection from wild animal destructions have to have their children watch for the wild animals and protect the fruits from being eaten by monkeys, baboons, and wild boars. This is particularly true during the growing seasons which begins from May through to November. Children also are obliged to watch for cultivated crops, fruits and vegetables from destruction by wild animals when parents have to live up to community's expectations in social affairs, religious life and official *Kebele* meetings.⁸⁰⁴ While younger children are obliged to watch the crops and vegetables during the day, older children are also expected to guard crops, fruits and vegetables during the night. As a result, children often miss their classes which is common during the growing season otherwise attend classes but only to sleep in their classes being tired having spent sleepless nights.⁸⁰⁵

A boy aged 13 said , in this connection, that of the 22 school days in a month he had to be absent for 6 days to guard the crops, fruits and vegetables his parents grow because there is no one to watch for the wild animals in the house. He continued saying that “I would have been a 6th Grader hadn't I dropped out of the school to guard crops, fruits and vegetables. I am now a 4th Grader lagging behind for two years ”⁸⁰⁶ Another boy, who is also 13, said he doesn't come to school at least for 5 days in a month and also lagged behind by two years. He said he would have also been a six (6) grader hadn't he dropped out of school to guard his parents' farm fields. His friend, aged 12, said that his father fell sick and is in bed due to his exposure to sever cold nights while guarding his farm fields against the wild animals. The girls also are obliged to watch the animals during the day. They shared that they do not have time to do their assignments because

⁸⁰⁴ FGDs with children of *Bosa Wanche* Primary School located in front of the office of *Kebele* Administration

⁸⁰⁵ Ibid

⁸⁰⁶ A student at *Bosa Wanche* primary school speaking in the FGD held in his school compound.

of their duty to guard farm fields from mainly monkeys. A natural science teacher at *Bosa Wanche* Primary School, said we know that most of the children are obliged to guard farm fields from the wild animals both during the day and night and therefore, understand their behaviors in class rooms where they exhibit dizziness and feel sleepy⁸⁰⁷. The teacher said, in the worst case children simply run out of the class unable to bear their class room duties of listening, writing and working on class assignments.

On the other hand, it was learnt that a 12th grade student has had his right hand paralyzed due to severe cold weather at night while carrying out his duty of guarding the farm field of his parents from consumption and destruction by the wild life. It was found out that when his father requests his school director for facilitation in which the boy could take the School Leaving Exam being at home, he was told that it was not possible. The boy didn't take his exam and dropped out of the school.⁸⁰⁸ These discussions shed lights on the facts that due to the project's lack of framework in which the ecological restoration outcomes are harmonized with the human rights achievement outcomes, the rights of the children to education as recognized under articles 28 of the CRC and 11 of the ACRWC are infringed upon irrespective of the fact that the infringements occurred indirectly via the threats to crop destructions by the wild animals from the forest. FGD with high school girls also elicited that younger boys are also being exposed to severe cold weather early in the morning and suffering from cold related diseases⁸⁰⁹. Furthermore, there also were reported household heads who fell sick (unable to walk due to exposure to severe cold weather) because of guarding their farm fields during the night instead of having their sons take on the task. So in such a way, the alarming increase in the number and species of wild animals in the forest has threatened not only the children's right to education but also of their right to health.

The foregoing discussion also shows that children's right to rest and leisure is also breached as most of the children spend their time guarding farm fields of their parents against wild life. It was learnt from the FGD held both in *Bosa Wanche* Primary and Secondary Schools which are separated only by a fence that almost all children who live along the fringe of the

⁸⁰⁷ Interview with a Science teacher at *Bosa Wanche* Primary School.

⁸⁰⁸ Interview with the school director in *Bosa Wanche* high school.

⁸⁰⁹ FGDs with high school girls at *Bosa Wanche* Secondary School.

mountainous project site are obliged by their parents to guard farm fields compromising their education, time to rest and play. A mother of a 6th grader, who is also a high school student, shared that her boy is extremely worried about his academic status because of the time he has to spend guarding the farm field of his parents against monkeys and baboons⁸¹⁰. So let alone getting time to rest and play which violates article-31 of the CRC and article 12 of the ACRWC, local children have found it difficult to get time for their studies which is in violation of their rights to education of children as provided for under article 28 of the CRC and 11 of the ACRWC.

Implications for the Rights of Community Elderlies of *Humbo* A/R CDM project

The community elderlies who live along the fringes of the mountainous project site have the same rights compromised as the other residents of the *Kebeles* sharing boundaries with the project site. The difference is that the project did not have a mechanism via which it addresses the rights of such segments of the local community. FGDs with the cooperative leaders of *Bosa Wanche* elicited that the elderlies along the foot of the mountains suffered the hardest hit from wild life attacks of their crops simply because the elderlies could not guard their crops from destructions by baboons, monkeys and wild boars. So at one level, they lose the fruits of their labor to wild life destructions and consumptions. As a result they sow seeds and nurture seedlings only to lose their harvests to the wild life which gets harsher for older household heads owing to the fact that their age is such that they couldn't spend the night guarding their crops from the wild lives. On a different level they could not lend their lands to younger farmers or rent it to younger farmers so as to obtain some kind of income because the land they own is directly exposed to destructions by the wild life as it is located along the boundaries of the project land. This way the older household heads suffer from food insecurity and associated famine.⁸¹¹

In addition, those elderly household heads who tried to guard their farm fields against wild life destruction have been exposed to cold related diseases. The direct health impacts from night colds at the foot of the mountain paralyzes the elderlies making them unable to walk and remain in beds. This happened to about 15 household heads in *Bosa Wanche* alone.⁸¹² It is said that 7 of the elderly households have been forcibly evacuated from their land and residents due to the

⁸¹⁰ Ibid

⁸¹¹ FGDs with the high school students of *Abela Longena Kebele* held at *Abela Faricho* High School

⁸¹² FGDs with the leaders of the *Kebele* cooperative in *Bosa Wanche*

same problem in the *Kebele*.⁸¹³ This problem is compounded by the fact that the elderlies are unable to travel long distances to fetch drinkable water. They ask for the help of young boys who get them water. However, the elderlies drink only little per day in trying to use the difficultly obtained drinkable water for long time lengthening the time for the subsequent round of looking for help in fetching water from wells afar. This is said to have caused water shortage related diseases to the elderlies of the community along the foot of the mountainous project site.⁸¹⁴ Here, it needs be noted that the water shortage problem that the residents face could have been identified as one of the development needs of the community which the project could have provided for as its sustainable development contribution by way of direction of the Designated National Authority (DNA) of the Ethiopia (Federal EPA). So as can be discerned from these discussions, the project has compromised, inter alia, the rights of the community elderlies to adequate standard of living and health protected under UDHR, ICESCR, the ACHPR and under the FDRE's constitution.

The Roles of World Vision Ethiopia (WVE), Local Government, and Forest Development Union in helping respect and protect human rights of local people.

World Vision Ethiopia's Role in Protection the Human Rights of Local People

World Vision Ethiopia (WVE) is the NGO that initiated, developed and implemented the *Humbo A/R CDM* project. The NGO has failed in addressing, respecting and protecting the different human rights of local people of the study *Weredas*. Firstly, it has been found out, in this research, that the project is rather imposed upon the local residents instead of being able to secure the free, prior and informed consent of all segments of the residents of the *Weredas*. This has already been ascertained via the findings of FGDs and in-depth interviews held during field research work which has already been discussed in the earlier part of this chapter. The 30 guards hired to protect the forest from the local people, several attempts of local residents of deliberately setting fire in the forest, repeatedly observed conflicts between the residents of the *Kebeles* and their respective cooperative leaders over rights to use grazing land in the forest and increasing frequencies of youth entering into the forest to “illegally” making charcoal for sale all help make an inference that the project implementation did not follow adequately held successful

⁸¹³ Ibid

⁸¹⁴ FGDs with high school students of *Abela Faricho* held in *Abela Longena Kebele*

consultations with the local people and the resultant absolutely granted consent of all the residents of the *Kebeles* involved. The project rather was imposed upon local people despite availability of evidences of signatures of participation of *Kebele* residents which Word Vision Ethiopia submitted to the CDM Executive Board in an effort to have the project registered

Furthermore, in accord with, the Project Design Document (PDD) of *Humbo A/R* CDM project, the local cooperatives were meant to sustainable manage the use of forest based resources as the project employed community management of forest resources approach. Having adopted such an approach, the project should have not hired guards against the local people with the role of prohibiting any kind of use of forest resources. In accord with interviews held with zonal and *Wereda* level EPA experts, it was found out that it is only in the initial stage of the project that local people were allowed to use hay as a fodder for their livestock. Later, local residents were faced with increasing restrictions and finally prohibition of use of the forest based resources clearly violating their rights to adequate standard of living of the people as the people used to depend on the enclosed land as a source of income from making charcoal, grazing land for their livestock, fuel woods for preparing meals and pottery for making clay products for sale. The NGO, in this regard, should have conducted monitoring activities in which sustainable and proper utilization of forest based resources are competently managed.

Secondly, World Vision Ethiopia (WVE) also failed to address the repeatedly presented complaint from the local people as regards the impacts of wild lives on crop production and the threats on their lives. As has already been discussed about 490 households presented a complaint before the NGO which only gave them the promise that it will build fences around the project boundary to keep the wild animals off the nearby farms. But the NGO never kept its promise. In accord with an interview with a climate change and environmental risk management specialist who works in a liaison office of the NGO in *Wolayita Sodo* they local people were rather suggested to plant fruits in the forest such as banana, avocado, papaya and other fruits in order to keep the monkeys and baboons off their farms. They also were told to use a tree species to plant along the boundaries which would serve as a fence keeping the wild lives off their farms. Such an inconsiderate response to the complaint has been documented to have compromised the right to adequate standard of living, the right health and the right to education of residents living along the foot of the mountainous project land.

Thirdly, it was found out that neither the cooperative leaders nor members of the cooperatives are informed about the price of a given ton of carbon dioxide sequestered sold in the international market. Interview with the present project coordinator of the NGO elicited that the price is a fixed price and that a given tCO₂ e sequestered is sold at a rate of \$4. And he said that it later was sold at an increased rate of \$10 and subsequently \$11 proving that the price is not a fixed price. And this is not known to any of the leaders of the cooperatives and also members of the cooperatives. So the NGO sold the emission reduction credits in the international market in a manner that is not transparent to the ultimate beneficiaries or right holders of carbon credits generated. This has left each of the seven (7) cooperatives in a position of unquestionably accepting the annual revenues or income they are paid. The lack of transparency in the sale of emission credits is also observed in the failure of the NGO in terms of accounting for why the *Kebele* cooperatives are paid fluctuating sum of money each year their carbon credits are sold and income generated .

For example, the NGO was unable to respond to questions that related to payment of smaller amount of money for cooperatives which manage larger area of forested land in comparison with the areas other cooperatives manage and the reason why income from the sale of carbon credits decline as the capacity of the forest to sequester more carbon dioxide grows when the forest increases in its density via richer growth of plants and increasing number of trees covering the previously bare lands. Another example of lack of transparency from the part of the NGO involves its failure in terms of accounting for the whereabouts of 5% of the income from the sale of carbon credits which the people were promised to be given when the project's crediting period ends. It has been found out, via a FGD with cooperative leaders of *Bosa Wanche*, that each of the *Kebele* cooperative has been paid their respective income from the sale of carbon credits for nine (9) consecutive years and at the end of the 9th year they have been told that World Vision Ethiopia (WVE) is going to discontinue selling carbon in a fixed market and is planning of entering into the voluntary market. Consequently, three (3) years have elapsed since the last time local cooperatives were paid the last income from the sale of carbon credits generated. No effort has been made from the part of Word Vision Ethiopia (WVE) to explain what is happening over these three years.⁸¹⁵

⁸¹⁵ In-depth interview with the previous leader of the forest protection and development union.

Fourthly, the NGO gave the generation of carbon credits a primary value compared to the right to development of local people when it decides to take measure (decided to deduct 20,000 birr from the annual income of each of the cooperatives) after having learnt that the *Wereda* government administration built a road that passes through the project land taking away about 10 hectares of the land. Instead of assessing the importance of the road in terms of easing life and facilitating economic development of the *Tebella* town, NGO warned the local government that it is going to use the satellite image data in its possession to decide on deducting the revenue from the sale of carbon credits of each of the *Kebele* cooperative in complete disregard to the right to development of the local people as recognized under the UN Declaration on the right to development.

So, by and large, though field notes and observations suggest that the A/R CDM project has succeeded in rehabilitating the previously degraded and exploited land and restoring its forest resources, it has largely failed to observed international human rights standards as it implements the project activities and shares the benefits accrued from the generation of carbon credits. In addition, the NGO has also failed to ensure the sustainability and adequacy of the alternative livelihood strategies that in supported local residents with as part of its contribution to sustainable development of the people of the project hosting state of Ethiopia.

The Role of both Federal and Local Government in Respecting and Protecting the Human Rights of Local People.

In accord with the CDM governance architecture, the project hosting State is expected to identify what is called its National Designated Authority (DNA) which is tasked with the responsibility of determining whether or not a given project contributes to sustainable development priorities of the country. After having determined that the project contributes to sustainable development of the country if it turns out that the project indeed contributes to sustainable development it grants the project proponent what is called a letter of no objection. A letter of no objection is obtained after a positive evaluation of the sustainable development contribution a given CDM project. So Ethiopia's Designated National Authority (DNA) is the Federal Environmental Protection Authority (EPA).

It was found out, in this research, that at the time of the inception of *Humbo* A/R CDM project by World Vision Ethiopia (WVE) the Federal EPA did not have the technical capacity

and expertise requisite for competently carrying out the sustainable development contribution of *Humbo A/R CDM* and that the project was seen as a pioneer project. This seems to have constituted the reason why it failed to competently determine whether or not the *Humbo A/R CDM* project contributes meaningfully to the sustainable development priorities of the country. Interview with the Directorate Director of Environmental Protection Authority in *Wolayita Sodo* elicited a very interesting information in which it was learnt that the Federal EPA gave World Vision Ethiopia (WVE) a complete representation to act on its behalf. So the project, since its inception, was developed and implemented by World Vision Ethiopia (WVE)⁸¹⁶ which played the simultaneous role of Designated National Authority (the DNA) and the project proponent embodying conflicting interests. This was the most important failures of the Federal EPA to grant representation to an internationally based NGO which is animated from outside the country by its governing entity outside the country. So in effect, World Vision Australia (WVA) did have the prerogative of determining whether or not the project it developed and is implementing is contributing to the sustainable development priorities or goals of Ethiopia. Put differently, World Vision Australia and Ethiopia did not have the government monitoring and ensuring that the project did not pose threats to both procedural and substantive rights of local people. So Federal EPA's grant of complete representation to World Vision Ethiopia (WVE) to act on its behalf to administer and manage all project activities, evidently is embodied with conflict of interests, does have negative implications for respecting and protecting the human rights of local people.

At the local level the zonal level government administration of *Wolayita Sodo* failed to ensure that the human rights of local people is respected and protected in two instances. One of these is when, as result of the rehabilitation of the forest and re-emergence of wild lives, local people's crops were destroyed and consumed by the wild lives and the people presented complaints before the zonal government administration and the other is when World Vision Ethiopia (WVE) warned that 20, 000 birr is going to be deducted from the revenue from the sale of carbon credits of each *Kebele* administration if the government did not stop constructing the road that cuts through the forested land. When local people complained and sought for mitigation

⁸¹⁶ World Vision Ethiopia (WVE) is normally animated by the interests of World Vision Australia which carried out all the facilitating processes including determining which buyer to sign Emission Reduction Payment Agreements, what kind of market to enter into, and possessed the technicians who conducted the monitoring of carbon sequestration annually, manage the transactions involved and even determined the need to save some portion of income accrued from the sale of carbon credits for emergency purposes and administrative purposes. The international NGO also did choose which DOE to work with in conducting the project validation work etc.

measures to the food insecurity problems caused by wild life destructions of their farm crops which affected, at least 490 households in the *Weredas*, it prioritized the monetary value of the CDM project compared to comprised rights of the people to food, and means of livelihoods. It was so inconsiderate that it suggested solutions which were “ironic “in the light of life circumstances of peasant farmers who, in *Bosa Wanche Kebele* for example have often been aid dependent for their food security, as it suggested the cultivation of such fruits as banana, avocados, papaya to feed the monkeys, baboons and other wild lives in the forested space. By so doing, instead of making sure that the project implementing NGO observes human rights standards in the implementation and management of project activities, the local government ended up being instrumental for the achievement of the project envisaged objectives.

In a different instance, the local government did see the right to development of the local people being compromised under its watch when World Vision Ethiopia (WVE) warned it and the local people that if they don't stop constructing a road, which both the local government and people believe would facilitate development of *Tebella* town and rural farmers, that it would deduct 20,000 birr from the annual incomes of all *Kebele* cooperatives involved.⁸¹⁷ Having learnt about the construction of the road that cuts through the forested project land through monitoring satellite image data, people from the NGO came to the zonal EPA office and told the EPA director that if they don't stop construction the road, the cooperatives will receive a deducted income from the sale of carbon credits. In accord with the zonal EPA officer, the local government decided to submit about 24 hectares of land which 3-4 times larger than the land that the construction of the road took to the project proponent as a compensation. The director of the EPA office said they did so fearing that the local cooperatives will lose their annual income from the sale of carbon credits.

This does clearly constitute a violation of the right to self-determination of peoples recognized under the common article -1 of both ICCPR and the ICESCR and article -1 of the UN Declaration on the right to development. So the local government failed to ensure that these rights are respected and protected.

⁸¹⁷ In-depth interview with the Directorate Director of *Wolayita Sodo* EPA government office.

The Role of Forest Protection and Development Union in Protecting Human Rights

Initially the local people were planned to be organized to form cooperatives which they did. So in all the seven (7) *Kebeles* involved in the project, households came together to form cooperatives or associations. Accordingly, there were established seven (7) *Kebele* cooperatives: one in each of the *Kebeles*. In time, the seven (7) *Kebele* cooperatives grew into a Forest and Biodiversity Protection and Development Union. The Union is ultimately envisaged to take over the role which now is being played by World Vision Ethiopia (WVE). The Union is meant to take over the tasks of administering and managing the project, and even finding buyers and signing Emission Reduction Purchase Agreements on its own. The Union is currently consisted of the *Kebele* cooperatives which have voluntarily participating members. Membership in the *Kebele* cooperative requires being willful and pay initially 10 birr and lately, nowadays, a 100 birr.⁸¹⁸ Members initially were entitled to use hay as a fodder for their cattle, get trainings before engaging in the alternative livelihood strategies developed, are beneficiaries of loans and livelihoods strategies developed by World Vision Ethiopia that included poultry, apiculture, pottery, tailoring, animal fattening, agro-forestry and the like.

Each of the cooperative is said to have its own respective annual action plan. And in accord with their respective action plan, they use their income from the sale of carbon credits. In most cases, the *Kebele* cooperatives built grain mills, store house for storing farm harvests and seeds, shops, schools, and use the funds to provide loans for members. These have contributed to the realization of the right to adequate standard of living of the residents in the *Kebeles*. The problem, here, is that the cooperatives don't have a means to make sure that the alternative livelihood strategies developed and the capital they have is sustained in time and expanding in its capital. An illustration is that the grain mill, for example, in *Bosa Wanche* is no longer working. Its construction did solve a very serious problem the community residents were faced with as they had to travel to *Wolayita Sodo* to get the services grain mills earlier. And the cooperative did not try to repair the mill after its failure which perpetuated the challenges local residents used to face. The other instance relates to effective engagement in the livelihood strategies. People fail to run for example business involving tailoring, animal fattening or poultry.

⁸¹⁸ In-depth interview with the current leader of the Forest and Biodiversity Protection and Development Union leader.

The Forest Development Union tried to have World Vision Ethiopia (WVE) clarify where the amount of money (5% of the income from the sale of carbon credits) went after successive payment of annual revenue for Nine (9) years and when the NGO decided to leave the fixed market and enter into voluntary market. In ensuring that the generation and distribution of income for the cooperatives is done in a manner that is transparent, the Union repeatedly tried to exert relentless effort.⁸¹⁹ It also tried to constantly create capital by constructing buildings which it rents, through buying seeds and grains when they are cheap and selling them when they expensive, building and running shops, and through promoting tourism .

The Union, however, have bylaws that does not allow the youth to be members once fathers or women household heads are registered as members failing to address the prevalence of youth unemployment in the *Kebeles*. Its exclusionary approach when granting loans, trainings and support with alternative livelihood strategies only to members. The Kebele cooperatives that constitute the Union also suffer from favoritism of the leaders in benefiting friends and relatives, lack managerial capacities, and lack of transparency in the way they utilize the monetary funds they administer. It is also a failure, from the part of the Union, in terms of ensuring the protection of the right to use forest based resources, by local residents, in a sustainable manner.

Lack of technical capacity is seen in planning and assessing the needs of local people. The Union for example could have focused on availability of drinkable water which lacking in the *Kebeles*, systematic utilization of hay through “cut and carry” method and making it available for local people since grazing land in the areas very limited and this often causes conflict between residents and cooperative leaders and facilitation of conditions in which the local people could , on their own , build natural fences around the project site or dig ditches since it is believed that the wild lives come out of the forest when they thirsty of water. Again lack of managerial and entrepreneurial capacity means that the Union could have very well promoted tourism enhancing the project site as simultaneously as source of tourist attraction.

⁸¹⁹ Interview with the previous leader of *Abela Longena Kebele* who later became the leader of the Forest Development Union elicited that he has repeatedly tried to make sure that the money generated from the sale of carbon credits and distributed to the *Kebele* cooperatives is done transparently. He said he repeated asked where the money which World Vision Ethiopia promised will be kept for emergency purposes went when the NGO decided to leave what they called the fixed market and enter into voluntary markets.

In this chapter, it has been shown that the implementation of *Humbo A/R CDM* project has failed to respect both procedural and substantive human rights of local people in *Bosa Wanche*, *Abela Longena* and *Hobbicha Bada Kebeles* of *Humbo Wereda*. It has been found out that local people and residents were not adequately consulted about the plan of the project and have not been communicated about the social impacts and/or human rights impacts of the implementation of the project via the project's Environmental Impact Assessment (EIA) report. Thus, the project did not respect local people's right to FPIC and their right to information and participation in environmental decision making as discussed in the foregoing sections. The project, therefore, is rather imposed upon the local people. It has also been revealed that there has not been any effort both on the part of project implementing NGO and more importantly the DNA of Ethiopia and local government to address complaints and ensure that project administrative issues are dealt with in a manner in which the principles of transparency and accountability are upheld.

So far as substantive human rights of the local people is concerned it was discussed that the project violated the right to adequate standard of living of the local people through enclosure of the 2,728 hectares of land which the residents used to use for collecting fuel woods, as a grazing field, for making charcoal and collecting woods for construction purposes and by way of inadequately generated income from the sale of carbon credits but from what the project implementer said "fixed market ". It was also learned that the alternative livelihood strategies that the project developer provided are, on the one hand, exclusive and, on the other hand, are "meaningless" as they only involve insignificant number of and yet only cooperative members of residents in the *Kebeles* and also took the form of unsystematic, and unsustainable interventions which have not been monitored for scaffolding support for facilitation of their growth and expansion.

The climate mitigation policy tool was not also found out being respectful of the rights of women, children, the youth and the elderly as it did not effectively allow their participation in the plan of the project and also while designing the alternative livelihood strategies it claimed to have provided for the local people. Moreover, the project has compromised the right to information, participation, the right to health and education of these vulnerable groups of people in the context of the implementation of the project. In terms of ensuring compliance with

internationally recognized human rights and their observations during the implementation of project activities neither the federal EPA (DNA of Ethiopia) nor the local government played meaningful role leaving the local people with no means of ensuring that violations of their rights are remedied and their grievances are satisfactorily addressed. The resultant effect being the emergence of hierarchical and colonial power dynamics in which both the local government and people are subjugated to the interests of actors like the World Bank and World Vision Australia whereby preservation of the enclosed forested space, not sustainable utilization of forest based resources, became primarily important amidst an outright compromise of the right to development of the local people and their right to self –determination in terms of use of their wealth and natural resources, land being a factual example in this case. The *Humbo* case, therefore, substantiates the claim that the dominant climate mitigation policies like CDM and REDD+ represent a particular way of responding to the climate crisis in which both the site and material responsibility of climate mitigation is shifted to countries in the global South in contexts in which their implementation causes severe human rights violations.

Conclusion

This dissertation is about the climate injustice concerns raised in connection with policy responses, via the international climate regime, to the phenomenon of global warming which is alternatively called climate change. It specifically saw the issue of climate injustice in the context of the insignificant historical contribution of countries in the global South to the problem and their relative vulnerability to the impacts of the change in climate and the unjust climate policy response of the global climate regime as represented by the terms of negotiations of the Conference of the Parties to the United Nations Framework Convention to Climate Change (the UNFCCC). It argued that the development of exclusive “emission rights” and the adoption of market-based climate mitigation mechanisms via emission trading and carbon offsetting under the Kyoto Protocol on the one hand and the “expansion” of the obligation to mitigate the climate crisis to include the global South and the increasing focus on intensifying carbon sequestration via “the protection of forests” mainly in the global South under the Paris Agreement constitute not only an unfair and ineffective climate policy but also a mechanism that allows the global North evade the assumption of the obligation to introduce fundamental and deeper socio – economic structural transformation necessary to shift away from fossil fuel based environmentally unsustainable industrial capitalist economy fueled by a consumer culture.

The research also shows that the negotiation processes that led to the development of the international climate regime (that is to say the various COP meetings) have been characterized by the influence of powerful states and creation of platforms where states do not have equal sovereign rights to fairly and effectively make their interests the terms of the agreements of the COP as seen in the negotiations of the Copenhagen Accord. Moreover, it has been highlighted making use of critical reviews of the literature that the basis bent on which carbon offsetting operates is without adequate evidence i.e. there is no adequate evidence to support the claim that “emission by sources of the GHGs is commensurately compensated by removal by sinks of these gases”, that it is not the same to compare “biotic carbon” with “ the carbon from fossil fuels”, and that it is very difficult to prove that most CDM and REDD+ projects are really additional. This is seen as being key in the discussion of the human rights implications of climate change regime because it directly determines whether or not global efforts to stabilize the climate so as to prevent dangerous interference into the climate system, as stated under article -2 of the UNFCCC, and limit temperature rise to 1.5 degrees as stated under the Paris Agreement are being

effectively materialized. This, in turn, determines whether or not the impacts upon the full and effective enjoyment of human rights from climate change are mitigated. So failure to effectively mitigate climate change and stabilize the climate translates to states failure to live up to their obligations to protect the human rights of their peoples from climate related effects.

Having shown the global nature of the problem through the discussions of local peoples' experiences of human rights violations in the context of the implementation of CDM and REDD+ projects in the different regions of the world, the research revealed that *Humbo A/R* CDM project in Ethiopia failed to effectively observe such procedural rights as the right of the local people to Free, Prior and Informed Consent (FPIC), the right to receive information, the right to take part in the conduct of public affairs that affect their lives and the right to judicial and administrative remedies. Furthermore, it has been shown that the implementation of the project did compromise the rights of local residents in *Bosa Wanche*, *Abela Longena* and *Hobbicha Bada Kebeles* to, inter alia, adequate standard of living, means of subsistence, the right to development, the right to property, and the right to education. Pinpointed also is the fact that the climate policy tool actually violated the rights of such vulnerable groups of people as children, women and the elderly. So the policy implementation was insensitive to vulnerable sections of local people who already are "ill-positioned" to withstand the impacts from the changing climate owing to culture, income and levels of education.

The alternative livelihood strategies that the project designed to address the opportunity costs of the means of livelihoods foregone consequent upon the enclosure of the 2,728 hectares of land were, apart from being exclusively meant for some selected members of the primary cooperatives established under the project, inadequate and unsustainable. Moreover, the annually accrued income from the sale of carbon credits has been found to be, again, inadequate in terms of meeting the socio-economic needs or supporting the livelihoods of the local people. Local people were only able to build grain mills (the grain mill is no longer working in *Bosa Wanche* for example), storehouse where they kept "best seeds" for sale, build small shops, paid salaries for guards who protected the forests, and a building which they rent for a local college. So the payments from the sale of carbon credits were not enough to provide local people of their means of livelihoods foregone due to the enclosure of the forested space. Even such an inadequate income from the sale of carbon credits is no longer available now for more than three years owing to the decision by World Vision Ethiopia that the sale of the credits is now to take

place in the voluntary markets—a decision in which the local people did not take part or were made “voiceless”. This could be thought as a peculiar instance where a forested land, in Ethiopia, is absolutely preserved for carbon sequestration to compensate for the pollution that industries in Canada or Japan produce without being paid for the environmental services as a result of a policy that benefits those primarily responsible for a crisis while punishing those that are already hardest hit by the crisis it purports to resolve.

So far as the legal, policy and strategic frameworks are concerned, irrespective of the fact that the country seems to build “climate resilient green economy” increasingly relying on renewable energy sources, its move towards realizing the green development goals is contingent upon the availability of climate finance from the global North which use it to further their political interests and interfere in the internal affairs of the states in the global South. At the same time being a party to both the Kyoto protocol and the Paris Agreement, Ethiopia is desirous of being attractive as a host state for the implementation of CDM project and now REDD+ projects seeking benefits from result based payments from a nationwide implementation of the successor of CDM projects in complete disregard of human rights violation in the context of the implementation of the projects. This happens without a conscious evaluation of whether or not such projects are genuine in terms of meeting their “environmental integrity” requirements, such adverse consequences as the shifts in the site and material responsibility of climate mitigation in the global South in spite of the fact that the problem is primarily caused by those countries in the global North and the compromise of the human rights of local people where such projects are implemented. It appears that this happens to be the case because governments in the global South see CDM and REDD+ projects as means of solicitation of finance to fund their development projects which, otherwise, would have hardly been funded by the finance their economies generate.

The DNA of the state and/or the administrative hierarchies of the government, also, were insensitive to their primary obligations to ensure that a third party (the World Vision Ethiopia) respects and promotes the protection of the human rights of local residents which the government assumes under existing human rights law and at the same time under the climate regime where the host state is entitled to make sure that such projects contribute to the sustainable development priorities of their government. By and large, carbon trading is critically analyzed as being an unjustly designed climate policy that inequitably distributes obligations to mitigate the climate

crisis in a manner that perpetuates a colonial dynamic of power relations in which the global North exercises a new way of control of land and forest based resources in the South that is concomitant with violations of local people's rights.

Reflections and Recommendations

The causes and consequences of global climate change put the states in the categories of the Global North and South on unequal footing. Development and higher standard of living brought about as a result of fossil fuel energy based industrial capitalism in the Global North caused the problem also making them economically resilient to its adverse impacts while leaving poor developing states in the Global South inadequately equipped to further development efforts amidst resilient economies to the impacts of climate change. In such a context, powerful states such as the US managed to "guard" their industries and companies against losses by designing and later withdrawing from a policy whose primary interest is to ensure expansion and growth of their industrial capital while ostensibly guaranteeing environmental sustainability via a climate mitigation policy which the US called "flexibility" mechanisms.

Characterized by the continued influences of powerful states, intimidation of poor states by the powerful ones and the manipulation of scientific technocrats by the powerful states, the COP came up in Paris with an unjustly evolved agreement in which on top of Kyoto protocol's rewards of emission rights to historically polluting industries and its ineffective market –based climate strategies, the agreement extended its obligation to also include the poor developing states reinvigorating carbon offsetting through results based payments by way of, not curbing emissions from the burning of fossil fuels, but intensification of carbon sequestration activities through the prevention of tropical deforestation and forest degradation.

So, in effect, the real cause of the problem– the burning of fossil fuels and the resultant emission of GHGs in industrial capitalist states underpinned by the belief that economic growth is not only compatible but also is a requisite condition for environmental sustainability–is evaded and obligation to mitigate the climate crisis is geographically shifted in poor developing states in the tropics in return for payment that is far short of contributing to their sustainable development priorities. So the negotiation processes and the substantive outcomes of policies and implementation of these in the ground clearly violated inter alia, the right to sovereign equality of states, the right to self-determination of the peoples of these states, interference in the internal

affairs of states, the right to development of the poor states and various human rights of local people and communities where these policy tools are implemented.

The critic of carbon offsetting that airs the view that "the IPCC scientists did not employ normal procedures of scientific standards to verifiably ascertain the claim that emission by sources of GHGs is compensated by removal by sinks of the gases and hence do not have adequate evidence to support the claim" as put forward by Larry Lohman, the fault in the assumption that all greenhouse gases have equal heating effect and, therefore, can be taken interchangeably with the heating effect of carbon dioxide, the uncertainties surrounding the "equivalence" of "biotic carbon" and "the fossil carbon", the challenge of proving the additionality of carbon offsetting projects, the problems of leakage and permanence all work together against the belief that carbon offsetting provides authentic solution to the climate crisis and hence, stabilizes the climate leading us to believe that these will curb the threats against the full and effective enjoyment of human rights of people.

Knowing that whatever efforts are there, their full and effective implementation will not prevent the warming of the planet in order of 2.7 to 3.5 degrees as indicated by the latest UNDP Emission Gap Report, it is evident that dangerous thresholds have already been passed and that global climate policy being implemented over three decades have failed with the implications that states will still face difficulties in protecting the human rights of their peoples from climate related effects. Thus the unjust, "false" and ineffective global climate regime is not only inherently incompatible with human rights but also clearly associated with their violations both in the processes of its negotiation and during the implementation of the specific policy tools it gave rise to.

The genuine solution to the problem requires fundamental political economic changes that involve shifts away from reliance on fossil fuel based energy sources towards those which are renewable and build authentically green economies which is evidently seen expensive by the global North but is indispensable if the climate is to be stabilized and if the developed world is to justly respond to the climate justice concerns. Furthermore, the developed world needs to openly recognize that it owes those poor developing states in the global South their right to development and pays for, out of obligation, not out of "capacity", their paths to green and sustainable economies. This could be through climate change adaptation funds. This is also supported by the right to development as enshrined under article -4 (2) of the UN Declaration on the Right to

Development where it states that "sustained action is required to promote more rapid development of developing countries. As a complement to the efforts of developing countries effective international cooperation is essential in providing these countries with appropriate means and facilities to foster their comprehensive development." Since this requires a political commitment on the part of the global North it appears that it is unlikely to come to fruition. This, therefore, calls for individuals to invoke their right to a clean and healthy environment which often is constitutionally recognized as is the case for the people in Ethiopia where the constitution protects this right. Though not yet binding, the international human right to a clean, healthy and sustainable environment could also be used as *jus cogens* to force states to ensure their citizens their right to a clean, health and sustainable environment.

The Kyoto protocol did grant "emission rights" to industries and countries, most responsible for polluting the air, to the atmospheric space which it exclusively shared among mostly the developed world while making the global South sites of the emission reduction activities via unevenly distributing projects which are often associated with insignificant sustainable development contributions. By so doing it helped the developed world continue exploiting what is becoming a scarce atmospheric space for absorbing GHGs further strengthened by its "market-based flexible mechanisms" of emission reduction. What came later by way of the Paris Agreement did the job of assigning obligations of emission reductions also for the poor developing countries, which have not been enjoying the levels of emission reduction rights due to their lower levels of development and were sites of emission reduction projects, restraining their equal rights to exploit a global common resource to further their economic development.

So while the development of the global North caused the problem of the climate crisis making the right to development of the global South difficult to be realized, the global South is doubly (via Kyoto protocol and the Paris Agreement) made to bear heavy responsibility presenting it with the challenges of expensive development as continued emission reduction pledges mean that the global South has rely on "green technologies" and develop renewable energy sources which evidently are expensive. So this justifies the need of the global South the pay for the development of the global North out of legal obligations instead of provision of aid conditioned upon political demands.

The other important alternative is strengthening an already existing network of social movements organized and orchestrated by local peoples and civil society organizations in the fight against international corporations and companies which are engaged in the extraction, distribution and use of fossil fuels. A “commonality” construed via the voices of grass root efforts of networks of local peoples, civil society organizations, research institutions, and think tanks built under the organizing principle of fighting against the capitalist and neoliberal values of indefinite expansion of markets and ever increasing accumulation of global capital through reliance on the cheapest source of energy (fossil fuels based energy sources) for ever pursued economic growth and their belief in the compatibility of such a value with environmental sustainability, “false” and ineffective solutions for the climate crisis, and human rights violations in the context of the implementation of unjustly designed dominant climate policies such as CDM and REDD+.

In the meantime, a rights- based approach to the existing market mechanisms could be exploited to inform the monitoring and evaluation exercise of the social and economic consequences of such strategies as the REDD+ on the one hand, while supporting the reinvigoration of the right to development as a legally binding treaty whereby the fundamental ideas of reliance on fossil fuel for propelling economic development efforts and decoupling of economic development goals from environmental sustainability visions are adequately addressed.

Bibliography

Books

- Adam, B. & Luchsinger, G., *Climate Justice for A Changing Planet: A Primer for Policy Makers and NGOs* (UN Non-governmental Liaison Service, 2009)
- Agarwar, A. and Narain, S., *Global Warming in an Unequal World: A Case of Environmental Colonialism* (Center for Science and Environment, 1991) p.1.
- Akenji, L. et al., *1.5 Degree Lifestyles: Towards A Fair Consumption Space for All* (A Report, Hot or Cool Institute, 2021).
- Angelson, A. et al, *Analyzing REDD+: Challenges and Choices*, (Indonesia, Center for International Forestry Research, 2012,) pp. 111-128.
- Anghe, A., *Imperialism, Sovereignty and the making of International Law*. (Cambridge: Cambridge University Press, 2007)
- Arnoldus, M. & Bymolt, R., *Demystifying Carbon Markets: A Guide to Developing Carbon Credit Projects*, (KIT Publishers, 2018), p. 20.
- Atapattu S A et al., *The Cambridge Handbook of Environmental Justice and Sustainable Development*. (Cambridge University Press, 2021)
- Bear P, Tom A. and Sivan K., *The Right to Development in a Climate Constrained World: The Greenhouse Development Rights Framework*. (Heinrich Böll Foundation, Christian Aid, Eco equity, and the Stockholm Environment Institute, 2007)
- Bernstein, S., *The Compromise of Liberal Environmentalism* (Colombia University Press, 2002) p.101.
- Bohm S & Dabhi S, *Upsetting the Offset: The Political Economy of the Carbon Markets*, (Mayfly Book, 2009)
- Bullock, S., Childs, M. and Picken T., *A Dangerous Distraction: Why Offsetting is Failing the Climate and People: The Evidence* (2009) available at: <https://www.foei.org> accessed on 3 June 2020.
- Christina Voigt (ed.) *Research Handbook on REDD+ and International Law* (Edward Elgar, 2016) p. 496
- Cifedhop, *The Human Rights –Based Approach: A Field of Action for Human Rights Education*, Coord.Josè Parra, Geneva, (2012), p.15.

- Cohen, L., Manion, L., and Morrison, K., *Research Methods in Education* (5th Edition, Rutledge Falmer 2000).
- Cupples, J., Horst, V.D., Rezdian, S., Wilson, M. and Staddon, S. (eds.) *Climate Change and Social Justice: Reflections on COP 26 from the Geographies of Social Justice Research Group*. (University of EDINBURGE, 2021).
- Desalegn, A., Desta, S. and Robinson, L., *Institutional assessment for climate change adaptation, Didahara, Borena, southern Ethiopia*: (International Livestock Research Institute, 2015).
- Dubash, N.(ed.), *Hand Book of Climate Change and India*, Center for Science and Environment, New Delhi, 2000, p.81-90.
- Eliasch, J. , *Climate Change: Financing Global Forests*. The Eliasch Review. (Routledge, 2008) p.9.
- Freestone, D.and Streck, C. (ed.), *Legal Aspects of Implementing the Kyoto Protocol Mechanisms: Making Kyoto Work*, (Oxford University Press, 2005). p.175.
- Galik, G. et al., *Alternative approaches for addressing non –permanence in carbon projects: an application to afforestation and reforestation under the Clean Development Mechanism*, (Nicholas Institution for Environmental Policy Solution, 2014).
- Gall, M.D., Gall, J.P. & Borg, W.R., *Educational Research: An Introduction* (Arnis E. Burvikovs ed. Seventh Edition, Pearson Education, Inc. 2003)
- Gardner S M et al., *Climate Ethics: Essential Readings*, (Oxford University Press, 2010).
- Gisila, T. and others, *Ethiopian Panel on Climate Change. First Assessment Report: Working Group I Report on Climate Change over Ethiopia, I, The Physical Science Basis* (Seyoum Mengistu ed., Ethiopian Academy of Sciences, 2015)
- Gupta, J. et al (ed.), *Climate Change, Forests and REDD. Lessons for Institutional Design*, Rutledge Research in Environmental Law, New York, NY, Rutledge, 2013, p. 80.
- Heartfield, J., *Green capitalism: manufacturing scarcity in an age of abundance*. (Mute, 2008).
- Holloway, V. & Giandomenico, E. , “*Carbon Planet White Paper: The History of REED+ Policy*”, (Carbon Planet Limited, 2009).
- Honkonen, T., *The common but differentiated responsibility principle in multilateral environmental agreements: Regulatory and Policy aspects*. (Kluwer Law International, 2009).

Houghton, J., *Global Warming: The Complete Briefing* (Third Edition, Cambridge University Press, 2004).

International Council on Human Rights Policy, *Climate Change and Human Rights: A Rough Guide*, (Versoix, Switzerland, 2008).

IPCC, *Climate Change :2014 :Impacts, ,Adaptation and Vulnerability ,Contribution of Working Group II To The Fifth Assessment Report of The Intergovernmental Panel on Climate Change* ,(Cambridge University Press ,2014).

-- *Climate Change 2014: Synthesis Report. Contributions of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (IPCC, 2014)

-- *Summary for Policymakers. In: Global Warming of 1.5°C. An IPCC Special Report on the Impacts of global warming of 1.5°C above pre –industrial levels and related global greenhouse gas emission pathways in the context of strengthening the global response to the threat of climate change , sustainable development and efforts to eradicate poverty*, (World Meteorological Organization, 2018), pp.32

-- , *Global Warming of 1.5°C: An IPCC Special Report on the Impacts of global warming of 1.5°C above pre –industrial levels and related global greenhouse gas emission pathways in the context of strengthening the global response to the threat of climate change , sustainable development and efforts to eradicate poverty* (World Meteorological Organization, 2018).

-- , *Climate Change 2014: Impacts, Adaptation and Vulnerability, Technical Summary* (Box TS, 4.P.8 2014).

IRENA, *Renewable Capacity Statistics*, (International Renewable Energy Agency, 2021

Johnson A et al. (eds.). *The Fire Now: Anti-racist Scholarship in Times of Explicit Racial Violence* (Zed Books, 2018).

Johnson, G.T. & Lubin, A. (eds.) *Futures of Black Radicalism* (Verso, 2017) pp.72-82.

Kamara, J. K., et al, *World Vision Humbo Community Reforestation Project in Humbo, Ethiopia: Participatory Rural Appraisal Documentation of Trends*. (World Vision Australia, 2008).

- Kamga S D, *The Right to Development in the African Human Right System*, (Toyin Falola and Roy Doron eds, Global Africa Series , Routledge, 2018).
- Lohmann, L., *Carbon Trading: A Critical Conversation on Climate Change, Privatization and Power* (Uppsala: The Dag Hammarskjold Center, 2006).
- — , *Democracy or Carbocracy? : Intellectual Corruption and the Future of the Climate Debate* (The Corner House Briefing, 2001)
- Mander J, *Manifesto on Global Economic Transition* (The Institute for Policy Studies, 2007)
- McInerney –Lankford, S., Darrow, M., & Rajamani, L., *Human Rights and Climate Change: A Review of International Legal Dimensions*, (The World Bank, 2011)
- Meadows D H et al, *The Limits to Growth: A Report for the Club of Rome's Project on the Predicament of Mankind*, (Universe Book, 1972)
- Mitman, G., Armiero, M. & Emmett, R., *Future Remains: A Cabinet of Curiosities for the Anthropocene*, (University of Chicago Press, 2020), pp.116-128.
- Monjane, B. et al, *15 Years of REDD+: A Mechanism Rotten at the Core*. Montevideo, World Rainforest Movement, 2022, p. 25).
- National Meteorological Agency, *Climate Change National Adaptation Program of Action (NAPA) of Ethiopia*, (National Meteorological Services Agency, 2007), p.25
- Negendakumana, S. et al., *Rethinking Rights and Interests of Local communities in REDD+ Designs: Lessons learnt from Current Forest Tenure Systems in Cameroon*, (ISRN Forestry, 2013), p.8.
- Newell P & Paterson M, *Climate Capitalism: Global Warming and the Transformation of the Global Economy*, (Cambridge University Press, 2010)
- Noordwijk, M.V. et al, *Local Perspectives on REDD+ In Comparison with those at the International Negotiation tables and their representations in quantitative scenario models* (Word Agro Forestry Center, 2011).
- Pahuja, S., *Decolonizing International Law: Development, Economic Growth and the Politics of Universality* (Cambridge: Cambridge University Press, 20 11).

- Pearse, R. & Dehm, J., *“In REDD: Australia’s Carbon Offset Project in Central Kalimantan* (Friends of the Earth International, 2011).
- Peters, R. & Robertson, L., *A User’s Guide to the CDM (Clean Development Mechanism)*, (Pembina Institute for Appropriate Development, 2003) p.6
- Pew Center for Global Climate Change, *Beyond Kyoto: Advancing the International Effort Against Climate Change* (A Report of the Center for Climate and Energy Solutions, 2003).
- Rajamani, L., *Differential Treatment in International Environmental Law*. (Oxford, Oxford University Press, 2006)
- Richard Peet et al., *Global Political Ecology*, (Rutledge, 2011)
- Saito –Jensen, M., *Theories and Methods for the Study of Multilevel Environmental Governance* , Center for International Forestry Research , Bogor , Indonesia , 2015 , p.2 available at : <https://pdfs.semanticscholar.org> accessed on 17 June 2020.
- Sands, P. et al., *Principles of International Environmental Law*. (3rd eds. Cambridge University Press, 2012).
- Schmidt, L. & Gerber, K., *A Comparison of Carbon Market Standards for REDD+ projects* (German watch, 2016).
- Soltau F, *Fairness in International Climate Law and Policy* (Cambridge University Press, 2009)
- Speth , J.G., *Red Sky At Morning : America and the Crisis of the Global Environment* (2nd Edition, Yale University Press , 2009) ,pp.5-6 .
- Steffen Bohm & Siddhartha Dabhi (eds.), *Upsetting the Offset: The Political Economy of the Carbon Markets*, (Mayfly Book , 2009).
- Stern, N., *The Economics of Climate Change: the Stern Review*. (Cambridge: Cambridge University Press).
- Tacconi, L. Mahanty, S. and Suich, H. (eds.), *Payment for Environmental Services, Forest Conservation and Climate Change: Livelihood in the REDD?* , (Edward Elgar Publishing Limited, 2010), pp. 185-211.
- Tan,N.Q., *Evaluation and Verification of the Free, Prior , Informed Consent Process under the UN-REED program in Lam Dong Province*.(The Center for People and Forests, 2010).

Tennigkeit, T. et al., *Financing REDD+ through private forestry sector: How to attract REDD+ related private investment*. (Freiburg, 2013).

Tsing, A.L., *The Mushroom at the End of the World: On the Possibility of Life on the Capitalist Ruins*. (Princeton University Press, 2015) pp.38-39.

Vanderheiden S, *Environmental Rights* (The International Library of Essay on Rights, Rutledge, 2012).

Verges, F., 'Racial Capitalocene' in G.T. Johnson, & A. Lubin (eds.) *Futures of Black Radicalism* (Verso,2017) pp.72-82.

Vidaurre, R. and Tedsen, E., *Effectiveness of Current Policy Frameworks in mitigating climate - induced risks relating to human security and conflict: Case Study on Ethiopia* (Ecologic Institute, 2012)

Westholm, L. et al, *Assessment of existing global financial initiatives and monitoring aspects of carbon sinks in forest ecosystems – The issue of REDD+* (Focali Report, Focali, 2009).

Electronic Journals, Conference Papers, Reports and Policy Briefs

ACHPR, Principles and Guidelines on the Implementation of Economic, Social and Cultural Rights in the African Charter on Human and Peoples' Rights. Available online at: < https://www.achpr.org/public/Document/file/English/achpr_instr_guide_draft_esc_rights_eng.pdf.

Adem,A. & Bewket, W., Assessment of Selected Development Policies and Strategies of Ethiopia from a climate change perspective, (Policy Brief # 5, Forum for Environment, Addis Ababa, 2011).

Admasu, M., *Humbo Community Managed Natural Regeneration Project: Social Aspect Pre-feasibility Study & Social Mitigation Action Plan*, Sept.14, 2007.available online at : <https://cdm.unfccc.int/Projects/DB/JACO1245724331.7/history> accessed on 3 January 2023.

Afionis S et al, 'Consumption –based carbon accounting: does it have a future?' (2017) Vol.8, Issue 1, Wiley Interdisciplinary Reviews: Climate Change, available online at : <<https://wires.onlinelibrary.wiley.com/doi/10.1002/wcc.438>> accessed on 17 September 2022.

- Aikens, N. et al, 'South to the Plantationocene' (2019) ASAP Journal. Available online at: < <https://asapjournal.com/south-to-the-plantationocene-natalie-aikens-amy-clukey-amy-k-king-and-isadora-wagner/> > accessed on 30 January 2022.
- Amanuel, W., 'The Role of Clean Development Mechanism on Social and Ecological Resilience in *Humbo* , Southern Ethiopia', (2020), Vol. 4 , Issue 14 , Annals of Ecology and Environmental Science , available online at< <https://www.researchgate.net/publication/350756370>> accessed on 15 August 2022.
- Aminzadeh, S. C., 'A Moral Imperative: The Human Rights Implications of Climate Change' (2007) Vol.30 No.2 Hastings International and Comparative Law Review. Available online at: < https://repository.uclawsf.edu/hastings_international_comparative_law_review/vol30/iss2/4/ > accessed on 17 February 2022.
- Andrew, J. et al, Carbon Tax: Challenging Neoliberal Solutions to Climate Change, Vol.31 (2), (2011), *Social and Environmental Accountability Journal*. Available online at: <https://www.tandfonline.com/doi/full/10.1080/0969160X.2011.593838?scroll=top&needAccess=true&role=tab> accessed on 4 March 2023.
- Ango T G, 'Medium –Scale Forestland Grabbing in the Southwestern Highlands of Ethiopia: Impacts on Local Livelihoods and Forest Conservation', Vol.7, No. 24, 2018, pp.1-20. Available at: <https://www.mdpi.com/journal/lamd> accessed on 26 Feb.2020.
- Arthur, H.A., Encouraging CDM energy projects to aid poverty alleviation , Attachment 1, Review of CDM Activities , 2003, available online at: <https://assets.publishing.service.gov.uk/media/57a08d0ced915d622c001735/R80372.pdf> accessed on 2 March 2022.
- Asamere, W. et al., Social and Economic Impacts of Community Managed Reforestation and Natural Regeneration of Forestry Development , the Case of *Humbo* District , Ethiopia , *Environment and Natural Resource Research* ; Vol.6, No. 4, 2016,pp.36-50 .
- Asia Indigenous Peoples Pact (AIPP), REED+ Implementation in Asia and the Concerns of Indigenous Peoples available on <https://www.iwgia.org> accessed on Oct.29.
- Ayestaran, I., 'The Second Copernican Revolution in the Anthropocene: An Overview' (2008) Vol.3, *Revista Internacional Sostenibilidad, Tecnologia y Humanismo*. Available online at: < <https://upcommons.upc.edu/bitstream/handle/2099/7083/ayestaran.pdf> > accessed on 1 February 2022.

- Bachram, H., Climate Fraud and Carbon Colonialism: The New Trade in Greenhouse Gases, Vol.5, No.4, (2004), *CAPITALISM NATURE SOCIALISM*. Available online at: <https://www.tandfonline.com/doi/abs/10.1080/1045575042000287299> accessed on 4 March 2023.
- Baer, P. et al., ‘The Greenhouse Development Rights Framework’, (2009), G-24 Policy Brief No.38, Climate and Development, available online at: https://www.researchgate.net/publication/233331687_The_Greenhouse_Development_Rights_Framework > accessed on 5 Oct.2022.
- Bayrak ,M., M.et al, Ten Years of REDD+ : A Critical Review of the Impact of REDD+ On Forest Dependent Communities, Vol. 8, Issue 7, (2016), *Sustainability*. Available online at : < <https://www.mdpi.com/2071-1050/8/7/620> > accessed on 21 June 2023.
- Bekele M. et al., REDD+ MRV implementation in Ethiopia: Review of the context, framework and progress, *Occasional Paper 192*, CIFOR, Bogor, Indonesia, 2018.
- Betsill, M.M. and Bulkeley, H., Cities and the multilevel governance of climate change, *Global Governance*, vol. 12, 2006, pp.141-159.
- Bhullar, L., REDD+ and the Clean Development Mechanism: A Comparative Perspective, *International Journal of Rural Law and Policy*, 2013, p.2 available on line at:<https://epress.lib.uts.edu.au> accessed on 1 March 2022.
- Biryahwaho, B. et al., Institutional Innovations in African Smallholder Carbon Projects : The Case Study of *Humbo* Ethiopia Assisted Natural Regeneration Project, (2012), CCAFS Report No.8, CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS) available online at: https://assets.publishing.service.gov.uk/media/57a08a85e5274a27b2000639/Africa_nAgCarbon-CaseStudy-Humbo.pdf > accessed on 9 December 2022.
- Bohm, S. & Dhahi, S., Commentary. Fault lines in Climate Policy: What role for Carbon Markets?, Vol.11(6),(2012), *Climate Policy*. Available online at: < <https://www.tandfonline.com/doi/abs/10.1080/14693062.2011.618770?journalCode=tcpo20> > accessed on 4 March 2023.
- Bohm S et al, Greening Capitalism? A Marxist Critique of Carbon markets, Vol. 0(0), (2012), *Organization Studies*. Available online at: < <https://core.ac.uk/download/pdf/16387374.pdf> > accessed on 12 April 2023.

- Bolin, A. & Tassa, D. Exploring Climate Justice for forest communities engaged in REED+: Experiences from Tanzania, *Forum for Development Studies*, Vol.39, 2012, pp. 5-29.
- Bond, P., 'Climate Debt Owed to Africa: What to Demand and How to Collect?' (Post Copenhagen Climate Justice Conference, Durban, South Africa, 5 May, 2010).
- — 'South African sub- imperialism'. (Paper presented to the Conference toward an Africa without Borders, Durban University of Technology, 8 July 2007).
- Bulkeley , H. et al, Environmental governance and transnational municipal networks in Europe, *Journal of Environmental Policy and planning*, vol. 5, 2003, pp. 235 - 254.
- Cabello, J. and Gilbertson,T., A Colonial Mechanism to Enclose Lands: A Critical Review of Two REDD+ focused special issue, Vol.12 (1/2), (2012), pp. 162-180, *Theory and Politics in Organization*. Available online at : < <https://ephemerajournal.org/sites/default/files/2022-01/12-1cabellogilbertson.pdf> > accessed on 17 June 2023.
- Candace, M.A. & Bowen, J.D., 'The Ethical Challenges of the UN's Clean Development Mechanism' (2013) Vol.117 No.4 the *Journal of Business Ethics*. Available online at: < <https://www.jstor.org/stable/42001888> > accessed on 25 March 2022.
- Carlarne, C. & Colavecchio, D., Balancing Equity and Effectiveness: The Paris Agreement & The Future of International Climate Change Law, Vol.27, (2019), *New York University Environmental Law Journal*. Available online at: < https://www.nyuelj.org/wp-content/uploads/2019/05/Carlarne_Balancing-Equity-and-Effectiveness.pdf> accessed on 20 January 2023.
- Carney, J. 'Subsistence in the Plantationocene: Dooryard gardens, agro biodiversity, and the subaltern economies of slavery' (2020) Vol.48 Issue 5 *The Journal of Peasant Studies*. Available online at : < <https://www.tandfonline.com/doi/full/10.1080/03066150.2020.1725488> > accessed on 30 Jan.2022
- Chagas, T. et al., A Close Look at the Quality of REDD+ Carbon Credits, A Report Published on 20 March 2020 available at: <https://www.climatefocus.com/sites/default/files/A%20close%20look%20at%20the%20quality%20of%20REDD%2B%20carbon%20credits%20%282020%29%20V.20.pdf>. Accessed on 20 December, 2021.

- Chimni, B.S., 'Third World Approaches to International Law: A Manifesto' (2006) Vol.8 Issue 1 International Community Law Review. Available online at: < https://brill.com/view/journals/iclr/8/1/article-p3_2.xml?language=en > accessed on 7 February 2022.
- Chomba, S. et al., Roots of Inequality: How the implementation of REED+ reinforces past injustices, Land use policy, vol.50, 2016, pp.202-213.
- CIFOR, Preventing the risk of corruption in REED+ projects in Indonesia, Working Paper, 2011, https://www.cifor.org/publications/pdf_files/WPapers/WP80Dermawan.pdf.
- Ciplet, D., Rethinking Cooperation: Inequality and Consent in International Climate Change Politics, Vol. 21, No.2, (2015), *Global Governance*. Available online at: <https://www.jstor.org/stable/pdf/24526164.pdf?refreqid=excelsior%3A2cc377a6ff6a0b4637110ffdc246b96&ab_segments=&origin=>> accessed on 25 January 2023.
- Climate Action Tracker, "INDCs lower projected warming to 2.7°C : significant progress but still above 2°C " (1 November 2015). Available online at: <https://climateactiontracker.org/publications/indcs-lower-projected-warming-to-27c-significant-progress-but-still-above-2c/> accessed on 20 January 2023.
- Climate Change Connection, "Contraction and Convergence", Climate Change Connection, [no date] para.7 available at: < <https://climatechangeconnection.org/solutions/international-solutions/contraction-convergence/> > accessed on 7 September 2022.
- Collins, Y. A., Colonial Residue: REDD+, Territorialisation and the racialized subject in Guyana and Suriname, Vol. 106, (2019), *Geoforum* , pp.38-47. Available online at: < <https://www.sciencedirect.com/science/article/abs/pii/S0016718519302283> > accessed on 21 June 2023.
- Cuong, P.M., 'REDD, LULUCF and CDM – Recent International Developments' (2010) http://www.iges.or.jp/en/fc/pdf/activity_201003/Vietnam/08_Cuong_REDD_Negotiation_processes.pdf
- Dale, G., 'Green Shift': An analysis of corporate responses to climate change, Vol.3 (2),(2008), *International Journal of Management Concepts and Philosophy*. Available online at: <https://www.researchgate.net/publication/49401482_'Green_Shift'_An_analysis_of_corporate_responses_to_climate_change/link/00463523009800ec0e000000/download> accessed on 17 April, 2023.
- Davis J et al, Anthropocene, Capitalocene,... Plantationocene? : A Manifesto for Ecological Justice in an Age of Global Crisis, Vol.13, (2019), *Geography Compass*. Available online at: < <https://par.nsf.gov/servlets/purl/10180270> > accessed on 1 April, 2023.

- Davis, H. & Todd, Z. On the Importance of a Date, or Decolonizing the Anthropocene, ACME. An International E-Journal for Critical Geographies, Vol.16 (4) 2017, p.770.
- Davis, R.S., Williams, D.D. & Yanchar, S., 'the Use of Randomization in Educational Research and Evaluation: A Critical Analysis of Underlying Assumptions', (2008) Vol.21. Issue 4, Evaluation and Research in Education available online at : <<https://www.tandfonline.com/doi/abs/10.1080/09500790802307837>> accessed on 17 August 2022
- Davis S J, and Calderia K, 'Consumption –Based Accounting of CO₂ Emission' Vol. 107/No.12, (2010), Proceedings of the National Academy of Sciences available at : <<https://www.pnas.org/doi/10.1073/pnas.0906974107> > accessed on 29 August 2022.
- Dawkins E & Croft S, 'Consumption –based accounting reveals global redistribution of carbon emissions', (2017) Discussion Brief available online at: <<https://mediamanager.sei.org/documents/Publications/SEI-2017-DB-Dawkins-Croft-CBA.pdf> > accessed on 17 September 2022.
- Dehm, J. 'Authorizing Appropriation? : Law in Contested Forested Spaces.', (2018) Vol.28 No.4 *The European Journal of International Law* available online at: <<https://academic.oup.com/ejil/article/28/4/1379/4866328> > accessed on 27 Feb.2020.
- — Reflections on Paris: Thoughts towards a Critical Approach to Climate Law, Vol.61, (2018), *Revue québécoise de droit international*. Available online at : <<https://www.proquest.com/openview/298c1dbc250da22876bd2c0dcffeda86/1?pq-origsite=gscholar&cbl=2069359> > accessed on 25 March 2023.
- —, Carbon Colonialism or Climate Justice? Interrogating the International Climate Regime from A TWAIL perspective, Vol.33, (2016), Windsor Year Book of Access to Justice. Available online at: <<https://wyaj.uwindsor.ca/index.php/wyaj/article/view/4893> > accessed on 19 April 2023.
- Deleuil, T., 'The Common but differentiated responsibilities principle: changes in continuity after the Durban Conference of the Parties' (2012) Vol.21 Issue. 3 Review of European Community and International Environmental Law . Available online at: <<https://onlinelibrary.wiley.com/doi/full/10.1111/j.1467-9388.2012.00758.x> > accessed on 20 February 2022.

- Delice, A., ‘The Sampling Issues in Quantitative Research’ (2010) Vol.10 (4) Educational Sciences: Theory and Practice available online at:
<https://files.eric.ed.gov/fulltext/EJ919871.pdf> accessed on 8 August 2022.
- Dingeto, A., Ethiopia hydropower development and Nile basin hydro politics, Vol.10, Issue 1, (2022), *AIMS Energy*. Available online at: <
<https://www.aimspress.com/article/doi/10.3934/energy.2022006?viewType=HTML>
 > accessed on 10 February 2023.
- Duker, A. et al., ‘ The implications of ignoring smallholder agriculture in climate –financed forestry projects : empirical evidence from two REED+ pilot projects ’,(2019) Vol.19 No.51 *Climate Policy*, available online at:
 <<https://www.tandfonline.com/doi/full/10.1080/14693062.2018.1532389>>
 accessed on 28 Feb.2020.
- Duyck, S. et al, ‘Human Rights and the Paris Agreements Implementation Guidelines: Opportunities to Develop a Rights –based Approach’ (2017) Vol.12 No.3 Carbon and Climate Law Review. Available online at: <
<https://www.jstor.org/stable/26554683> > accessed on 27 March 2022.
- Eberle, C., Munstermann, N. & Siebeneck, J., ‘Carbon Colonialism: A Postcolonial Assessment of Carbon Offsetting’ (A Research Paper, University of Bonn/ United Nations University, 2019).Available online at : <
https://www.researchgate.net/publication/337622634_Carbon_Colonialism_A_postcolonial_assessment_of_carbon_offsetting > accessed on 30 January 2022.
- Echeverria, D. & Terton, A., Review of Current and Planned Adaptation Action in Ethiopia, *CARIAA Working Paper No. 8*, (International Development Research Center, Ottawa, Canada and UK Aid, London, United Kingdom, 2016). Available online at:
www.idrc.ca/cariaa
- Engel, S. and Palmer, C, ‘Painting the Forest REDD? Prospects for Mitigating Climate Change through Reducing Emissions from Deforestation and Degradation’ (IED Working Paper 3, 2008)
 <<http://ecollection.library.ethz.ch/eserv.php?pid=eth:41892&dsID=eth-41892-01.pdf>>.11
- ERM Certification and Verification Services, ‘CDM Validation Report ’(ERM CVS 2011)
 available on
<https://cdm.unfccc.int/filestorage/H/A/O/HAOMN2GWX18YJE4IC93R56UFPZ7Q>

[DT/1883%20v1%20Bujagali%20FVR%2006Oct.2011signed.pdf?t=eTN8bzVvYnA3fDDPNOf9Q5mlaCRkUnQ1jk7](https://www.jstor.org/stable/3993785) accessed on 20Oct.2021.

Escobar, A. ‘Beyond the Third World: Imperial Globality, Global Coloniality and Antiglobalization Social Movements’ (2004) Vol.25 Issue 1 Third World Quarterly. Available online at: < <https://www.jstor.org/stable/3993785> > 5 March 2022.

Ethiopian Panel on Climate Change , First Assessment Report , Summary of Reports for Policy Makers , Ethiopian Academy of Sciences , Addis Ababa , Ethiopia ,2015, pp.14-16 available at <https://www.eas-et.org> accessed on Feb.20, 2020.

EU REDD Facility, Introduction to REDD+ , Briefing available on www.euredd.efi.int/documents/15552/154912/introduction+to+redd+/eaabc68f-9176-40b0-acf3-dd4e81e40aad accessed on Nov.30,2021

Fairhead, J., Leach, M. and Scoones, I., ‘Green Grabbing: A New Appropriation of Nature?’ (2016), Vol.39 No.2 Journal of Peasant Studies. Available online at :< www.tandfonline.com/doi/full/10.1080/03066150.2012.671770 > accessed on 7 February 2022.

Fearnside, P.M., ‘Saving Tropical Forests as a Global Warming Countermeasure: An Issue that Divides the Environment Movement’, (2001) 39(2) Ecological Economics, pp.167-184 available online at: <https://www.researchgate.net/publication/222656635_Saving_tropical_forests_as_a_global_warming_countermeasure_An_issue_that_divides_the_environmental_movemental_movement > accessed on 1 March 2022 .

FIAN International, ‘Honduras – Bio Aguan ‘, <<http://www.fian.org/en/what-we-do/case-work/honduras-bajo-aguan>, 2013 accessed on 14 Oct.2021.

Forest People Program (FPP), Lessons from the field: REDD+ and the Rights of Indigenous Peoples and forest dependent communities. Moreton-in- Marsh, UK:FPP, 2011.

Forest Trends’ REDDX reporting REDD+ finance at the national level for the period 2008-2012 for Brazil, Colombia, DRC, Ecuador, Ghana, Indonesia, Liberia, Mexico, Peru and Tanzania. Available at < <http://reddx.forest-trends.org>>

- Freudenthal, E. Nnah, S. & Kenrick ,J. REED AND RIGHTS in CAMEROON: A review of the treatment of indigenous peoples and local communities in policies and projects , Forest Peoples Program , 2011. Available online on <https://www.forestpeoples.org> accessed on Nov.8, 2021.
- Gilbertson T & Reyes O, ‘Carbon Trading: How it works and why it fails’ (Occasional Paper Series, Uppsala, 2009).
- GJEP et al., NO-REDD Papers , Volume One available at [https://globaljusticeecology.org/wp-content/ uploads/2011/11noreddpapers.pdf](https://globaljusticeecology.org/wp-content/uploads/2011/11noreddpapers.pdf) .
- Global Forest Coalition, 15 Years of REDD+: Has it been Worth the Money?, Published in September 2020, available at : <https://globalforestcoalition.org> accessed on 20 Dec.2021.
- Global Forest Coalition, 15 years of REDD+, 2020. Available on <https://www.globalforestcoalition/15-years-of-reddpdf>
- Green, J.F., ‘Does Carbon Pricing Reduce Emissions? A Review of ex-post analysis’ (2021) Vol.16 No.4 Environmental Research Letters. Available online at: < <https://iopscience.iop.org/article/10.1088/1748-9326/abdae9> > accessed on 7 February2022.
- Hailemariam ,S.N., Soromessa, T. & Teketay ,D., Non –carbon benefits for effective implementation of REED+: The Case of Bale Mountains Eco-region , South Eastern Ethiopia ,African Journal of Environmental Science and Technology, Vol.910, 2015, pp.747-764.
- Hall, S. & Davis, M., Permission to Say “Capitalism”: Principles for Critical Social Science Engagement GGR Research, Vol.3, 2021, *Frontiers in Climate*. Available online at: < <https://www.frontiersin.org/articles/10.3389/fclim.2021.708913/full> > accessed on 10 January 2023.
- Hammond. J., Salvaging the United Nations REDD+ Program against the Backdrop of International Human Rights Violations, Vol. 45, No.4 , *Denver Journal of International Law and Policy*. Available online at : < <https://digitalcommons.du.edu/cgi/viewcontent.cgi?article=1018&context=djilp> > accessed on 21 June 2023.

- Hansen J et al, Target Atmospheric CO₂: Where Should Humanity Aim? Vol.2, (2008), *The Open Atmospheric Science Journal*. Available online at :< <https://openatmosphericsciencejournal.com/contents/volumes/V2/TOASCJ-2-217/TOASCJ-2-217.pdf> > accessed on 1 April, 2023
- Haraway, D., ‘Anthropocene, Capitalocene , Plantationocene, Chthulucene : Making Kin’ (2015) Vol.6 Issue 1 *Environmental Humanities*. Available online at: < <https://read.dukeupress.edu/environmental-humanities/article/6/1/159/8110/Anthropocene-Capitalocene-Plantationocene> > accessed on 30 Jan.2022.
- Haraway, D.J. et al., ‘Anthropologists are talking – About the Anthropocene’ (2016) Vol.81 Issue 3 *Ethnos*. Available online at: < <https://works.swarthmore.edu/cgi/viewcontent.cgi?article=1450&context=fac-biology> > accessed on 30 January 2022.
- Hayward T, ‘Human Rights versus Emission Rights: Climate Justice and the Equitable Distribution of Ecological Space ‘, *Ethics and International Affairs*, Vol.21, Issue 4, (2011). Available online at: <https://philippapers.org/rec/HAYHRV-2> accessed on 15 Oct.2022.
- Haya, B., ‘Measuring Emissions against an Alternative Future: Fundamental Flaws in the Structure of the Kyoto Protocol’s Clean Development Mechanism’, *Energy and Resource Group Working Paper* ERG 09-011. Available online at : < https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1562065 > accessed on 17 June 2023.
- Hepburn, C., ‘Carbon Trading : A Review of the Kyoto Mechanisms’ (2007) Vol.32 *The Annual Review of the Environment and Resources* .Available online at :< <https://www.annualreviews.org/doi/pdf/10.1146/annurev.energy.32.053006.141203> > accessed on 14 February 2022.
- Hickel J et al., Imperialist appropriation in the world economy: Drain from the global South through unequal exchange, 1990 -2015. Vol. 73, (2022), *Global Environmental Change*. Available online at : < <file:///C:/Users/Fifi/Downloads/1-s2.0-S095937802200005X-main.pdf> > accessed on 12 April,2023.
- Hooghe, L. and Marks, G., Types of multi-level governance, *European Integration Online Papers* 5(11), 2001, available at <http://eiop.or.at/eiop/texte/2001-011.htm>
- Hoang, C. et al., ‘This is my garden’: justice claims and struggles over forests in Vietnam’s REDD, *Climate Policy*, Vol.19, 2019, No. S1, pp. S23-S25. Available on <https://www.researchgates.net> accessed on Oct.28, 2021.
- Huggins, L.S., “1.5° c to stay alive’: climate change, imperialism, and justice for the Caribbean’ (2017) Vol.38 No. 1 *Third World Quarterly*. Available online at : <

<https://www.tandfonline.com/doi/full/10.1080/01436597.2017.1368013> >accessed on 7 February 2022.

Humbo Ethiopia Assisted Natural Regeneration Project (undated), Project Design Document Form, Version 10, Section A. P.4. Available online at <https://cdm.unfccc.int>.

Humphreys S, *Climate Change and Human Rights: A Rough Guide* (International Council on Human Rights Policy, 2008).

Israel, F. and Murugan, P., 'Livelihood Impacts of Forest Carbon Project and Its Implications for forest sustainability: The Case of Regenerated Forest in Humbo District, South Western Ethiopia', Vol.XI, No.2, 2015, pp.58-83, available at: <https://www.researchgate.net> accessed on 4 May 2020.

Jessica, G., Delegation and accountability in the Clean Development Mechanism: The new authority of non-state actors, *Journal of International Law & International Relations*, Vol.4, 2008, p. 21.

Jindal, R. et al, 'Forest based carbon sequestration projects in Africa: Potential benefits and challenges' (2008) Vol.33 No.2 Natural Resource Forum. Available online at: < <https://onlinelibrary.wiley.com/doi/10.1111/j.1477-8947.2008.00176.x> > accessed on 20 February 2022.

Kemerink-Seyoum, J.S. et al , Sharing benefits or fueling conflicts? ; The elusive quest for organizational blueprints in climate financed forestry projects in Ethiopia , *Global Environmental Change* , Vol. 53, 2018 , pp.265-272.

Kotze, L.J., 'Human Rights and the Environment in the Anthropocene' (2014) Vol. 1 Issue 3 the Anthropocene Review. Available online at: < <https://journals.sagepub.com/doi/10.1177/2053019614547741> > accessed on 30 January 2022.

Lewis, S.L. & Maslin, M.A. Defining the Anthropocene.(2015) Vol. 519(742) *Nature* . Available online at : < [\(PDF\) Defining the Anthropocene \(researchgate.net\)](#) > accessed 20 october 2021.

Limon, M., 'Human Rights and Climate Change: Constructing a Case for Political Action' (2009) Vol.33 *Harvard Environmental Law Review*. Available online at : < <https://harvardelr.com/wp-content/uploads/sites/12/2019/07/33.2-Limon.pdf> > accessed on 17 February 2022.

Liu, L. et al, An equity-based framework for defining national responsibilities in global climate change mitigation, Vol.9, Issue 2, (2015), *Climate Change and*

Development. Available online at:
<https://www.tandfonline.com/doi/full/10.1080/17565529.2015.1085358?scroll=top&needAccess=true&role=tab> accessed on 13 January 2023.

Llanos, R.E. & Feather, C. The Reality of REED+ in Peru: Between Theory and Practice, Indigenous Amazonian Peoples' Analysis and Alternatives, 2011, p.30 available on <https://www.forestpeoples.org>. Accessed on Nov.3, 2021.

Lohmann, L., *Democracy or Carbocracy? : Intellectual Corruption and the Future of the Climate Debate* (The Corner House Briefing , 2001)

-- , *Carbon Trading: A Critical Conversation on Climate Change, privatization and power*, (The Dag Hammarskjöld Foundation, 2006).

-- , Carbon trading, climate justice, and the production of ignorance: Ten examples, Vol. 51, (2008), *Development*. Available online at:
www.thecornerhouse.org.uk/pdf/document/ignornacefinalpdf. Accessed on 18 April, 2023.

-- , Hold the Applause: a critical look at recent EU climate claims, The Corner House. Available online at: www.thecornerhouse.org.uk/resources/hold-applause accessed on 18 April 2023.

-- , Toward a different debate in environmental accounting: The cases of carbon and cost– benefit, Vol.34, (2009), *Accounting, Organizations and Society*, .Available online at : <
<http://www.thecornerhouse.org.uk/sites/thecornerhouse.org.uk/files/EnvAcctg.pdf>
> accessed on 18 April 2023.

-- , Uncertainty markets and carbon markets: Variations on Polanyian themes. Vol.5, Issue 2 (2010), *New Political Economy*. Available online at: <
<https://www.tandfonline.com/doi/abs/10.1080/13563460903290946> > accessed on 18 April 2023.

Lovbrand, E., 'Earth System governmentality: Reflections on Science in the Anthropocene' (2009) Vol.19 *Global Environmental Change*. Available at: <
<http://www.zeeli.pro.br/wp-content/uploads/2018/04/2009-Lövbrand-et-al-ESS-Science-in-the-Anthropo.pdf> > accessed on 1 Feb. 2022.

Low Carbon Green Growth Roadmap for Asia and the Pacific, Fact Sheet, REDD and REDD+ available online at: <<https://www.unescap.org>> accessed on 28 Feb. 2022.

- Lyons, K. & Westoby, P., Carbon colonialism and the new land grab: Plantation forestry in Uganda and its livelihood impacts, vol.36, (2014), *Journal of Rural Studies*. Available online at : < <https://www.sciencedirect.com/science/article/abs/pii/S0743016714000692> > accessed on 17 April 2023.
- Mahadew, R., A Human Rights –Based Approach to Climate Change, Vol.31, (2021), *Revue juridique de l’Océan Indien*, 2021, *Justice climatique : perspectives des îles de l’océan Indien*. Available online at: < <https://hal.univ-reunion.fr/hal-03328964/document> > accessed on 8 February 2023.
- Matisoff, D.C., ‘Making Cap-and-Trade –Work: Lesson from the European Experience’ (2010) Vol.52 No.1 *Environment: Science and Policy for Sustainable Development*. Available online at: <www.tandfonline.com/doi/full/10.1080/00139150903479530 accessed on 10 Feb.2022.> accessed on 27 March 2022.
- Mboya A, ‘Human Rights and the Global Climate Change Regime’, Vol.58, No. 1, (2018) *Natural Resource Journal*, available online at: < https://www.jstor.org/stable/26394775?read-now=1&seq=4#page_scan_tab_contents > accessed on 24 Oct.2022.
- McCarthy, J., A Socioecological Fix to Capitalist Crisis and Climate Change? The Possibilities and Limits of Renewable Energy, Volume 47, pp. 2485-2502,(2015), *Environment and Planning* , available online at : < <https://journals.sagepub.com/doi/pdf/10.1177/0308518X15602491> > accessed on 10 January 2023.
- McKittrick, K. ‘Plantation Futures’ (2013) Vol.17 Issue (3(42)) *A Caribbean Journal of Criticism*. Available online at : < [https://read.dukeupress.edu/small-axe/article-abstract/17/3%20\(42\)/1/33296/Plantation-Futures?redirectedFrom=fulltext](https://read.dukeupress.edu/small-axe/article-abstract/17/3%20(42)/1/33296/Plantation-Futures?redirectedFrom=fulltext) > accessed on 15 December 2022.
- Meyer A, ‘Briefing: Contraction and Convergence ‘(2004) Vol.157, Issue 4, *Engineering Sustainability*, available online at :< https://www.researchgate.net/publication/239410492_Contraction_and_Convergence > accessed on 1 September 2022.
- Michaelowa, A. and Purohit, P., ‘Additionality Determination of Indian Projects: Can Indian CDM Project Developers Outwit the CDM Executive Board?’ (2007) <http://medias.lemonde.fr/mmpub/edt/doc/20070608/920594_additionality_determination_of_indian_cdm_projects.pdf>.23
- Moore, J.W., ‘The Capitalocene, Part 1 : On the Nature and Origins of our Ecological Crisis.’

(2017) Vol.44 Issue 3 The Journal of Peasant Studies. Available online at: < <https://www.tandfonline.com/doi/full/10.1080/03066150.2016.1235036> > accessed on 7 February 2022.

Müller, F., Kyoto's Grandfathering Principle as an Obstacle to be Overcome, Working Paper, Stiftung Wissenschaft und Politik, German institute for International and Security Affairs, 2005. Available online at: < https://www.swp-berlin.org/publications/products/arbeitspapiere/DiskP2005_04_mlr_sicher.pdf > accessed on 28 Feb. 2023.

Muluneh, A. et al., Adapting to Climate Change for Food Security in the Rift Valley Dry Lands of Ethiopia: Supplemental Irrigation, Plant Density and Sowing Dates, *Journal of Agricultural Sciences*, 2016, Pp.1-22.

Murdiyarso, D. et al., Some lessons learned from the first generation of REED+ activities, Current Opinion in Environmental Sustainability, Vol. 4, 2012, pp.678-685 available on www.sciencedirect.com accessed on Oct.18, 2021.

Murphy, D. et al, Climate Change Mitigation through Land Use Measures in Agriculture and Forestry Sectors, International Institute for Sustainable Development, Background Paper, 2009, p.15. Available online at: https://www.fao.org/fileadmin/user_upload/rome2007/docs/Climate_Change_Mitigation_through_Land_Use_Measures.pdf accessed on 10 May 2022.

NAPA, Climate Change National Adaptation Program of Action (NAPA) of Ethiopia, Report of the Federal Democratic Republic of Ethiopia, Ministry of Water Resources, National Meteorological Services Agency, Addis Ababa, Ethiopia, 2007.

Napoli, C., 'Understanding Kyoto's failure' (2012) Vol. 32 No.2 the SAIS Review of International Affairs. Available online at: < <https://www.jstor.org/stable/27000907> > accessed on 14 Feb.2022.

Norman, M. & Nakhooda, S., The State of REDD+ Finance, CGD Working Paper, Center for Global Development, Washington DC, US, 2014, p.5 available at: <https://www.cgdev.org/publication/state-redd-finance-working-paper-378> accessed on 22 Dec.2021.

Obergassel, W. et al, Human Rights and the Clean Development Mechanism: Lesson learned from three (3) case studies, Wuppertal Institute for Climate, Environment and Energy, Wuppertal, Germany, 2017, pp. 1-22.

OFWE, Farm Africa and SOS Sahel Ethiopia, Bale Mountains Eco-region Reduction of Emission from Deforestation and Forest Degradation (REDD+) Project –Ethiopia, Project Description /Project Design Document, 2014, available at www.oromiaforest.govt.et

OHCHR, Applying a Human Rights –Based Approach to Climate Change Negotiations, Policies and Measures. Available online at: <<https://www.ohchr.org/sites/default/files/Documents/Issues/ClimateChange/InfoNoteHRBA.pdf>>

OHCHR, ‘Private military and security companies in Honduras need robust and effective monitoring, says the UN expert group, TEGUCIGALPA/ GENEVA ‘, 25 February, 2013 available on <https://newsarchive.ohchr.org>, accessed on Oct.15, 2021.

Oxfam, Faire Shares: A Civil Society Equity Review of INDCS: Summary (October 2015) available online at: < <https://www.oxfam.org/en/research/fair-shares-civil-society-equity-review-indcs>> accessed on 17 January 2023.

Oxfam International, Media Briefing, “Extreme Carbon Inequality” (2 December 2016) which is available online at: < www.oxfam.org/sites/www.oxfam.org/files/file_attachments/mb-extreme-carbon-inequality-021215-en.pdf>

Pan, C. et al, Key Challenges and Approaches to addressing barriers in forest carbon offset projects, Vol.22, (2022), *Journal of Forest Resources*. Available online at: < <https://link.springer.com/article/10.1007/s11676-022-01488-z> > accessed on 28 January 2023.

Pablo, J. et al., Rights abuse allegations in the context of REDD+ readiness and implementation: A preliminary review and proposal for moving forward, CIFOR, No.190, 2017 .p.4 available at www.cifor.org/publications/pdf_files/infobrief/6630-infobrief.pdf

Pauw P. et al ‘Different perspectives on differentiated responsibilities : A state –of-the –Art Review of the Notion of Common and Differentiated Responsibilities in International Negotiations’ (2014) Discussion Paper. Available online at: <www.die-gdi.de/uploads/media/DP_6.2014.pdf> accessed on 7 February 2022.

Pearse, R. & Bohm, S., Ten reasons why carbon markets will not bring about radical emissions reductions, Vol.5, Issue 4 , (2014), *Carbon Management*. Available online at: <https://www.tandfonline.com/doi/full/10.1080/17583004.2014.990679> accessed on 28 Feb.2023.

Pew Center for Global Climate Change, *Beyond Kyoto: Advancing the International Effort Against Climate Change* (A Report of the Center for Climate and Energy Solutions , 2003).

Raftopoulos, M. 'REDD+ and Human Rights: Addressing the urgent need for a full community – based human rights impact assessment', (2016) Vol. 20, Issue 4 The International Journal of Human Rights available online at: < <https://www.tandfonline.com/doi/abs/10.1080/13642987.2015.1115266?needAccess=true>> accessed on 27 Feb.2020.

Rainforest Action Network, 'Stop Banks Funding Climate Chaos' available online at:www.ran.org/campaign/stop-banks-funding-climate-chaos/ > accessed on 18 February2022.

Sachs W, 'Development: The Rise and Decline of an Ideal ',(2000), Working Papers , No.108, Wuppertal Papers, available online at : < <https://www.econstor.eu/bitstream/10419/49106/1/332536696.pdf>> accessed on 17 September 2022.

Schade, J. & Obergassel,W., Human Rights and the Clean Development Mechanisms , Cambridge Review of International Affairs , Tayler and Francis Group , Vol. 27. , No.4, 2014, pp. 717-735 available on <http://www.tandfonline.com/10.1080/09557571.2014.961407> accessed on 14. Oct.2021.

Schapper, A., 'Climate Justice and Human Rights' (2018) Vol.32 (3) , International Relations , Available online at: <https://dspace.stir.ac.uk/bitstream/1893/27619/1/Climate%20Justice%20and%20Human%20Rights_accepted%20version.pdf> accessed on 7 July 2022.

Scheba, A. & Rakotonarivo, O., Territorializing REED+: Conflicts over market-based forest conservation in Lindi, Tanzania, Land Use Policy, Vol.57, 2016, pp.625-637.

Schlosberg D, 'Further Uses for the Luxury /Subsistence Distinction: Impacts, Ceilings and Adaptation, (2019) Vol. 21, No.2, The British Journal of Politics and International Relations, available online at: <<https://journals.sagepub.com/doi/10.1177/1369148118819065>> accessed on 1 September 2022.

- Schlup, M., 'The Gold Standard: Linking The CDM to development and poverty reduction' (A Conference on Climate or Development, Hamburg Institute of International Economics, 28-29 October, 2005).
- Schneider, L., Is the CDM fulfilling its environmental and sustainable development objectives? An evaluation of the CDM and options for improvement, (Report prepared for WWF, Oko- Institute, 2007).
- Scholz I, 'Reflecting on the Right to Development from the Perspective of Global Environmental Change and the 2030 Agenda for Sustainable Development' (Conference Paper, Bonn, November, 2019). Available online at : < https://link.springer.com/chapter/10.1007/978-3-030-30469-0_11 > accessed on 31 March 2023.
- Sheng, J. et al, Neoliberal Conservation in REDD+: The Roles of Market Power and Incentive Designs, Vol, 28, (2019), *Land Use Policy*. Available online at: <https://www.sciencedirect.com/science/article/abs/pii/S0264837719302510> accessed on 17 June 2023
- Shue H., Subsistence *Emissions and Luxury Emissions*, *Law &Policy*, Vol.15, No.1, 1993, pp.39-59, available at: <https://www.onlinelibrary.wiley.com> accessed on 3 June 2020.
- Skutsch, M. and Trines, E., 'Understanding Permanence in REDD' (Policy Paper No 6, The Kyoto Think Global Act Local Project (K: TGAL), 2010) <http://www.communitycarbonforestry.org/NewPublications/KTGAL%20Policy%20Note%206%20Permanence%20in%20REDD.pdf>
- Skutsch, M. and Jong, B., 'The Permanence Debate' (2010) 327 *Science* ,107.available online at: < https://www.researchgate.net/publication/41578414_The_Permanence_Debate > accessed on 23 June 2023.
- Stoddard, I. et al, Three Decades of Climate Mitigation: Why Haven't We Bent the Global Emissions Curve? Vol.46, (2021), *Annual Review of Environment and Resources*. Available online at: < <https://www.annualreviews.org/doi/pdf/10.1146/annurev-environ-012220-011104> > accessed on 9 February 2023.
- Stott R, 'Contraction and Convergence : A Healthy Response To Climate Change' Vol. 332 , No.7554, (2006), *British Medical Journal* ,available online at : < <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1476735/#:~:text=Contraction%20and%20convergence%20is%20a,will%20reduce%20alongside%20carbon%20dioxide.> > accessed on 7 September 2022.

- Streck,C., REDD+ and Leakage: debunking myths and promoting integrated solutions, *Climate Policy*, Vol.21 (6), 2021, pp.843-852.
- Streck, C. and Lin, J., Making Markets Work: A Review of CDM Performance and the Need for Reform, *The European Journal of International Law*, Vol.19, No.2, 2008, pp.409-442 available online at: <https://academic.oup.com/ejil/article/19/2/409/407762> accessed on 16 May 2022.
- Sullivan, S., ‘Ecosystem service commodities’ – a new imperial ecology? Implications for animist immanent ecologies, with Deleuze and Guattari. vol.69, (2010), *A Journal of Culture/Theory/Politics*. Available online at: < <https://www.ingentaconnect.com/contentone/lwish/nf/2010/00000069/00000069/art0009>> accessed on 18 April, 2023.
- Sultana F, The Unbearable Heaviness of Climate Coloniality, Vol.99, (2022), *Political Geography*. Available online at :< <https://www.sciencedirect.com/science/article/abs/pii/S096262982200052X> > accessed on 25 March 2023.)
- Sun F, ‘Is the Fundamental Cause of Climate Change Capitalist Economic Growth?’(Global Social Challenges, 5 May 2021), < <https://sites.manchester.ac.uk/global-social-challenges/2021/05/05/is-the-fundamental-cause-of-climate-change-capitalist-economic-growth/> > accessed on 18 October 2021.
- Sutcliffe J. P., A. Wood & J. Meaton, Competitive Forests: Making Forests Sustainable in South-West Ethiopia, *International Journal of Sustainable Development and World Ecology*, Vol.19, No.6, 2012, pp.471-481. Available at: <https://www.tandfonline.com> accessed on 7April 2020.
- Sutter, C. & Parreno, J.C., Does the current Clean Development Mechanism (CDM) deliver its sustainable development claim ? : An analysis of officially registered CDM projects , Vol.84, Issue 1, (2013), *Climate Change*. Available online at: < <https://link.springer.com/content/pdf/10.1007/s10584-007-9269-9.pdf> > accessed on 18 April, 2023.
- Thompson, M.,C. et al, Seeing REDD+ as a Project of Environmental Governance, Vol. 14 , Issue 2, (2011), *Environmental Science and Policy*. Available online at : < <https://www.sciencedirect.com/science/article/abs/pii/S1462901110001619> > accessed on 20 June 2023.
- "US Embassy Cables: US Urges Ethiopia to Back Copenhagen Climate Accord," *The Guardian*, (2 February 2010) < <https://www.theguardian.com/world/us-embassy-cables-documents/246644>> accessed on 28 January 2023; "US Embassy Cables: Maldives Tout \$50 Million Climate Projects to US," *The Guardian*, (3 December 2010) < <https://www.theguardian.com/world/us-embassy-cables-documents/251174> > accessed on 28 January 2023.

- Vatn, A. et al., what does it take to institute REDD+? : An Analysis of the Kilosa REDD+ pilot. Tanzania, Forest Policy and Economics. Vol.83: 2017, pp.1-9.
- Voigt, C., Is the Clean Development Mechanism Sustainable? : Some Critical Aspects, Sustainable Development Law and Policy, Vol.8. Issue 2, 2008, pp.15-21. Available online at: <https://digitalcommons.wcl.american.edu/cgi/viewcontent.cgi?> Accessed on 10 May 2022.
- Walker, S.M. et al., Technical Guidance on Development of a REDD+ Reference level, Winrock International, Ecosystem Services Units, p.7, available online at : <https://winrock.org/document/technical-guidance-on-development-of-redd-reference-level/> accessed on 10 May ,2022.
- Watson, C., Mourato, S. & Milner-Gulland, E.J., Uncertain Emission Reductions from Forest Conservation: REDD in the Bale Mountains, Ethiopia, Ecology and Society, Vol.18, No.3, 2013.
- WCED, Our Common Future, Report of the World Commission on Environment and Development, United Nations, 1987, pp..37-38 available online at : <https://www.are.admin.ch/are/en/home/media/publications/sustainable-development/brundtland-report.html> accessed on 11 May 2022.
- Westoby, P. & Lyons, K., ‘Carbon Colonialism and the new land grab: Plantation forestry in Uganda and its livelihood impacts’ (2014) Vol.36 Journal of Rural Studies. Available online at : < <https://www.sciencedirect.com/science/article/abs/pii/S0743016714000692> > accessed on 27 February 2022.
- Whiteman, D. et al., Business and Biodiversity: They would say that. Vol. 466, Issue, 435 (2010), *Nature*. Available online at : < <https://www.nature.com/articles/466435b> > accessed on 18 April, 2023.
- Whyte, K.P., Indigenous Science (fiction) for the Anthropocene : Ancestral dystopias and fantasies of climate change crisis , Environment and Planning E. , Nature and Space , 1 (1-2) , 2018 , pp. 224-242 , p.226
- Winrock International and World Bank, Decision Support Tool for Developing Reference Levels for REDD+, 2012. Available at:<https://www.leafasia.org/tools/decision-support-tool-developing-reference-levels-redd>
- Wolde, A. et al., ‘Social and Economic Impacts of Community Managed Reforestation and Natural Regeneration of Forestry Development, the Case of *Humbo* District,

Ethiopia', *Environment and Natural Resource Research*, Vol.6, No. 4, 2016, pp.36-50 available at: <https://www.researchgate.net> accessed on 24 Feb.2020.

Wolford, W., 'the Plantationocene: A Lusotropical Contribution to the Theory' (2021) Vol. 0 Issue 0 *Annals of the American Association of Geographers*. Available online at : < <https://www.tandfonline.com/doi/full/10.1080/24694452.2020.1850231> > accessed on 30 Jan.2022.

Wood, R.G., Carbon Finance and Pro-poor co-benefits: The Gold Standard and Climate, Community, Biodiversity Standards. Sustainable Markets Discussion Paper, International Institute for Environment and Development (IIED), 2011, p.8. Available online at : <http://www.environmentportal.in/files/Carbon%20finance%20and%20pro-poor.pdf> accessed on 6 May 2022.

World Bank, 'Uganda- Bujagali Hydropower Project' (World Bank 2005) available on <https://documents.worldbank.org/curated/en/2005/10/6343110/uganda-bujagali-hydropwer-project> accessed on Oct.19, 2021

___ __ , 'Kenya Electricity Expansion Project (English)- Integrated Safeguards Data Sheet'(2010)AC4957<https://documents.worldbank.org/curated/en/2010/03/11987133/kenya-electricity-expansion-project>>accessed on Oct.21,2021.

___ __, 'Management Report and Recommendation in Response to the Inspection Panel Investigation Report No. 44977-Ug of the Uganda: Private Power Generation (Bujagali) Project '(2008) IDA/R2008-0296.

Wynter, S., 'Novel and History, Plot and Plantation' (1971) Vol. 5 *Savacou* .Available online at: < <https://trueleappress.files.wordpress.com/2020/04/wynter-novel-and-history-plot-and-plantation-first-version-1971.pdf> > accessed on 15 December 2022.

Zegeye, H., 'Climate Change in Ethiopia: Impacts, Mitigation and Adaptation' (2018) Vol.5 *International Journal of Research in Environmental Studies*, available online at <<http://www.bluepenjournals.org/ijres/abstract/2018/May/Zegeye.php> > accessed on 20 Feb.2020.

Senior Essays, MA and Doctoral Theses

Alison J K., (2015). Human Rights: An Alternative Approach For Addressing Climate Induced Loss and Damage, Unpublished MA Thesis, University of Gothenburg.

- Aynalem, G., 'When the Forest was ours: Ownership and Partnership in a CDM Forestry Project in South-western Ethiopia', MA Thesis, Center for Development and the Environment, University of Oslo, Blindern, Norway, 2012.
- Declan, C. & E.L.F., Schipper, , Adaptation to Climate Change in Africa: Challenges and Opportunities identified from Ethiopia, School of International Development, University of East Anglia, UK, 2010.
- Fleming, A.J.K., 'Human Rights: An Alternative Approach for Addressing Climate Induced Loss and Damage', Unpublished MA Thesis, University of Gothenburg, Sweden, 2015, available at: <https://munin.uit.no> accessed on 23 Dec.2019.
- Gashaw, A.G., 'When the Forest was ours: Ownership and Partnership in a CDM Forestry Project in South-western Ethiopia', MA Thesis, Center for Development and the Environment, (University of Oslo, Blindern, Norway, 2012). Available at: <https://www.duo.uio.no> accessed on 24 Feb.2020.
- Grcheva, I., 'Water Urbanism in Trans boundary Regions: The Nile Basin and The Grand Renaissance Dam', (MA Thesis, Ku Leuven University 2016).
- Khan, M.A.A., 'Impacts of Climate Change on the Human Rights of Displaced People: Bangladesh Perspective', A Doctoral Thesis, Western Sydney University, Australia, 2015, available at: <https://researchdirect.westernsydney.edu.au> accessed on 4 January 2020.
- Larsson, C., 'Carbon Offsetting, a new form of Colonialism? : Local Implications of tree - planting Projects in East Africa' (Bachelor Essay, Sodertom University, 2021).
- Margaretha, J.W., 'State Responsibility, Climate Change and Human Rights under International Law', Unpublished Doctoral Thesis, European University Institute, 2015.
- Olawuyi, D.S., ' The Human Rights Based Approach to Climate Change Mitigation: Legal Framework for Addressing Human Rights Questions in Mitigation Projects', Doctoral Thesis, University of Oxford, United Kingdom, 2013, available at: <https://ora.ox.ac.uk> accessed on 10 January 2020.
- Torre, de la, J.C.P., The Clean Development Mechanism: An analysis of the Implementation in Ecuador, MA Thesis, Wageningen University, 2006, p.11 available online at: <https://edepot.wur.nl/99267> accessed on 3 March 2022.
- Ullstrom S, 'The Political Ecology of Carbon: Commodification, Colonialism, and debt in carbon offsetting under the Clean Development Mechanism' (Bachelor's Degree Thesis, Lund University, 2017).

Wewerinke, M. J., ‘State Responsibility, Climate Change and Human Rights under International Law’, Doctoral Thesis, European University Institute, 2015, available at: <https://cadmus.eui.eu> accessed on 4 January 2020.

Newsletter Articles, Blogs and Websites

Carbon Markets Watch, The Clean Development Mechanism: Local Impacts of a Global System, 2018, available at <<https://carbonmarketwatch.org>> accessed on Oct.13, 2021.

CDM Watch , ‘ Unsolicited Letter : Registration request of the Aguan biogas recovery from Palm Oil Mill Effluent Project 3197, Honduras ’, 14 February available at < <http://carbonmarketwatch.org/cdm-project-application-3197-aguan-biogas-recovery-from-palm-oil-effluent-pom-ponds-and -bio-gas-utilization-exportadora-del-atlantico-aguanhonduras/>> ,2011a , accessed on 13 Oct.2021.

Chivers, D. and Worth , J., ‘ Paris Deal : Epic Fail on A Planetary Scale ’ (New Internationalist, 12 December 2015) (<https://newint.org/features/web-exclusive/2015/12/12/cop21-paris-deal-epi-fail-on-planetary-scale>) accessed on 13 of January 2023.

Damian Carrington, ‘WikiLeaks Cables reveal how US manipulated climate accord’, *The Guardian*, (London, 3 December, 2010)< <https://www.theguardian.com/environment/2010/dec/03/wikileaks-us-manipulated-climate-accord>> accessed on 28 January 2023.

Diaz, D. et al., ‘The State of the Forest Carbon Markets 2011: From Company to Currency’, (Forest Trends, Sept.28, 2011) <<https://www.forest-trends.org>> accessed on 31 December 2021.

Funes Y, ‘Yes, Colonialism caused Climate Change, IPCC Reports’ (Atmos, 4 April 2022)< <https://atmos.earth/ipcc-report-colonialism-climate-change/> > accessed on 24 March 2023.

Goldstein, A. & Gonzales, G., ‘Turning over a new Leaf: State of the Voluntary Carbon Markets’,(Forest Trends, Nov.21, 2014)< <https://www.forest-trends.org> > accessed on 31 December 2021.

- Gupta,S., ‘Presenting. HT’s Stars of the Summit’ *Top News* (17 December 2009) < <https://topnews.in/presenting-ht-s-stars-summit-2245235>> accessed on 26 of January 2023.
- Hess, L., ‘Updated national plans set world on track for 2.7 degrees of warming by 2100’ *Landscape News* (German: 27 October 2021), available online at: <https://news.globallandscapesforum.org/55449/updated-ndcs-set-world-on-track-for-2-7-degrees-of-warming-by-2100/#> accessed on 4 March 2023.
- IEN, UN Promoting Potentially genocidal policy at World Climate Summit, (8 December, 2015). Available online at : < <https://www.ienearth.org/un-promoting-potentially-genocidal-policy-at-world-climate-summit/> > accessed on 19 June 2023.
- — “INDCs lower projected warming to 2.7° C : Significant Progress but still above 2 ° C “ (1 October 2015). Available online at: < <https://climateactiontracker.org/publications/indcs-lower-projected-warming-to-27c-significant-progress-but-still-above-2c/> > accessed on 19 June 2023.
- — , ‘UN promoting potentially genocidal policy at World Climate Summit’ (8 December 2015).available online at :< <https://www.ienearth.org/un-promoting-potentially-genocidal-policy-at-world-climate-summit/> > accessed on 28 March, 2023.
- John Vidal, ‘Climate Aid Threat to Countries that Refuse to Back Copenhagen Accord’, *The Guardian*,(London, 11 April 2010) < <https://www.theguardian.com/environment/2010/apr/11/climate-aid-threats-copenhagen-accord> > accessed on 28 January 2023.
- John Vidal & Susanne Goldenberg, ‘Snowden Revelations of NSA Spying on Copenhagen Climate Talks Spark Anger’, *The Guardian*, (London, 30 January 2004) < <https://www.theguardian.com/environment/2014/jan/30/snowden-nsa-spying-copenhagen-climate-talks>> accessed on 28 January 2023.
- Laurence, W.F., ‘A New Initiative to Use Carbon Trading for Tropical Forest Conservation’ (2007) 39(1) *Biotropica*, pp. 20 -24 available online at:< <https://www.jstor.org/stable/pdf/30045478.pdf> > accessed on 1 March 2022.
- "Leaked Cables Show US Pressured Saudis to Accept Copenhagen Accord," *New York Times*, (30 November 2010)< <https://archive.nytimes.com/www.nytimes.com/cwire/2010/11/30/30climatewire-leaked-cables-show-us-pressured-saudis-to-ac-56437.html> > accessed on 28 January 2023.
- Martin Khor, ‘Climate Talks End by only “Noting” An Accord’, *Third World Network* (21 December 2009), < [Climate talks end by only “noting” an Accord \(twn.my\)](http://Climate%20talks%20end%20by%20only%20%E2%01%91%97%20noting%20an%20Accord%20(twn.my))> accessed on 26 January 2023.

Mercer H, 'Colonialism: Why leading climate scientists have finally acknowledged its link with climate change' (The Conversation, 22 April 2022) < <https://theconversation.com/colonialism-why-leading-climate-scientists-have-finally-acknowledged-its-link-with-climate-change-181642> > accessed on 24 March 2023.

Oxfam International, Media Briefing, and "Extreme Carbon Inequality" (2 December 2016) which is available online at: < www.oxfam.org/sites/www.oxfam.org/files/file_attachments/mb-extreme-carbon-inequality-021215-en.pdf

Ramachnadran, V., 'Rich Countries Climate Policies are Colonialism in Green' FP (Washington, 3 November 2021)

Rood, R., 'If we stopped emitting greenhouse gases right now, would we stop climate change?' <The Conversation, 5 July 2017) < <https://theconversation.com/if-we-stopped-emitting-greenhouse-gases-right-now-would-we-stop-climate-change-78882> > accessed on 17 February 2022.

Terry Geraldine, "Zenawi Out on His Own in Africa," *TerraViva*, (17 December 2009). Sarkozy-Zenawi press conference video, Mereja Forum, 16 December 2009, www.ethio.tube.net/video/7053/Joint-Press-Conference-by-Ethiopian-PM-Meles-Zenawi-French-President-Nicolas-Sarkozy—28 January 2023.

US Under Secretary for Democracy and Global Affairs Maria Otero, "US Embassy Cables: US Urges Ethiopia to back Copenhagen Climate accord" Available online at : < <https://www.theguardian.com/world/us-embassy-cables-documents/246644> >

Vidal, J., 'Climate aid threat to countries that refuse to back Copenhagen Accord' *the Guardian* (United Kingdom, 11 April 2010) < <https://www.theguardian.com/environment/2010/apr/11/climate-aid-threats-copenhagen-accord> > accessed on 26 February 2023.

Wilkes R, 'Is Contraction and Convergence 'the Answer to Climate Change?' (Climate & Capitalism, 31 March 2007)< <https://climateandcapitalism.com/2007/03/31/is-contraction-and-convergence-the-answer-to-climate-change/> > accessed on 17 September 2022.

UNFCCC Treaties, Decisions and Reports

The United Nations Framework Convention on Climate Change (UNFCCC). Available online at :<

https://unfccc.int/files/essential_background/background_publications_htmlpdf/application/pdf/conveng.pdf >

The Kyoto Protocol. Available online at : < <https://unfccc.int/resource/docs/convkp/kpeng.pdf> >

The Paris Agreement. Available online at: < https://unfccc.int/sites/default/files/english_paris_agreement.pdf >

PDD of *Humbo* A/R CDM project. Available online at: < <https://cdm.unfccc.int/Projects/DB/JACO1245724331.7/view> >

UNFCCC, Procedure: Terms of Reference of the support structure of the CDM Executive Board, Version 03.1, Clean Development Mechanism, and CDM-EB-61-A01-PROC available online at: https://cdm.unfccc.int/Reference/Procedures/panels_proc02.pdf accessed on 16 May 2022.

UNFCCC, Report of the Conference of the parties on its 7th session , held at Marrakesh from 29th October to November 2001 , FCCC/CP/2001/13/Add.2, 21 January 2002 available online at : <https://unfccc.int/process-and-meetings/conferences/past-conferences/marrakech-climate-change-conference-october-2001/cop-7/cop-7-reports> accessed on 10 March 2022.

The UN Climate Change Secretariat , Handbook of Measurement, Reporting and Verification for Developing Country Parties , United Nations Convention on Climate Change , Bonn , Germany , December ,2014 available at https://unfccc.int/non-annex_i_mrv_handbook accessed on Dec.8,2021

AGBM/1.9.96/14, “Draft Proposals for a Climate Change Protocol based on Contraction and Convergence: A Contribution to Framework Convention on Climate Change,” Ad Hoc Group on the Berlin Mandate, 1996, at www.gci.org.uk/contconv/protweb.html.

UNDP, The Clean Development Mechanism: An Assessment of Progress, 2006, available online at: <https://www.unclearn.org> accessed on 1 March 2022.

UNEP, Introduction to CDM Report available online at: https://unfccc.int/files/cooperation_and_support/capacity_building/application/pdf/unepcdmintro.pdf

UNEP, Introduction to the Clean Development Mechanism (CDM), UNEP Collaborating Center on Energy and Environment, Riso National Laboratory, Roskilde, Netherlands available at : <https://unfccc.int> accessed on 28 December 2021 .

UNDP, The Clean Development Mechanism: A User's Guide, Energy & Environment Group and Bureau for Development Policy, 2003, p. 23-25. <https://www.undp.org/sites/g/files/zskgke326/files/publications/cdmchapter2.pdf>

UN-REDD Program, Towards a Common Understanding of REDD+ under the UNFCCC , A UN-REDD Program document to foster a common approach of REDD+ Implementation , Technical Resources Series , 2016 available online at : https://www.uncclearn.org/wp-content/uploads/library/redd_under_the_unfccc_hq.6_713128_1.pdf accessed on 16 May 2022.

The Marrakesh Accord, Annex I , Modalities and Procedures for Clean Development Mechanism, (B), paragraph 4. available at < https://unfccc.int/cop7/documents/accords_draft.pdf>

Decision 5/CP.6, the Bonn Agreements on the Implementation of the Buenos Aires Plan of Action, UN Doc FCCC/CP/2001/5 (25 September 2001).

Decision 11/CP.1, Land Use, land-Use Change and Forestry, UN Doc FCCC/CP/ 2001/13/Add.1 (21 January 2002)

Decision 17/CP .7, Modalities and procedures for a clean development mechanism as defined in Article 12 of the Kyoto protocol, FCCC/CP/2001/13/Add.2 (10 November 2001)

Decision 17/CP.8, Guidelines for the preparation of national communications from Parties not included in Annex I to the Convention, FCCC/CP/2002/7/Add.2 (1 November 2002)

Decision 19/CP 9, Modalities and Procedures for Afforestation and Reforestation Project Activities under the Clean Development Mechanism, UN Doc. FCCC/CP/2003/6/Add 2 (30 March 2004)

Decision 1/CP.16 , the Cancun Agreement : Outcome of the work of the Ad Hoc Working Group on Long- term Cooperative Action under the Convention , FCCC/CP/2010/7/Add.1 (15 March 2011).

Decision 12/CP.19 , The timing and frequency of presentations of the summary of information on how all the safeguards referred to in decision 1/CP.16 , appendix I, are being addressed and respected , FCCC/CP/2013/10/Add.1 (22 November 2013) .

Decision 17/CP.21 , Further guidance on ensuring transparency , consistency, comprehensiveness and effectiveness when informing on how all the safeguards referred to in decision 1/CP.16 , appendix I, are being addressed and respected , FCCC/CP/2015/10/Add.3 (10 December 2015) .

Decision 12/CP.17, Guidance on systems for providing information on how safeguards are addressed and respected and modalities relating to forest reference emission levels and forest reference levels as referred to in decision 1/CP.16

Decision 19/CP. 9, Modalities and Procedures for Afforestation and Reforestation Project Activities under the Clean Development Mechanism in the first commitment period of the Kyoto Protocol , FCCC/CP/2003/6/Add 2 (30 March 2004)

Decision 11/CP.19, Modalities for national forest monitoring system, FCCC/CP/2013/10/Add.1 (22 November 2013)

Decision 2/CP.17, Outcome of the work of the Ad Hoc Working Group on Long Term Cooperative Action under the Convention , FCCC/CP/2011/9/Add.1 , Annex III & IV (11 December 2011)

Decision 20/CP.19, Composition, modalities and procedures of the team of technical experts under international consultation and analysis, FCCC/CP/2013/10/Add.2/Rev.1 (22 November 2013)

Decision 1/CP.16, The Cancun Agreements: Outcome of the Work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention, FCCC/CP/2010/7/Add.1.available online at: < <https://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf#page=12> > accessed on 5 March 2023.

UN Reports and Other Resources

Cultural Survival, Observations on the state of Indigenous Human Rights in Panama prepared for the 36th Session of the United Nations Human Rights Council Universal Periodic Review .available at : < <https://uprdoc.ohchr.org>. > accessed on 12 Oct.202.

HRC, Report of the Office of The United Nations High Commissioner for Human Rights on the relationship between Climate Change and Human Rights , A/HRC/10/61 , 15 Jan.2009.

HRC, Annual Report of the Office of United Nations High Commissioner for Human Rights on the Relationship between Climate Change and Human Rights , A/HRC/10/61, 15 January 2009 available online at : <https://documents-dds-ny.un.org/doc/UNDOC/GEN/G09/103/44/PDF/G0910344.pdf?> Accessed on 11 May 2022.

OHCHR, Frequently Asked Questions on a Human Rights –Based Approach to Development Cooperation, United Nations, New York and Geneva, (2006), p. 16.

OHCHR, ‘Private military and security companies in Honduras need robust and effective monitoring, says the UN expert group, TEGUCIGALPA/ GENEVA ‘, 25 February, 2013 available on <https://newsarchive.ohchr.org>, accessed on Oct.15, 2021.

Domestic Policies and Legislations

FDRE’s Constitution. Available online at : < <https://ethiopianembassy.be/wp-content/uploads/Constitution-of-the-FDRE.pdf> >

FDRE, National REDD+ Strategy (2016-2030) available online at: <https://faolex.fao.org/docs/pdf/eth178847.pdf> Growth and Transformation Plan II of the Ethiopian Government. Available online at: < <https://ethiopia.un.org/sites/default/files/2019-08/GTPII%20%20English%20Translation%20%20Final%20%20June%2021%202016.pdf> >

Forest Development, Conservation and Utilization Proclamation No. 1065/2018. Available online at : < <https://faolex.fao.org/docs/pdf/eth182203.pdf> >

Ethiopia’s Cooperative Societies Establishment Proclamation No. 985/2016. Available online at: < https://www.lawethiopia.com/images/federal_proclamation/proclamations_by_number/985.pdf >

The Southern Nations, Nationalities and Peoples Regions Proclamation No.110/2007. Available online at: < <https://faolex.fao.org/docs/pdf/eth164265.pdf> >

Ethiopia’s Rural Land Use and Administration Proclamation No.456/2005. Available online at : < <https://www.refworld.org/docid/5a268b2b4.html> >.

Federal Democratic Republic of Ethiopia, National Adaptation Plan , Addis Ababa, Ethiopia, 2019, available at <http://www4.unfccc.int> .

Federal Democratic Republic of Ethiopia, Ethiopia’s Climate –Resilient Green Economic Strategy, 2011, available at <https://www.adaptation-undp.org>

EPRDF, Ethiopia’s Climate -resilient Green Economy. Available online at: < https://www.preventionweb.net/files/61504_ethiopiacrge.pdf >

The Environmental Policy of Ethiopia. Available online at: < <https://climate-laws.org/document/environment-policy-of-ethiopia> 49c5 >.

Humbo Forestry and Agro –forestry Development By-law

Appendices

Survey Questionnaires

Appendices

አዲስ አበባ ዩኒቨርሲቲ

የሰበአዊ መብቶች ማእከል

የዶክትሬት ድግሪ ፕሮግራም ጥናት እና ምርምር ስራ መጠይቅ

ይህ መጠይቅ በ An Assessment of the Human Rights Implications of Climate Change Governance in Ethiopia : The Cases of *Humbo* Assisted Natural Regeneration of Forestry and the *Bale* Mountains Eco-region REDD+ policy actions በሚል እርዕስ እየተሰራ ላለ የሶስተኛ ዲግሪ (PhD) ማሟያ ጥናት እና ምርምር ስራ መረጃን ለመሰብሰብ የተዘጋጀ ነው ። ጥናት እና ምርምሩ የአየር ንብረት ልዩ ጥን አሉታዊ ውጤቶች ለመግታት ሲባል የሚተገበሩ ፖሊሲ ትግበራዎች በአካባቢው ማህበረሰብ የሚያስከትሉትን መሰረታዊ የሆኑ የመብት ጥሰቶችን ለመመርመር የተለመደ ነው ። በመረጃ ስብሰባዉ ሂደት የተሳታፊዎች ማንነት በሚሰጥር የሚጠበቅ የሆነ ። በተጨማሪም የመረጃ መሰብሰብ ሒደቱ የጥናት እና ምርምር ስነ-ምግባርን የተከተለ ይሆናል ። የመረጃ መሰብሰቢያዉ ቅጽ መሰረታዊ ሁኔታዎች ፣ የአካባቢዉ ማህበረሰብ የኑሮ ሁኔታዎችን ፣ በፕሮጀክቱ የነበራቸውን ተሳትፎ እና የፕሮጀክቱን ትርፍ አስተዳደር የሚመለከቱ ጥያቄዎች በቅደም ተከተል ተሰናድተዋል ።

ሀ. መሰረታዊ ሁኔታዎችን የሚመለከት መረጃ

እድሜ ፡

ጾታ ፡- ወንድ - ሴት -

የጋብቻ ሁኔታ ፡- ባለ ትዳር - ያላገባ -

የቤተሰብ አባላት ብዛት ፡-

የልጆች ብዛት ፡

አቅመ ደካሞች (በእድሜ የገፉ አዛውንቶች ፣ ህሙማን ፣ አካል ጉዳተኞች) ብዛት ፡.....

የመተዳደሪያ ስራ ፡

የትምህርት ደረጃ ፡

የሁምቦ ደን ልማት የአባልነት ሁኔታ ፡ አባል ነኝ አባል አይደለሁም

ለ. የአካባቢዉ ነዋሪዎች በቂ የኑሮ ደረጃን የማግኘት መብትን የተመለከቱ ዳሰሳዎች ።

1. በዚህ አካባቢ ያለህን ያሰፋፈር እና የኑሮን ሁኔታ እንዴት ትገልፅዋለህ ?

ሀ. ወደዚህ አካባቢ በሰፈራ አማካኝነት ነው የመጣሁት

ለ. የዚህ አካባቢ ተወላጅ እና ነዋሪ ነኝ

ሐ. በሰራ አማካኝነት ነው ውደዚ የመጣሁት

መ. ጊዜያዊ ነዋሪ ነኝ

ሠ. በሌሎች ሁኔታዎች ነው እዚህ ያለሁት

2. የመተዳደሪያ ዘዴ ወይም ስራህ /ሽ ምንድን ነው ?

ሀ. ግብርና (የእርሻ ስራ እና ከብት አርባታ) ለ. እንስሳት እርባታ

ሐ. ንግድ መ. የመንግስት ሰራተኛ ሰ. የጉልበት ሰራተኛ

3. የፕሮጀክቱ ስራዎች ለፕሮጀክቱ ተብሎ በተከለለው ስፍራ ላይ ከመተግበራቸው በፊት አካባቢውን ለምን አገልግሎቶች ትጠቀሙት ነበር ?

ሀ. የማገዶ አንጨት መስብሰቢያ ሰፍራ ለ. ለከሰል ማክሰያ የሚሆን አንጨት የምንሰበስብበት ስፍራ

ሐ. የግጦሽ መሬት ነበር መ. የአሻ ቦታ ነበር ሠ. የቤት መሰረያ አንጨት ምንጭ ነው

4. አሁን በፕሮጀክቱ የተከለለውን ሥፍራ ልግጦሽ መሬት የማትጠቀሙበት ከሆነ ከብቶቻችሁን የምታሰማሩት የት ነው?

ሀ. የከብቶች ምግብ አንገዛለን ለ. ከብቶቻችንን በሌሎች የግጦሽ መሬቶች አናሰማራለን

ሐ. በግጦሽ መሬት አጥረት ምክኒያት አንሳት አርባታ ትተናል መ. ከፕሮጀክቱ መሬት አንጠቀማልን

5. አሁን የማገዶ አንጨት ከየት ታገኛለችሁ ?

ሀ. በግዢ ለ. ፕሮጀክቱ በታዳሽ ሓይል የሚሰራ ምድጃ አበርክታል

ሐ. ከሌሎች ስፍራዎች አንለቅማለን መ. የመብራት ሀይል አንጠቀማለን

6. አንድ የአካባቢው ነዋሪ የደን ልማት ማህበር አባል የሚሆነው አንዴት ነው ?

ሀ. የማህበር መዋጮ በመክፈል ለ. የቀበሌው ነዋሪ መሆን ብቻ ይጠበቅበታል

ሐ. በቀበሌ አስተዳደር ወኪሎች መመረጥ ይኖርብናል መ. በፈቃደኝነት ነው

7. የተራቆተውን መሬት መልሶ ለማልማት የዛፎች ዝርያ መረጣ ላይ እና የተክል አንክብካቤ ላይ ይሳተፋሉ ?

ሀ. መሳተፍ ስላልፈለኩኝ አልተሳተፍኩኝም ለ. አዎ ፤ ቋሚ ሰራተኛ ሆኜ እየሰራሁ ነው

ሐ. ፍላጎቴ ቢኖረኝም የማህበሩ አባል ባለመሆኔ ልቀጠር አልቻልኩኝም

መ. የራሴ የኑሮ መተዳደሪያ ስላለኝ አልተሳተፍኩኝም

8. በፕሮጀክቱ ስራ ላይ ይሳተፉ ከነበር ከስራው የሚያገኙትን ገቢ እንዴት ይገመግሙታል ?

ሀ. ቤተሰቤ የተሻለ ህይወት እንዲመራ አስችሎታል

ለ. ከእጅ ወደ አፍ የሆነ ኑሮ እንኳን መምራት አያስችልም

ሐ. ከእርሻ ስራ ማግኘት የምቸለውን በሚገባ የሚተካ ነው

መ. ቤተሰቤን ለማስተዳደር በቂ አይደለም

9. በቀበሌያችሁ የሚኖሩ ነዋሪዎች የምግብ ዋስትና ሁኔታን እንዴት ትገልጹታላችሁ ?

ሀ. አብዛኞቹ ነዋሪዎች አመቱን ሙሉ የምግብ ደህንነት የሚያሰጋቸው አይደሉም

ለ. የአካባቢው ነዋሪዎች ከመስከረም እስከ ታህሳስ ላሉት ወራቶች የምግብ ደህንነቱ የተጠበቀ ሲሆን ከዚያ በኋላ ላሉት ወራቶች የምግብ ደህንነት እየቀነሰ ወደ እጥረት ያመራል

ሐ. ነዋሪዎች በአምት ወሰጥ ላብዛኛውን ወራት በምግብ እጥረት የሚሰቃዩ ናቸው

መ. በተሻለ የኑሮ ደረጃ ላይ የሚገኙ ነዋሪዎች የምግብ ዋስትና ሲኖራቸው ፤ በዝቅተኛ የኑሮ ደረጃ ላይ የሚገኙት ደግሞ ለከፍተኛ የምግብ እጥረት የሚጋለጡ ናቸው

10. ፕሮጀክቱ ባደራጀው የደን ልማት ማህብር አማካኝነት ያገኛችሁትን ስራ የቀጥሮ ሁኔታ እንዴት ትገልጹታላችሁ?

ሀ. ስራዬ በኮንትራት የተገደበ እና በየጊዜው የሚታደስ ነው

ለ. ጊዜያዊ ስራ ነው

ሐ. ቋሚ ሰራተኛ እና የሌሎች ጥቅማጥቅም ተጠቃሚ ነኝ

መ. ጊዜያዊ እና የቀን ሰራተኛ ነኝ

11. በፕሮጀክቱ አማካኝነት የተዋወቃችሁት በትንሽ መሬት ላይ ምርታማ መሆን የሚያስችለው የእርሻ ዘዴ ውጤታማነት እንዴት ይገመግሙታል ?

ሀ. በምርታማነቱ የተሻለ እና ዘለቄታዊ ውጤት የሚያስገኝ ነው

ለ. ምርት አሁንም ቢሆን ዝቅተኛ እና ዘለቄታዊነት የሌለው ነው

ሐ. ምርቱ የተሻለ ቢሆንም የግብርና ግባአቶች ውድ ናቸው

መ. አሁን ለመናገር የሚያስችግር ነው

12. ለቤት ስራ የሚውሉ እንጨቶችን ከየት ነበር የምታገኙት ?

ሀ. በፕሮጀክቱ አማካኝነት ከመከለሉ በፊት ከቦታው ነበር ለቤት መሰሪያ የሚሆኑ እንጨቶችን የምናገኘው

ለ. ከደኑ እንጨት ከሚሰብሩ የእንጨት ነጋዴዎች ነበር የምንገዛው

ሐ. ነባር የደን ልማት ማህበር በፈቀደልን መሰረት ዘለቄታዊ ጥቅምን ባረጋገጠ ሁኔታ እንድንጠቀም ይፈቅድልናል

መ. ከአካባቢው የአካባቢ ጥበቃ ቢሮ ፍቃድ በማግኘት ነበር እንጨት የምናገኘው

13. የደን ልማት ማህበሩ አባል ከሆኑ የማህበሩ አባላት የደን ሀብት አጠቃቀምን እንዴት ይገልጹታል ?

ሀ. የደን ሀብቱን የማገዶ እንጨትን ከመሰብሰብ ፤ ለቤት ስራ የሚውሉ እንጨቶችን ከማግኘት እና የግጥሽ ምሬት ከማግኘት አንጻር በበቂ ሁኔታ እየተጠቀምን ነው

ለ. ከፍላጎታችን አንጻር አጠቃቀማችን በቂ አይደለም

ሐ. የደን ሀብቱን እንድንጠቀም እየተበረታታን አይደለም

መ. ከደን ሀብቱ የተወሰነ እንጠቀማለን ነገር ግን በኔ አስተያየት ይሄ በቂ አይደለም

ሐ. የአካባቢው ነዋሪዎች ፕሮጀክቱ ከመተግበሩ ብረት ሊጠበቅላቸው የሚገባ ነጻ ፤ ቅድም ፕሮጀክት ፤ በቂ መረጃ ላይ የተመሰረተ ፍቃድን ከሚመለከት መብት ጋር የተያያዙ ጥያቄዎች ።

14. ፕሮጀክቱን በአካባቢው ለመተግበር ስለመታቀዱ በማንኛውም መንገድ ከመንግስት የተሰጣችሁ መረጃ ነበርን ?

ሀ. አይ፣ ስለፕሮጀክት ስራው እቅድ ከመንግስት አካላት የተሰጠን መረጃ አልነበረም

ለ. አዎን ፡ ስለፕሮጀክቱ እቅድ መንግስት በሚገባ አወያይቶን ነበር

ሐ. እዱን በተመለከተ ስለነበረ ዉይይት የማስታወሰው ነገር የለም

15. ከላይ ለቀረበው ጥያቄ መልሶት አዎን ከሆነ በምን መንገድ ነበር መረጃውን ያገኙት ?

ሀ. በመረጃ ማስታወቂያ ወረቀት

ለ. በተደራጀ ስብሰባ አማካኝነት የመንግስት ተወካዮች ፤ የ World Vision ተወካዮች እና የመንግስት የአካባቢ ጥናት ባለሙያዎች በተገኙበት ይጥያቄ እና መልስ መርሀግብርን ባካተተ መልኩ

ሐ. በቀበሌው የማስታወቂያ ሰሌዳ ላይ በተለጠፈ መረጃ

መ. በተደጋጋሚ በተዘጋጀ እና የቀበሌ አሰተዳደር ፤ የ World Vision ተወካዮች እና የቀበሌው የአካባቢ ጥበቃ ባለሙያዎችን እንዲሁም መላውን የቀበሌው ነዋሪዎችን ያካተቱ ተከታታይነት ያላቸው ዉይይቶችን በመጠቀም ስለ ፕሮጀክቱ መረጃዎችን ለማግኘት ችለናል

16. የፕሮጀክቱ አስፈላጊነትን አስመልክቶ እና ፕሮጀክቱ እንዲተገበር ፍቃድ ከመሰጠት አንጻር የአካባቢው ነዋሪን ተሳትፎ እንዴት ትገመግመዋለህ/ሽ ?

ሀ. ሁሉም የቀበሌው ነዋሪዎች ስለፕሮጀክቱ በቂ መረጃዎች ያላቸው እና ፕሮጀክቱ እንዲተገበር ፍቃዳቸውን የስጡ ናቸው

ለ. የተመረጡ የቀበሌው ነዋሪዎች በዉይይቱ የተሳተፉ እና ፍቃዳቸውን የሰጡ ናቸው

ሐ. የፕሮጀክቱ አስፈላጊነትን በተመለከተ እና ፕሮጀክቱ እንዲተገበር ፍቃድ ለመሰጠት የሚያስችል የዉሳኔ ተሳትፎ አላደረግንም

መ. በዉሳኔ አሰጣጥ ላይ መሳተፍ የፈለጉ የአካባቢው ነዋሪዎች ብቻ ተሳትፈዋል

17. የፕሮጀክቱን አስፈላጊነት እና ፕሮጀክቱ እንዲተገበር ዉሳኔን ከመስጠት አንጻር የአካባቢው ነዋሪ የነበረውን ድጋፍ እንዴት ትገልጻለህ /ሽ ?

ሀ. የአካባቢው ማህበረሰብ ፕሮጀክቱ እንዲተገበር ሙሉ በሙሉ ድጋፉን ሰጥቷል

ለ. ነዋሪው ፕሮጀክቱን ሙሉ ብሙሉ ተቋዉሞታል

ሐ. ዉሳኔው ብዙ ክርክር የነበረበት እና ጥልቅ የሆኑ የሀሳብ ሙግቶች የነበሩበት ሲሆን የፕሮጀክቱ ትግበራ ደጋፍ በከፊል ብቻ ስምምነትን አግኝቷል

መ. ፕሮጀክቱ እንዲተገበር የአካባቢው ነዋሪዎች የቀረቡት አስተያየቶች ከግምት ውስጥ እንዲገቡ አሳስቦ የአካባቢው ነዋሪ ፍቃዱን ሰጥቷል

መ. ከፕሮጀክቱ የተገኘውን ማንኛውንም ጥቅም የአካባቢው ነዋሪ እንዴት እንደሚያስተዳድር ወይም እንደሚጋራ የተመለከቱ ጥያቄዎች ::

18. ከፕሮጀክቱ የሚገኘው ትርፍ እንዴት ይተዳደራል ?

ሀ. ከፕሮጀክቱ የሚመነጨው ትርፍ ከአካባቢው ነዋሪዎች ጋር በሚካሄድ ዉይይት እና ስምምነት ይተዳደራል

ለ. World Vision Ethiopia እና መንግስት ለአካባቢው ነዋሪዎች የሚደርስውን ድረሻ ብቻ አሳዉቀዉናል

ሐ. ከፕሮጀክቱ የሚገኘው ገቢ እንዴት እንደሚከፋፈል አላዉቅም

መ. ከፕሮጀክቱ የሚገኘው ትርፍ ከአካባቢው ማህበረሰብ እዉቅና ዉጪ የሚተዳደር ነዉ

19. ከፕሮጀክቱ የሚገኘውን ጥቅም የሚያገኘው ማን ነዉ ?

ሀ. የደን ማህበር አባላት

ለ. የፕሮጀክት ክልል ዙሪያ ያሉ የሁሉም ቀበሌዎች ነዋሪዎች

ሐ. በዝቅተኛ የኑሮ ደረጃ ላይ ያሉ እና በሴት ነዋሪዎች የሚመሩ የመኖሪያ ቤቶች

መ. ፕሮጀክቱ አጠገብ የሚኖሩ ነዋሪዎች

20. ከፕሮጀክቱ የሚገኝ ትርፍ ዘላቂነትን በተመለከተ ያላችሁ ግምገማ ምንድን ነዉ ?

ሀ. ፕሮጀክቱ ዘላቂታዊ ትርፍ ያስገኛል ☐

ለ. ከፕሮጀክቱ የሚገኘው ገቢ እስከተወሰነ ጊዜ ድረስ የሚኖር ነው ☐

ሐ. የትርፉን ዘላቂታዊነት አስመልክቶ ጠንቅቄ የማዉቀው ነገር የለም ☐

21. ከፕሮጀክቱ የሚገኘውን ገቢ አስመልክቶ ያሉ ተግዳሮቶች ምንድን ናቸው ?

ሀ. የትርፍ ክፍፍሉ ፍትሐዊ አይደለም ☐

ለ. የደን ልማት ማህበራት አባል ያልሆኑ ያካባቢው ነዋሪዎች ከትርፉ አየቋደሱም ☐

ሐ. ትርፉ በቂ አይደለም ☐

መ. ከትርፉ የሚገኘው ገቢ የሚዘገይ እና የሚቆራረጥ ነው ☐

ሠ. በአካባቢው ለአደጋ ተጋላጭ ለሆኑ የህብረተሰብ ክፍሎች ፕሮጀክቱ የነበረው የአካታችነት ደረጃን የተመለከቱ ጥያቄዎች ።

22. በፕሮጀክቱ የአካል ጉዳተኞች ተሳትፎን እንዴት ይገመግሙታል ?

ሀ. ፕሮጀክቱ የአካል ጉዳተኞችን በሁሉም የፕሮጀክት ምዕራፎች በሚገባ ያሳተፈ ነበር ☐

ለ. ፕሮጀክቱ ለአካል ጉዳተኞች የተለየ ትኩረት አልነበረውም ፤ አካል ጉዳተኞችን ያሳተፈ አልነበረም ☐

ሐ. እዳጋጣሚ አካል ጉዳተኞች ሊሳተፉ ችለዋል ☐

23. በፕሮጀክቱ የነበረን የሴቶች ተሳትፎ እንዴት ይገመግሙታል ?

ሀ. ፕሮጀክቱ የሴቶች ተሳትፎን በሚያበረታታ መልኩ የተነደፈ እና ሴቶች በንቃት የተሳተፉበት ነበር ☐

ለ. ፕሮጀክቱ የሴቶች ተሳትፎ የሚያበረታታ አልነበረም ☐

ሐ. ቤተሰብ የሚያስተዳድሩ ሴት የቤተሰብ አስተዳዳሪዎች ብቻ ሊሳተፉ ችለዋል ☐

24. በፕሮጀክቱ የነበረን የአረጋዊያን ተሳትፎ እንዴት ይገመግሙታል ?

ሀ. የአረጋዊያን ተሳትፎ እጅግ አስፈላጊ እና ጠቀሜታ የነበረው ነበር ☐

ለ. ፕሮጀክቱ አረጋዊያንን ያሳተፈ አልነበረም ☐

ሐ. የአረጋዊያን ተሳትፎ እጅግ የተወሰነ ነበር ☐

25. በፕሮጀክቱ የወጣቶች እና ለሕጻናት የተሰጠውን እድል እንዴት ይገመግሙታል ?

ሀ. ፕሮጀክቱ ወጣቶችን እና ሕጻናትን በሚገባ ያሳተፈ ነበር ☐

ለ. ፕሮጀክቱ ወጣቶችን እና ሕጻናትን ያገናዘበ አልነበረም ☐

ሐ. የወጣቶች እና የህጻናት ተሳትፎ አልነበረም ☐

26. በፕሮጀክቱ ዝቅተኛ ገቢ ያላቸው የህብረተሰብ ክፍሎች ተሳትፎን እንዴት ይገመግሙታል ?

ሀ. ዝቅተኛ ገቢ ያላቸው አባወራዎች ትሳትፏቸው አነስተኛ ነበር

ለ. ምንም ተሳትፎ አልነበራቸውም

ሐ. ፕሮጀክቱ ዝቅተኛ ገቢ ያላቸውን አባወራዎች ብሚገባ ያገናዘበ ነበር

ረ. የአካባቢው ነዋሪዎች ፕሮጀክቱን አስመልክቶ ያላቸውን ግንዛቤ የተመለከቱ ጥያቄዎች

27. ስለፕሮጀክቱ ምንነት ያለህን ግንዛቤ እንዴት ትገመግመዋለህ ?

ሀ. በቂ ግንዛቤ አለኝ ለ. ምንም ግንዛቤ የለኝም ሐ. አነስተኛ ግንዛቤ ነው ያለኝ

28. ስለፕሮጀክቱ እቅድ ፤ አተገባበር ፤ ግምገማ እና ውጤት ያላችሁ ግንዛቤ ምን ያህል ነው ?

ሀ. ከፍተኛ ለ. መካከለኛ ሐ. ዝቅተኛ

Addis Ababa University
Center for Human Rights
Dissertation Research Tool

This research tool has been developed to generate data for a PhD research project in title: An Assessment of the Human Right Implications of Climate Change Governance in Ethiopia: The Cases of the Humbo Assisted Natural Regeneration of Forests Project. The dissertation project purports to investigate the human rights implications of relevant legal frameworks (climate mitigation legal frameworks), policies and strategies and also empirically evaluates or assesses the rights implications of the actual approval and implementation of the projects upon vulnerable groups and local people. The project also investigates the role of NGOs involved in the projects in terms preventing and protecting the rights impacts of the implementation of the projects.

To this end, the tool is set to assess the implications of the implementation of the climate mitigation projects upon the rights to adequate standard of living (the right to adequate food, means of subsistence and housing), the right to FPIC, the right to participation in environmental decision making and the right to equitable benefits sharing of local people and communities. The research tool keeps the anonymity of the research participants and observes all the relevant ethical standards in the actual administration of the survey. The data elicited through the research tool is used for academic purposes. The questionnaire is organized in such a way that it firstly tries to document data as regards the demographic characteristics of respondents followed by information as regards the implications on the right to adequate standard of living of local people , FPIC , rights to participation of local people on decision making and finally tries to capture information that pertains to the implications on the right to equal benefit sharing of people in the context of the actual implementations of the projects .

A. Demographic Characteristics of Household Heads

Age:

Sex: Male ☐ , Female ☐

Marital Status: Married ☐ , Single ☐

Household Size:

No. of children:

Educational Background:

B. Inquiry that pertains to the right to adequate standard of living of people in and around the project site.

1. How do you describe the nature of your residence in this location?

- I. I came here through settlement ☐ II. Indigenous/local Inhabitant ☐
II. A temporary resident ☐ IV. A civil servant placed at the location ☐
V. Other ☐

2. What do you do for living?

- I. Crop production /Farming ☐ II. Agro –pastoralist ☐
III. Cattle raising ☐ IV. Merchant ☐
V. Other livelihoods ☐

3. How has your household been using the project site before the implementation of the project activities?

- I. For fuel wood collection ☐ IV. As a grazing area ☐
II. Charcoal making ☐ V. As a farm land ☐
III. Obtaining wood for construction purposes ☐

4. If you are not, now, using the project site as a grazing area, where else do you let your cattle graze or what other options do you use?

- I. Buy fodder ☐ II. Let cattle graze at other sites ☐
III. Abandoned raising cattle ☐ IV. Other ☐

5. Where do you, now, get fuel wood from?

- I. Buy fuel wood ☐ II. I am a beneficiary of alternative source of energy ☐
III. I collect fuel woods from other sites ☐ IV. I use electricity ☐ V. Other ☐

6. How does one become a member of the Community Managed Natural Regeneration of Forestry Cooperative (CMNR)? ☐

- I. By paying membership fee ☐ II. One has to be a resident in the *Kebele*

- III. If one is selected by the *Kebele* agents involved in the project ☐
- IV. Participation in the cooperatives is on a voluntary basis. ☐
7. Do you participate in the planting, weeding and cultivating the growth of tree species on the project site that the project has been implementing over the years?
- I. No, I am not employed by the project for the work since I didn't want to . ☐
- II. Yes, I do take part in the activities ☐
- III. No, because I am not a member of a community cooperative organized under the project despite my interest. ☐
- IV. Other ☐
8. How would you describe the food security status of the households in your *Kebele*?
- I. Most households are food secure throughout the year. ☐
- II. Households are food secure from September through to December and food begins dwindling thereafter. ☐
- III. Households are food insecure in most parts of the year. ☐
- IV. While better off households are food secure throughout the year, poor households are food insecure for most part of the year. ☐
9. If your response to the above question is yes, how would you evaluate the income you generate from your work under the project?
- I. It has enabled my family lead a better life ☐
- II. It barely supports even a subsistence life ☐
- III. It very well substitutes the income I would have generated via crop production ☐
- IV. It is not adequate to support my family. ☐
10. How would you describe the nature of your employment under the Farmers Managed Forest Regeneration Program (FMFRP) or the Bale Mountains REED+ project?
- I. It is on a contractual basis and renewable periodically. ☐
- II. I am hired only temporarily ☐
- III. I am hired on a permanent basis and is a full time job ☐
- IV. I am paid on a daily basis and is a part time job. ☐
11. How would you evaluate the outcome from the agricultural intensification activity the project provides, if it applies to you?
- I. It is better in terms of its yields and also sustainable ☐
- II. Production still is poor and not sustainable ☐
- ☐

- III. Yields are better but agricultural inputs are expensive
- IV. It is difficult to tell the changes in terms of output from the activity yet.
- V. Other

12. How have you been obtaining woods for the construction of houses purposes before the operation of the project at the site?

- I. We just cut woods from the forests which is now the project site without prevention.
- II. We used to buy from those who cut woods from the forest
- III. We had existing community association which allows us use the forest to obtain woods for construction of houses on a sustainable basis
- IV. We get permission from the local environmental protection bureau to obtain woods from the forests.

13. If you are a member of community cooperatives established under the project, how do you describe the way you use forest resources?

- I. We adequately use the forest resources as a source of fuel woods, obtaining woods for construction purposes, and grazing our cattle.
- II. I don't see our utilization of the forest resources as adequate when seen in reference to our needs.
- III. We are not encouraged to use forest resources at all.
- IV. There are limits to the extent to which we use forest resources to maintain their sustainability but that is not adequate in my view.

C. Inquiry Related to the local people's rights to Free, Prior, Informed Consent (FPIC) to the Implementation of the Project

14. Have you, in any way, been informed about the plan of implementing the project at the project site by your local government agent?

- I. No, I had not known that the local government agents had this kind of project that they planned to implement.
- II. Yes, the local government agents had informed us about their plan of implementing the Afforestation and Regeneration of forest species on the project site.
- III. I don't remember whether or not I had been informed about the plan of implementing the project.

15. How were you informed about the project?

- I. Through a notice paper
- II. In an organized meeting where there were government agents, people from World Vision Ethiopia, and the local environmental experts with a question and answer sessions.
- III. On a poster posted on the *Kebele* notice board
- IV. Through a series of discussions with the *Kebele* administrative agents, World Vision representatives, and local level environmental experts of the community residents.
- V. Others

16. How would you rate the participation of the local people in approving the implementation of the project?

- I. Almost all the residents of the *Kebele* have been informed and approved the implementation of the project.
- II. Only selected households have been informed and took part in the discussion and approval of the implementation of the project.
- III. We have not taken part in the decision involving the approval of the project.
- IV. Only those who were willing to take part in the discussions and approval process were able to decide on the implementation of the project.

17. How would you describe the level of local people's or your community's support to the approval and implementation of the project?

- I. The community unanimously agreed upon the implementation of the project.
- II. The community completely rejected the implementation of the project
- III. There was a heated, and thorough debate on the project and it was only partially agreed on.
- IV. The community accepted the implementation of the project on condition that the comments we provided are effectively incorporated.

D. Inquiry related to the sharing of benefits among the residents of the community.

18. How was the monetary benefit accrued to the community following successful outcomes of the project administered or shared among member of the local community?

- I. Through adequate negotiations and consent of the community ☐
- II. We have only been noted about the proportion of benefits allotted to the community by the government and World Vision Ethiopia. ☐
- III. I don't know how the benefits from the project are administered. ☐
- IV. The benefits of the projects ~~have~~ been administered without the consent of the community beneficiaries. ☐

19. Who gets the benefits from successful implementation of the projects?

- I. Members of the cooperatives ☐
- II. All residents of the *Kebeles* surrounding the project site ☐
- III. Poor and Women headed households ☐
- IV. Those residents who live close to the site ☐

20. What is your assessment of the sustainability of the benefits from the project?

- I. The benefits are sustainable ☐
- II. Benefits are for limited time period ☐
- III. I am not sure about sustainability of the benefits ☐
- IV. Other ☐

21. What challenges do you identify with regards to the sharing of benefits?

- I. Challenges related to unequal distribution of benefits ☐
- II. Challenges associated with the non-inclusion of households who are not members of cooperatives ☐
- III. Challenges linked with the inadequacy of the benefits ☐
- IV. Challenges pertinent to delayed and interrupted payments of benefits. ☐

In-depth –Interview Tool

This research tool has been developed to generate data for a PhD research project in title: An Assessment of the Human Right Implications of Climate Change Governance in Ethiopia: The Case of Humbo Assisted Natural Regeneration of Forests Project .The dissertation project purports to investigate the human rights implications of relevant legal frameworks (climate mitigation legal frameworks) , policies and strategies and also empirically evaluates or assesses the rights implications of the actual approval and implementation of the projects upon vulnerable groups and local people . The project also investigates the role of NGOs involved in the projects in terms preventing and protecting the rights impacts of the implementation of the projects.

To this end, the tool is set to assess the implications of the implementation of the climate mitigation projects upon the rights to adequate standard of living (the right to adequate food, means of subsistence and housing), the right to FPIC, the right to participation in environmental decision making and the right to equitable benefits sharing of local people and communities. The research tool keeps the anonymity of the research participants and observes all the relevant ethical standards in the actual administration of the survey. The data elicited through the research tool is used for academic purposes. The questionnaire is organized in such a way that it firstly tries to document data as regards the background information relevant to the lives of local people or residents in the vicinity of the project site followed by information as regards the implications on the right to adequate standard of living of local people , FPIC , rights to participation of local people on decision making and finally tries to capture information that pertains to the implications on the right to equal benefit sharing of people in the context of the actual implementations of the projects .

I. Inquiries that pertain to the background of the project

1. How long have you been living here? , Are you an indigenous inhabitant of this area or a settler?
2. What do you do for living?
3. How have you been using the project site before the introduction of the project? , Has it ever been used in any way to support your livelihood?
4. How was the project site used by the community? , was your utilization of the site and its resources (fuel wood, grazing field, construction woods, charcoal) regulated in anyway by anyone or entity?
5. Did you ever take part in a meetings or discussions involving the introduction and approval of the project? , How were you informed about the plan of introducing the project at the project site?

6. Are you a member of the local community cooperatives established under the project? If Yes, how do you assess your utilization of the resources of the site in terms of construction woods, grazing field, obtaining fuel wood, or in terms of getting farming land/plot?
7. What is your assessment of the productivity of agriculture in your area? , How do you assess the food security status of households in your *Kebele*?
8. Could you explain the major challenges of farming (crop production) and livestock raising that most households in your *Kebele* face?

II. Inquiries relevant to implications on the right to adequate food, means of subsistence, housing, FPIC (Free, Prior, and Informed Consent) , right to participation in decision making and equal benefit sharing .

1. Is your access to grazing field on the project site restricted as a result of the project ?, If your response is yes , then where else do you let your cattle graze or how do you deal with the fodder needs of your cattle ?
2. Are you employed under the project for helping restore the forest cover of the site? , If your answer is yes, then how do you assess the adequacy and sustainability of the income you gain from your employment?
3. Where are you getting fuel woods from since the time the project began being implemented? , Has the project restricted your access to fuel woods from the site now covered by the project activities?
4. Is the forest, now, being used by the community for obtaining construction woods? Please explain who could use forest woods, and how the forest is utilized for obtaining construction woods.
5. If alternative techniques of agriculture are being implemented as part of the project activities in your area, how do you assess the agricultural productivity (outputs of both crop production and animal husbandry) that you are trained to pursue?, Do you think the alternative techniques ensure food security and sustainability of outcomes?

6. How do you assess the projects impact on the food security status of households in the surrounding *Kebeles*?
7. Where do people obtain woods for construction purposes? , Do people still use the forest or the project site as a source of construction woods? , If yes, then who could use the forest for obtaining the construction woods?
8. Have you been consulted about the project's idea of allowing the regeneration of forests on the site before the actual approval and implementation of the project? , Have you in any way taken part in a stakeholders meeting where you were shared and asked to comment on the projects ideas and activities?
9. If your response to the above question is yes, how would you describe the degree of consent that people from your Kebele or their representatives granted to the project proponents and implementers?
10. What concerns do you have about the project? Please explain the concerns you might have about the implementation of the project.
11. How would you describe the degree of consent that the local people granted to the project implementation? , Do you think that the local people believe in the project objectives and outcomes?
12. Could you tell me how many times you participated in meetings or discussions that involve the project and what your roles were?
13. Have you received any kind of training relevant to the project activities?, Please share the knowledge, skills or experiences you gained from the trainings.
14. Do you believe that the local people have been given adequate voice in shaping and deciding on the project activities? How would you explain it?
15. Do you think that the project is inclusive or exclusionary? If it is exclusionary who is excluded and why?
16. What benefits do local people get from the implementation of the project and as a consequence of it?

17. Do you think that the benefits of the projects were adequately negotiated by the local people? Was it participatory? If you could explain how the benefits of the project was determined?
18. Do you think that the benefits from the project are adequate and sustainable?
19. What concerns do you have as regards benefits sharing from the implementation of the project?
20. Do you think that you can rely on the benefits from the project without resorting to other alternative means of livelihood? If you could explain the nature of your employment under the project?

አዲስ አበባ ዩኒቨርሲቲ

የሰበአዊ መብቶች ማእከል

የዶክትሬት ድግሪ ፕሮግራም ጥናት እና ምርምር ስራ መጠይቅ

ይህ መጠይቅ በ An Assessment of the Human Rights Implications of Climate Change Governance in Ethiopia : The Cases of *Humbo* Assisted Natural Regeneration of Forestry በሚል እርዕስ እየተሰራ ላለ የሶስተኛ ዲግሪ (PhD) ማሟያ ጥናት እና ምርምር ስራ መረጃን ለመሰብሰብ የተዘጋጀ ነው። ጥናት እና ምርምሩ የአየር ንብረት ልውውጥ አላታዊ ውጤቶች ለመግታት ሲባል የሚተገበሩ ፖሊሲ ትግበራዎች በአካባቢው ማህበረሰብ የሚያስከትሉትን መሰረታዊ የሆኑ የመብት ጥሰቶችን ለመመርመር የተለመደ ነው። በመረጃ ስብሰባው ሂደት የተሳታፊዎች ማንነት በሚሰጥር የሚጠበቅ የሆነ ሲሆን። በተጨማሪም የመረጃ መሰብሰብ ሒደቱ የጥናት እና ምርምር ስነ-ምግባርን የተከተለ ይሆናል። የመረጃ መሰብሰቢያው ቅጽ መሰረታዊ ሁኔታዎችን፣ የአካባቢው ማህበረሰብ የኑሮ ሁኔታዎችን፣ በፕሮጀክቱ የነበራቸውን ተሳትፎ እና የፕሮጀክቱን ትርፍ አስተዳደር የሚመለከቱ ጥያቄዎች በቅደም ተከተል ተሰናድተዋል።

ሀ. መሰረታዊ ሁኔታዎችን ያገናዘቡ ጥያቄዎች

እድሜ :

የጋብቻ ሁኔታ :- ያገባ ያላገባ ፈት

የትምህርት ደረጃ :-

ስራ :

የደን ልማት አባልነት ሁኔታ :

ለ. በፕሮጀክቱ ጋር የተያያዙ መሰረታዊ ጉዳዮች ጋር የተያያዙ ጥያቄዎች ::

1. በአካባቢው ለምን ይህል ጊዜ ኖረሁል /ሸል ? ፣ የአካባቢው ነባር ነዋሪ ነህ/ነሽ ውይስ በሰፈራ ነው የምጣሕው /የመጣሸው ?
2. የኑሮህ መተዳደሪያ ዝዴህ መንድን ነው ?
3. በፕሮጀክቱ የተከበባውን መሬት ለምን ለምን ትጠቀሙበት ነበር ? መሬቱን በመጠቀም ቤተሰብ ያስታዳድሩብት ነበር ?
4. ማህበረሰቡ በፕሮጀክቱ የተከበበውን መሬት ለምን ለምን አገልግሎት ነበር የሚጠቀመው ? መሬቱን መጠቀም የሚያስችል መተዳደሪያ ደንብ ነበር ? ቁጥጥርስ ነበረው ?

5. የፕሮጀክቱን ትዕዛዝ ፣ የትግበራ ሂደት ፣ የፕሮጀክቱ አስፈላጊነት እና ለፕሮጀክቱ ትግበራ ፍቃድን የተመለከቱ ስብሰባዎች ፣ ዉይይቶች ላይ ተሳትፈው ያዉቃሉ ? ስለፕሮጀክቱ መምጣት እንዴት ነበር መረጃን ያገኙት ?
6. የደን ልማት ማህበሩ አባል ኖት ? አባል ከሆኑ በፕሮጀክቱ ከተከለለዉ ስፍራ ለግጦሽ መሬት ፣ ቤት መስሪያ እንጨቶችን ከማግኘት አንጻር ፣ ከሰል ለማክሰል የሚያስችሉ እንጨቶችን ውይም የማገዶ እንጨቶችን ከመሰብሰብ አንጻር እና የእርሻ መሬትን ከማግኘት አንጻር እንዴት ይገመግሙታል ?
7. በአካባቢዉ ያለ የእርሻ ማርታማነትን እንዴት ይገመግሙታል ? ፣ የነዋሪዎች በምግብ እራሳቸውን የመቻል ሁኔታ እንዴት ይገመግሙታል ? የምግብ ዋስትናስ ምን ይመስላል ?
8. በአካባቢዉ ዋነኛ የእርሻ እና የእንስሳት እርባታ ተግዳሮቶች ምን ምን ናቸዉ ?

መ. የምግብ ዋስትናን ፣ ነጻ ፣ቅድመ ፕሮጀክት ፣ በቂ መረጃ ላይ የተመሰረት ፈቃድ ፣ አካባቢያዊ ጉዳዮችን በሚመለከቱ ነገሮች ሁሉ በዉሳኔ አሰጣጥ ላይ የመሳተፍ መብትን እና የጋራ ጥቅምን በእኩልነት የመካፈል ጉዳዮች ላይ የተመሰረቱ ጥያቄዎች ።

1. በፕሮጀክቱ አማካኝነት የግጦሽ ምሬት የመጠቀም ነጻነት ተገድቧል ? ከተገደበስ ሌላ ምን አማራጭ አሎት ?
2. በፕሮጀክቱ ስር ተቀጥረዉ ይሰራሉ ? የሚሰሩ ከሆነ ከስራዉ የሚያገኙትን ገቢ በቂነት እና ዘለቄታነት በተመለከት ያሉት ግምገማ ምንድን ነዉ ?
3. አካባቢዉ በፕሮጀክቱ ከተከበበ ብሏላ የማገዶ እንጨት ከየት ያገኛሉ ? ብፕሮጀክቱ ምክኒያት የማገዶ እንጨት ምንጮችሁ ተገድቧል ?
4. የአካባቢዉ ማህበረሰብ በደን ልማት የተከበበዉን የፕሮጀክቱን ስፍራ ለቤት ምስሪያ የሚዉሉ እንጨቶችን ያገኝበታልን ? ስዋች ከአካባቢዉ እናጩት የሚሰበስቡ ከሆነ እነማን ናቸው የሚጠቀሙት ?
5. በተለምዶ እናንተ ከምታከናዉኗቸው የግብርና ስራዎች የበለጠ ምርታማ የሆኑ ዘዴዎች ካሉ ውጤታማነታቸውን እንዴት ትገመግማላችሁ ? አዳዲሶቹ ዘዴዎች የተሻለ እና ዘለቄታዉን የጠበቀ ምርታማነትን የሚያስከትሉ ይመስላችኋል ?
6. የአካባቢዉ ነዋሪዎች የምግብ ዋስትናቸዉ እንዲረጋግጥ ከማስቻል አንጻር የፕሮጀክቱን ፋይዳ እንዴት ይገመግሙታል ?
7. ፕሮጀግቱ ከመተግበሩ በፊት ፕሮጀክቱን የተመለከቱ እቅዶች ስለመኖራቸው ያዉቁ ኖሯል ? እንዲተገበርስ ፈቃዶችን ስጥተዋል ? ከዚህ ጉዳይ ጋር የተያያዙ ስብሰባዎች ፣ ዉይይቶች እና ስልጠናዎች ላይ ተሳትፈዋል ?

8. በስብሰባዎች ፣ ስልጠናዎች እና ውይይቶች ላይ ተሳትፈው ከሆነ ለፕሮጀክቱ መተግበር ህብረተሰቡ የነበረው ስምምነት እና ፍቃድ ምን ያህል ነበር ?
9. ፕሮጀክቱን የተመለከቱ ስጋቶች ካሏቸው ስጋቶቹ ምን ምን ናቸው ? ቢያብሯቸው?
10. የአካባቢው ነዋሪዎች ብፕሮጀክቱ ውጤታማነት የሚያምኑ ይመስላቸዋል ?
11. የአካባቢው ነዋሪዎች የፕሮጀክቱን አላማዎች ፣ሂደቶች እና ውጤቶች ከመወሰን አንጻር ጉልህ ሚና ነበራቸው ብለው ያምናሉ ?
12. ፕሮጀክቱ አካላት ነበር ውይስ አልነበረም ? ካልነበረ ማንን አካተተ እንደሚመዘገብ አገለግላለን?
13. የአካባቢው ነዋሪ በፕሮጀክቱ አማካኝነት ያገኛቸው ጥቅሞች ምን ምን ናቸው ? ቢያብራሩልን ?
14. ክፍሎች የሚገኘው ትርፍ ውይም ጥቅም በፍታዊነት የተከፋፈለ ይመስላቸዋል ? ከህብረተሰቡ ጋር የነበረን ድርድር ቢያብራሩልን ?
15. ክፍሎች የሚገኘው ጥቅም በቂ እና ዘላቂነት ነው ይላሉ ?
16. የጥቅም ክፍፍሉን በተመለከተ ያሉት ስጋት ምን ምን ናቸው ?
17. ብፕሮጀክቱ በሚኖረት ተሳትፎ በሚገኝ ገቢ ብቻ የእርሶን እና የቤተሰቡን ኑሮ በዘላቂነት መምራት የችላሉ ብለው ያምናሉ ?
18. ፕሮጀክቱ አካል ጉዳተኞችን ፣ሴቶችን ፣ ህጻናት ፣ ዝቅተኛ ገቢ ያላቸውን አባዎች እና አረጋዊያንን በበቂ ሁኔታ ያሳተፈ ነው ይላሉ ?
19. ስለፕሮጀክቱ ያላችሁን ግንዛቤ እንዴት ይገመግሙታል ? ያብራሩልን ?
20. በፕሮጀክቱ የተሳተፉ መንግስታዊ ያልሆኑ ድርጅቶች የህብረተሰቡን ጥቅም ከማስጠበቅ አንጻር የነበራቸውን ሚና እንዴት ይገመግሙታል ?

አዲስ አበባ ዩኒቨርሲቲ

የሰበአዊ መብቶች ማእከል

የዶክትሬት ድግሪ ፕሮግራም ጥናት እና ምርምር ስራ መጠይቅ

ይህ መጠይቅ በ An Assessment of the Human Rights Implications of Climate Change Governance in Ethiopia : The Case of *Humbo* Assisted Natural Regeneration of Forestry large scale project በሚል እርዕስ እየተሰራ ላለ የሶስተኛ ዲግሪ (PhD) ማሟያ ጥናት እና ምርምር ስራ መረጃን ለመሰብሰብ የተዘጋጀ ነው ። ጥናት እና ምርምሩ የአየር ንብረት ልውጥን አሉታዊ ውጤቶች ለመግታት ሲባል የሚተገበሩ ፖሊሲ ትግበራዎች በአካባቢው ማህበረሰብ የሚያስከትሉትን መሰረታዊ የሆኑ የመብት ጥሰቶችን ለመመርመር የተለመደ ነው ። በመረጃ ስብሰባዉ ሂደት የተሳታፊዎች ማንነት በሚሰጥ የሚጠበቅ የሆኗል ። በተጨማሪም የመረጃ መሰብሰብ ሒደቱ የጥናት እና ምርምር ስነ-ምግባርን የተከተለ ይሆናል ። የመረጃ መሰብሰቢያዉ ቅጽ መሰረታዊ ሁኔታዎች ፤ የአካባቢዉ ማህበረሰብ የኑሮ ሁኔታዎችን ፤ በፕሮጀክቱ የነበራቸውን ተሳትፎ እና የፕሮጀክቱን ትርፍ አስተዳደር የሚመለከቱ ጥያቄዎች በቅደም ተከተል ተሰናድተዋል ።

ሀ. የአካባቢዉ ነዋሪዎችን የተመለከቱ መሰረታዊ የሆኑ መረጃዎችን ያገናዘቡ ጥያቄዎች።

1. በአካባቢዉ የሚገኙ ነዋሪዎች ነባር ነዋሪዎች ናቸው ውይስ በተለያዩ ጊዜያት በአካባቢዉ የሰፈሩ ናቸው ?
2. የአካባቢዉ ነዋሪዎች ዋነኛ የመተዳደሪያ ዘዴዎች ምን ምን ናቸው ? ከመተዳደሪያ ዘዴዎቹ ጋር የተያያዙ ስጋቶችስ ምን ምን ናቸው ?
3. በፕሮጀክቱ የተካለለዉን ስፍራ ለምን ለምን አገልግሎቶች ነበር የምትጠቀሙት ?
4. የአካባቢዉ ነዋሪዎች የኑሮ ደረጃ ጋር የተያያዙ ችግሮች ምን ምን ናቸው ?
5. የአካባቢዉ ነዋሪዎች ስለ ፕሮጀክቱ ያላቸውን ግንዛቤ እንዴት ትገመግሙታላችሁ ?
6. የአካባቢዉ ነዋሪዎች ስለነበራቸው የፕሮጀክቱ ተሳትፎ ያብራሉናል ?

ሀ. ለፕሮጀክቱ መተግበር ፍቃድ ከመስጠት አንጻር

ለ. በፕሮጀክቱ ትግበራ ውስጥ ጉልህ ሚና ከመጫወት አንጻር

ሐ. ከፕሮጀክቱ የተገኘዉን ጥቅም ከማስተዳደር አንጻር

ለ. ፕሮጀክቱ በአካባቢው ነዋሪዎች ላይ ያስከተለው ተጽኖን የተመለከቱ ጥያቄዎች ።

7. በፕሮጀክቱ መተግበር ምክኒያት የአካባቢው ነዋሪዎች የመተዳደሪያ ዘዴዎች በምን መልኩ ተጽኖ ውስጥ እንደገቡ ያብራራልናል ?
8. ከፕሮጀክቱ መተግበር ጋር የተያያዙ የስራ እድሎች ምን ያህል በቂ እና ዘላቂነት ያላቸው መሆናቸውን ያስረዱን ።
9. ከፕሮጀክቱ የተገኙ ጥቅሞች ምን ምን ናቸው ?
10. ከፕሮጀክቱ የሚገኘውን ጥቅም በምን መሰረት ይተዳደራል ?
11. የፕሮጀክቱን ያሳታፊነት ደረጃ እንዴት ይገመግሙታል ?

ሀ. አካል ጉዳተኞችን ከማሳተፍ አንጻር

ለ. ሴቶችን ከማሳተፍ አንጻር

ሐ. ህጻናት እና ወጣቶችን ከማሳተፍ አንጻር

መ. ዝቅተኛ የኑሮ ደረጃ ላይ ያሉ የህብረተሰብ ክፍሎችን ከማሳተፍ አንጻር

12. የአካባቢው ነዋሪ የደን ሀብት ማህበር አባል ለመሆን ማሟላት የሚገባው ቅድመ ሁኔታዎች ምን ምን ናቸው ?
13. ማንኛውም የአካባቢው ነዋሪ ከደን ሀብቱ የምጠቀም መብት አለው ?
14. ከደን ሀብቱ መጠቀም የሚያስገኘውን ጥቅም በቂነት እና ዘላቂነት በተመለከለ ያሎት አስተያየት ምንድን ነው ?
15. ከፕሮጀክቱ ትግበራ በፊት በስፍራው የነበረን ሀብት ከመጠቀም አንጻር መብትን እና ግዴታን የሚደነግግ ደንብ ወይም ሥርዓት ነበር ?
16. በፕሮጀክቱ ትግበራ ላይ ተሳትፎ የነበረው መንግስታዊ ያልሆነ ድርጅት ሚናን እንዴት ትገመግሙታለችሁ ?
17. ፕሮጀክቱ የአካባቢውን ነዋሪዎች ኑሮ ከማሻሻል አንጻር ያለውን ፋይዳ እንዴት ታዩታለችሁ ?

List of Participants of Focus Group Discussions (FGDs) Held

List of participants of FGD #1 held on March 20, 2022

No.	Names	Positions /Status	Mobile Phone	Kebele	Remark
1.	Teferi Seta	Member of Bosa Wanche Forest Cooperative	0913834363	Bosa Wanche	
2.	Debisa Dea	Chair of the Cooperative of Bosa Wanche	-	>>	
3.	Deneke Daniel	Cooperative's Accountant	-	>>	
4.	Ato Takele Data	Assistant committee Leader	-	>>	
5.	Ato Merikineh Jege	Accountant of the Association	-	>>	
6.	Ato Daniel Dechasa	Kebele Admin. Leader	0925288078	>>	

List of Participants of FGD # 2 at Bosa Wanche Primary School

No.	Name	Position /Status	Age	Kebele	Remark
1.	Ephrem Toru	Student	12	Bosa Wanche	Lives along the fringe of the mountain
2	Mhiretu Michael	Student	13	>>	>>
3	Tarekegn Matheos	Student	13	>>	>>
4.	Dagim Desta	Student	11	>>	>>
5.	Afewerk Werana	Student	12	>>	>>
6.	Bethlehem Matheos	Student	8	>>	>>
7	Eyerusalem Mengistu	Student	12	>>	>>
8.	Mebiratu Yisak	Student	16	>>	>>

List of FGD participants of FGD s # 3 of residents in *Hobicha Bada Kebele*

No.	Name	Position/Status	Age	Kebele	Remark
1.	Tewodros Tadios	Student	9	Hobicha Beda	
2.	Tequebay Achefo	Student	11	>>	
3.	Atinafu Ayele	Student	10	>>	
4.	Minyas Michael	Student	11	>>	
5	Esayas Buhasi	Student	11	>>	
6	Teacher Minase Afework	Teacher and Resident	35	>>	
7.	W/ro Addis Mena	<i>Resident</i>	35	>>	
8	W/ro Bizunesh Samuel	Resident	42	>>	
9	Fikiru Dawit	Student	16	>>	

List of Participants of FGDs # 4 held with high schools students in *Hobicha Bada Kebele*

No.	Name	Position/Status	Gender	Age	Kebele	Remark
1.	Aster Bapa	Resident	Female	25	Hobica Bada	
2.	Nazreth Basa	Student	Female	17	>>	
3.	Werkinesh Chiqo	Resident	Female	20	>>	
4	Biruk Asiyas	Student	Female	17	>>	
5	Abayinesh Samuel	Student	Female	20	>>	
6	Dinknesh Esaw	Student	Female	18	>>	
7	Abinet Nahom	Student	Female	15	>>	
8	Gisten Gizaw	Resident	Female	20	>>	
9	Mihret Minota	Student	Female	15	>>	

List of Participants of FGDs # 5 held residents in Abela Longena

No.	Name	Position/Status	Age	Kebele	Remark
1.	Alemayew Adiku	Resident	49	Abela Longena	
2.	Ashebir Jemal	Resident	18	>>	
3.	Anjalu Alisu	Resident	43	>>	
4.	Temesigen Thomas	Resident & 11 th Grader	18	>>	
5	Zinash Labsu	Resident & 12 th Grader	20	>>	
6.	Eshetu Woraraw	Resident & 12 th Grader	18	>>	
7	Melkamu Feleke	Resident & 12 th Grader	20	>>	
8.	Zekios Loha	Resident & 10 th Grader	18	>>	
9.	Africanhesh Berkura	Resident & 10 th Grader	16	>>	

List of Participants of FGDs # 6 held with residents in Abela Longena at Abela Faricho Secondary School

No.	Name	Position/Status	Age	Kebele	Remark
1.	Tewodros Mantiro	Student (9 th Grader)	17	Abela Longena	
2.	Aster Daricho	Student (9 th Grader)	23	>>	
3.	Alemitu Zekarias	Student (10 th Grader)	15	>>	
4.	Tamirat Tadesse	Student (10 th Grader)	22	>>	
5.	Adela Bosa	Student (9 th Grader)	19	>>	
6.	Terefe Solomon	Student (9 th Grader)	17	>>	
7.	Aynalem Bekele	Student (9 th Grader)	18	>>	
8.	Tigist Dawit	Student (9 th Grader)	23	>>	
9	Ashagre Yohannes	Student (10 th Grader)	18	>>	

List of Individual Interviewees of Interviews conducted in two Phases: March 20 – 27, 2022 and June 18 -25, 2022 in Sodo, Humbo, Bosan Wanche, Abela Faricho and Hobicha Bada.

No.	Full Name	Position	Mobile No.	Date and Time	Remark
1	Ato Amanuel Mena	Development Plan Expert. Presently Acting Leader of <i>Humbo</i> Forest Protection and Development Union	0916694125	March. 20,2022, at 2:00pm	Ato Amanuel is temporarily assigned as the Unions leader but actually works as development plan expert in Sodo
2.	Ato Abraham Moges	Monitoring Expert for Mobility of Forest –based resources in <i>Humbo Wereda</i>	0928713293	March. 24,2022 at 10:00 am	
3.	Ato Addis Ayano	Environmental Risks Management Specialist , Project Coordinator at World Vision	0911869046	March 21, 2022 At 10:00 am	
4.	Ato Amenu Goa	Deputy Chief Administrator of <i>Humbo Wereda</i>	0927045343	22 March 2022 At 3:00 pm	
5.	Ato Birhanu Chuma	Environmental Protection Directorate Director, <i>Sodo</i> Zonal Administration	0923857273	21 March 2022 At 2:00 pm	
6.	Ato Beyene Angebo	Previous Union Leader		22 March 2022 At 4:30 pm	
7.	Ato Daniel Dechasa	Agriculture and Rural Development Kebele Administration Head Officer	0925288078	June 19, 2022 At 2:00pm	
8	Teacher Minase Afework	Natural Science	0952924868	25 March ,2022	335

		Teacher at <i>Bosa Wanche</i> P. School		At 10:00am	
9.	Bethelhem Matheos	Student at Bosa Wanche Primary School , Aged 8	-	25 March 2022 At 10:00am	Bethelhem lives along the foot of the mountainous project site
10	Eyerusalem Mengistu	>>	-	25 March 2022 At 11:00 am	Eyerusalem also is a daughter of a framer along the fringe of the mountain
11.	Dr. Minase Milka	Deputy Wereda Leader of Abela Faricho	0916285485	25 June 2022 At 2:00pm	
12.	Ato Tariku Yosef	Deputy Academic Leader at Abela Faricho High School	0926005239	15 June 2022 At 3:30 pm	
13.	Teacher Daniel Dawit	A Biology Teacher		22 June 2022 At 3:00pm	A teacher who lives in <i>Abela Longena</i>
14.	Teferi Seta	A member of the Committee for Bosa Wanche cooperative	0913834363	23 March 2022 At 11:00 am	Ato Teferi also a technical expert who measures changes in forest carbon stocks under the project.
15.	Teacher Andualem Takele	A Geography Teacher			Lives along the fringe of the project site in <i>Abela Longena</i> .
16.	W/ro Addis Mena Boke	Resident in Bosa Wanche	No mobile phone		
17	W/ro Bizunesh Samuel	Resident in Abela Longena	No Mobile Phone		
18	W/ro Bizunesh Shirko	Resident in Hobica Bada	No mobile Phone		

19	Ato Ashebir Kidane	Forest Development and Protection Office Coordinator	0925523630	15 June 2022 At 3:00 pm	
20	Ato Tefera Getaneh	Environmental and Social Safeguard Specialist at Federal EPA	0911806173	11 March 2022 At 3:00pm	

List of Key Informants

No.	Name	Position	Mobile No.	Date and Time	Remark
1.	Dr. Yitebitu Moges	National REDD+ Coordinator	0925909550	25 July 2022 At 10:00am	
2.	Ato Sahilemariam Mezmur	Sustainability Timber Harvesting Specialist	0911034453	4 Feb.2022 At 9:00am	One of the leading expert in REDD+
3.	Ato Hailu (World Vision)	Climate Change Specialist	0913277583	10 Feb.2022	X Word Vision Project coordinator. He is one of the initiators of Humbo A/R CDM project.
4.	Ato Eyob Tenkir	Social and Environmental Safeguard Specialist at Federal EPA	0912159425	21 Jan.2022 At 10:00am	
5.	Ato Birhane Bezabh Ambaye	EPA – Policy Analyst Expert IV	0939427577	24 July 2022 At 11:00am	Policy Analyst Level IV
6.	Ato Kebede Regassa	Project Coordinator of <i>Humbo A/R CDM</i> project	0967260627	27 July 2022	

Some Photos



