



ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
FACULTY OF LAW

**ENSURING SUSTAINABLE FORESTRY MANAGEMENT IN ETHIOPIA FROM THE MILLENNIUM
DEVELOPMENT GOALS PERSPECTIVES**

By
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Advisor

Mekete Bekele (Assistant Professor, LLB, LLM)

*A Thesis Submitted to Addis Ababa University, the School of Graduate Studies,
Faculty of Law in Partial Fulfillment of the Requirements for the Degree of
Master of Laws (LLM) in Public International Law*

December, 2012

Addis Ababa

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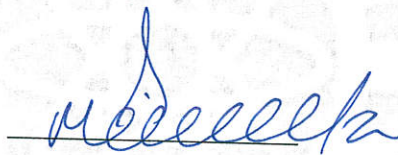
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OFWE- Oromia Forestry and Wild Life Enterprise

OECD-Organization of Economic Cooperation and Development

ORDA-Organization for Rehabilitation and Development in Amhara

PASDEP-Plan for Accelerated and Sustainable Development to End Poverty

PFM-Participatory Forestry Management

REDD+ -Reducing Emission from Deforestation and Forest Degradation

SNNPR-Southern Nations, Nationalities and Peoples Region

SIDA-Swedish International Development Authority

SDPRP-Sustainable Development and Poverty Reduction Strategy Program

SOS-Sahel-Save our Souls

SUPFM-Scaling Up Participatory Forestry Management

SSLFMP-Strengthening Sustainable Livelihood for Forestry Management Program

UNFCCC-United Nations Framework Convention on Climate Change

UNFF-United Nations Forum on Forests

UNEP-United Nations Environmental Program

USAID-United Nations Agency for International Development

UNCED-United Nations Conference on Environment and Development

WB-World Bank

Abstract

The issue of climate change and environmental degradation due to global warming and other factors are the current issues of the world since they are causing serious problems to the world. In order to address those global problems, in September 2000, the United Nation comes up with the Millennium Declaration with eight goals to be achieved in 2015. In the meantime, all member states of the world including Ethiopia agreed on the whole content of the declaration. Among the MDGs, Goal Seven i.e. ensuring environmental sustainability is studied from the perspectives of forestry management in Ethiopia.

In contextualizing the MDGs, sustainable forestry management is sectorial component part of the whole environment. Thus sustainable forest management includes the extent of forests, biological diversity, vitality, productivity, protective and socio economic functions of forests, and legal, policy and institutional framework so that the need of future generation is not compromised for the present demand. In this respect, the Environmental Policy of Ethiopia and the Forest Conservation and Utilization Policies are instrumental policy documents. On the other hand, the former strategic document PASDEP and the current strategic framework GTP focus on detailed targets to address the need for sustainable forestry management with the strategies to achieve MDGs. In addition Ethiopia's Climate-Resilient Green Economy strategy is also very important.

In relation to this sector, the FDRE Constitution, the FDRE Criminal Code, sectorial and cross-sectorial legislations like Forest Development, Conservation and Utilization Proclamation (Proclamation No. 542/2007), Environmental Impact Assessment Proclamation (Proclamation No. 299/2002) and Environmental Pollution Control Proclamation (Proclamation No 300/2002) are mentioned. While EPA, MOA, IBC, EWCA and some NGOs working on environment are quite important. In relation to the actual undertakings the adaption plans of regions, rehabilitation practices, PFM and the development of CDM and REDD+ initiatives in some regional states have their own role in enhancing sustainable forestry management though the sector is not free from some serious challenges. Therefore it is very much necessary to have better enforcement upon promulgating regional laws with supporting regulations. Moreover, it is also recommendable to support NGOs and to reorganize MOA considering forestry management as a separate directorate so that the intended goal is met.

Declaration

I the undersigned, declare that this thesis is my original work, and has not been presented for a degree in any other university, and that all the sources of materials used for the thesis have been fully acknowledged.

Teshome Besufekad



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Above all my thank goes to the almighty God for giving me strength to make every thing possible.

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List of Acronyms and Abbreviations

- CDM-Clean Development Mechanism
- CRGES-Climate-Resilient Green Economy and Strategy
- EPA-Environmental Protection Authority
- EIA-Environmental Impact Assessment
- EC-European Commission
- EWCA-Ethiopian Wildlife Conservation Authority
- FAO-Food and Agricultural Organization
- FFE-Forum for Environment
- FDRE-Federal Democratic Republic of Ethiopia
- GTZ (GIZ)-Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH
- GTP-Growth and Transformation Plan
- IDGs-International Development Goals
- IBC-Institute of Biodiversity Conservation
- IUCN-International Union for Conservation of Nature
- JICA-Japanese International Cooperation Organization
- MOA-Ministry of Agriculture
- MDGs-Millennium Development Goals
- MOFED-Ministry of Finance and Economic Development
- NFPAs-National Forest Priority Areas
- NAPA-National Adaptation Plan
- NAPA-National Adaptation Program of Action
- NGO-Non Governmental Organization
- NTFP-Non Timber Forest Products

Chapter One

1.1. General Background

Through humans history forests have played significant role for the well-being of human society.¹ It is widely acknowledged that forests and trees provide a wide range of socio economic and environmental benefits to mankind.² Since they are very important in all aspects, they need due care and protection to get the benefits from them and for the reason that it is very difficult to rehabilitate them.

Ethiopia was known for variety of forest ecosystem century ago where forests cover was about 40 percent of the total land area of the country.³ Forests have fundamental ethical, cultural, economic as well as environmental values. Their importance can also be grouped in to three components. One of their importance is for domestic use such as firewood, fodder and others that are consumed directly. The other is for their commercial use in the form of timber and medicine plants. The third most important use is regulating and maintaining the ecosystem such as, photosynthetic facility (carbon sink), regulate the climate and to maintain the fertility of the soil.⁴ Even if forests are precious natural resources that provide the aforementioned and other many functions, the resource is decreasing from time to time at an alarming rate in many countries including Ethiopia. Though forests are important natural resources that provide various functions and services, unplanned cutting of trees and deforestation is currently a serious threat in Ethiopia. Therefore a great concern is given to sustainable management of forests to mitigate all the adverse effects of deforestation.⁵ Thus sustainable forest management is very important in utilizing, developing and conserving forest resources to meet the social, economic, ecological, cultural and spiritual human needs of the present and future generations.

¹Feyera Senbeta (2003), *The Paradox of Forest Conservation and Food Security in Ethiopia: Proceedings of food security Conference 2003 UNCC, Addis Ababa, August 13-15, 2003*, P.317.

² Id., P.319.

³Ibid.

⁴GebreMarkos Wolde Silassie (1998), *The Forest Resources of Ethiopia-Past and Present*, P. 15.

⁵International Year of Forests (2011), *Multiple Roles of Forests in Ethiopia Vs Associated Challenges: Maximizing Benefits while Curbing Limitations*, April 2011, Addis Ababa, P .67.

The point here is that the effects of deforestation and misuse of forests contrary to sustainable management and utilization of forests is becoming serious problem to the whole world for its devastating effect on the global climate, biodiversity, ecosystem and the environment at large. So as to address and mitigate the most crucial problems of the world, the United Nation has come up with the Millennium Declaration consisting of eight basic goals which incorporates the issue of ensuring environmental sustainability. Therefore the MDGs are the reflections of different observations gleaned from various regional, national and international conferences organized under the auspices of UN at different times and on different occasions of 1990s for combating the basic problems of nations.⁶Therefore this incidence has opened the door for the shifting of the development agenda from International Development Goals (IDGs) to the Millennium Development Goals (MDGs) and eight prioritized goals are incorporated in the declaration. In September 2000, leaders of 189 countries have adopted the document with a view that states are committed to achieve those goals until 2015.⁷ Of the eight Millennium Development Goals, the seventh goal: Ensuring Environmental Sustainability is very important for the purpose of this thesis. So this goal will be dealt from the perspective of sustainability of forestry management aspect in Ethiopia.

Since forests are basic components for ensuring environmental sustainability by mitigating environmental changes, the UNFF come up with the elements of sustainable forest management incorporating the following seven basic elements stated below.

Sustainable Forest Management as a dynamic and evolving concept to maintain and enhance the economic, social and environmental value of all types of forests, for the benefit of present and future generations which is characterized by seven elements including 1/extent of forest resources; 2/forest biological diversity;/forest health and vitality; 4/productive functions of forest resources; 5/protective functions of forest resources; 6/socio economic functions of forests; and 7/legal policy and institutional framework.⁸

Since Ethiopia is one of the parties to the Millennium Declaration, it has been doing different activities in trying to achieve those goals. Of these is the incorporation of MDGs and

⁶Getachew Adem (2007), *Ethiopia's Prospect in Meeting the MDGs*, Economic Focus, P.33-34.

⁷ Id., P.34.

⁸Secretariat of Convention on Biodiversity (2009), *Sustainable Forestry Management, Biodiversity and Livelihoods: A Good Practice Guide*, P.8.

environmental issues in the strategy, policy documents of the country. Institutional concerns and reforms in regulating and administering environmental issues including forestry management are also government effort in achieving the aspired objectives.

Here it is important to note that the FDRE constitution deals with environmental rights and objectives of sustainable development. Therefore the issue of sustainable development is stated as aright in the constitution and the Conservation Strategy of Ethiopia (CSE) which was formulated and finalized in 1989G.C. In addition to this, in 1997 the government of Ethiopia has officially launched and approved the Environmental Policy of Ethiopia with two main objectives i.e. Clean and Healthy Environment and Sustainable Development as important policy frameworks which are important to answer questions related to the concern of the study. The Environmental Policy of Ethiopia (EPE) sectorial and cross sectorial elements and hence one of it is forestry, woodland and tree resource management⁹Moreover, the Agricultural and Rural Development Policies and strategies (RADPS) was also adopted by the government on March 2002 in the context of combating desertification and mitigating all the effects of drought.¹⁰More importantly Proclamation No 295/2002 which empowered the Environmental Protection Authority to prepare procedures, guidelines and standards to efficiently implement and enforce all its concerns plays a role in ensuring sustainability of forests regional environmental organs.¹¹The Ministry of Agriculture is also mandated to play a great role in the conservation and utilization of forests and wild life resources among other instruments.¹²The enactment of the current Forest Management, Development and Utilization Proclamation No. 542/2007 which repealed Proclamation No. 94/1994 has also to do in the regulation of forestry management. Here

⁹ The Environmental Policy of Ethiopia recognized major sectorial and cross sectorial elements. Soil husbandry and sustainable agriculture, forest, woodland and tree resources, genetic, species and ecosystem biodiversity, water resources, energy resource, mineral resources, human settlement, urban environment and environmental health, control of hazardous materials and pollution from industrial waste, atmospheric pollution and climate change, and cultural and natural heritage are the sectorial policy elements. While pollution and the environment, community participation and the environment, tenure and access rights to land and natural resources, land use plan, social and gender issues, environmental economics, environmental information system, environmental research, environmental impact assessment, and environmental education and awareness are the cross sectorial ones emphasized in the policy.

¹⁰The Agricultural and Rural Development and policy as one of the most important policy document addressed combating desertification and all the adverse effects of climate change (basically related with food insecurity and environmental degradation).

¹¹ Environmental Protection Organs Establishment Proclamation, *Negarit Gazeta*, Proclamation No. 295/2002, 9th Year, No. 7, 31st October 2002, Article 6 Sub Article 2.

¹²Definition of Powers and Duties and Executive Organs of the Federal Democratic Republic of Ethiopia, *Negarit Gazeta*, Proclamation No. 4/1995, 1st year, No. 4, 23rd August 1995, Article 9 Sub Article 1.

the role of some non-governmental organizations can also be mentioned for their efforts of the afforestation and related activities, awareness creation, technical, financial supports and concerns. In addition to policy and institutional frameworks, the FDRE Criminal Code plays a role in the regulation process.

In dealing with the issue of sustainable forestry management, it is quite important to look at the developmental policies of the country and hence the Plan for Accelerated and Sustained Development to End Poverty /PASDEP/ which has been drawn for the year 2006-2011 is important for its overall concern for the attainment of MDGs. The current policy document known as the Growth and Transformation Plan (GTP) is mentioned as its guiding document of the country from 2010/11-2014/15. It also incorporates the objective of effectively implementing policies, strategies, laws and standards which will foster social and green economy development so as to enhance the welfare of citizens and environmental sustainability.¹³ Moreover, it incorporates the need and importance of managing environmental issues in the process of achieving MDGs by 2014/15. In the GTP targets environmental issues including forestry management aspects are also incorporated.¹⁴ On the other hand the country's CRGES (Climate Resilient Green Economy and Strategy) are also equally significant policy instrument to enhance green economy in the country.

In the process of achieving goal seven, especially sustainable forestry management, the incorporation of MDG goals and the formulation of laws, policies and institutional setups shows the commitment of the government. When we come up to practical efforts, the efforts of regional governments for increasing the quality and biodiversity of forests through different projects and programs could be mentioned. Protected forest areas with restricted access for local communities have often been introduced as a solution to tackle deforestation and its effects. On the other hand Participatory Forest Management (PFM) is a forest management system that was introduced as a complementary mechanism viewing PFM, community based benefit sharing and bio-carbon initiatives and projects are some of the developments in the sector.¹⁵ But Ethiopia has a long way to go to fully achieve the goals since the challenges and threats stands against the efforts. The

¹³Ministry of Finance and Economic Development (2010), *Ethiopian Growth and Transformation Plan (GTP)*, 2010/2011-2014/15, November 2010, Addis Ababa P.122.

¹⁴ Id., P. 121.

¹⁵Ellen Winberg (2010), *Participatory Forest Management in Ethiopia, Practices and Experiences*, FAO, SFE, June 2010, Addis Ababa, P.5.

main environmental problems in the country include land degradation, soil erosion, and deforestation, loss of biodiversity, desertification, recurrent drought, flood, wild fire and water and air pollution. Therefore these threats need to be solved and mitigated to achieve the goal. The drawbacks caused as a result of lack of coordinated effort and commitment at all levels, lack of strong institutional setup for Woody Biomass Inventory of forests and others should be solved for better achievement.¹⁶

1.2. Statement of the Problem

Forestry management has been used for centuries to mitigate and solve the impacts of deforestation and its adverse effect on the patterns of rainfall, humidity, air condition, temperature and biodiversity. Since such global problems are considered very devastating not only one country but also the whole world, the UN is very much concerned to come up with the Millennium Declaration having eight basic goals to be achieved until 2015. Of the goals, ensuring environmental sustainability is to be dealt specifically in the context of sustainable forestry management of Ethiopia. Therefore, in the research process the following are found to be the problems at hand from achieving the specific sectorial aspect of environmental sustainability forestry management.

Forestry management is a process which doesn't end at a point. It rather needs continuous coordination and relation among sectorial and cross sectorial bodies. On the other hand it looks for guideline for the proper implementation. Here issues of guideline among national and regional environmental bodies so that the implementation capacity and willingness go to the extent of the society. It is also logical to raise the extent of implementing and enforcing environmental legislations by justice organs.

Laws are basically promulgated to regulate a certain behavior or conduct. Regulations are equally important for facilitating implementation and enforcement. So in relation to forest development, conservation and utilization the issue of regulation and the degree regulatory capacity can be questioned.

¹⁶The Federal Democratic Republic of Ethiopia, Ministry of Water Resources and National Metrological Agency (2007), *Climate Change National Adoption Program of Action (NAPA) in Ethiopia*, Addis Ababa, P.16.

It is known that many people are dependent on forest and forest products for their livelihood. Forests are used for fire woods and fuel, food and construction and for environmental purposes even if the unbalanced utilization which is aggravated by poverty is against sustainable management of forests in our country. In spite of such facts our awareness to forests is also contributing for such aspect of the problem.

Investment is one of the policy concerns of the government. In many regional states of the country there are plenty of investment opportunities. Hence many investors are given investment licenses of promotion of different investments. The need to answer investments Vs impact assessment on the whole environment is one of the vital duties of the respective organ of the government in the process of regulating and mitigating the negative deprecation.

Executive organs of the government expected to operate and handle their duties and responsibilities according to the mandate they have. In the mean time they are expected to mobilize the required skilled manpower and financial resources. More over all the necessary units are to be organized to undertake and execute their specific tasks. The Ministry, EPA and others related to sectorial and cross sectorial units handling their respective duties and responsibilities towards achieving the intended goal is highly determined by those basic inputs.

Mobility and settlements to relatively non degraded areas especially for the demand for farm land has been the common trend in Ethiopia. Settlement programs which are officially supported by the government/s and the illegal ones to ecologically richer areas of the region opt for solving societal problem. On the contrary dense forests are usually destroyed for utilizing land for agriculture, construction and fuel without replacements. Conflicts among the community and settlers have the possibilities of aggravating the problem.

In every aspect of management up to date information system is inevitable. Not only Policies but also corrective measures are taken based on the reliable information obtained through modern system. The availability of Woody Biomass Inventory Unit in the sector institution (MOA) is the question asked to clearly know the density and spatial distribution of forests.

1.3.Objectives of the Study

The objective of this research is to evaluate and address one of the sectorial programs of sustainable forestry management in Ethiopia in the context of Goal Seven of the MDGs. Therefore objectives of this research are categorized in to general and specific objectives stated as follows:

1.3.1. General Objectives

Under this the historical patterns, uses and traits to our forestry distribution and management are studied in light of the intended Millennium Development Declaration especially from the point of view of Goal Seven and forestry management perspectives. Moreover, all policy, legal and administrative frameworks are to be evaluated in relation to their roles in achieving the goal.

1.3.2. Specific Objectives

The specific objectives of the research are:

- Addressing and evaluating the policy, legal, institutional aspects as well as the efforts made in ensuring sustainability of forests in meeting the goal.
- Dealing with the challenges and prospects with regard to the actions and conditions towards the goal and institutional efforts and commitments are also evaluated.
- In studying with it, the adequacy of the declaration and legal and policy documents are also searched in light of the sectorial aspect of ensuring sustainability of forests in Ethiopia.
- Pointing out the basic findings of the thesis and recommending the solutions to those problems so that the problems are given due attention and considered for better achievement of Goal Seven of the declaration since the sustainable forestry management has the largest share in ensuring environmental sustainability in Ethiopia.

1.4. Research Questions

This thesis attempts to address the following pertinent questions.

- What are the policies, legal and institutional frameworks of the country in administering forestry management?
- What are the actual forestry undertakings of the country?
- What are the possible prospects and challenges of the sector?
- What should be done to meet goal seven of MDGs (sustainable forestry management) of the country?

1.5. Significance of the study

Since any study is aiming in investigating and addressing a certain issue, this research can't go away from that. Therefore the major importance of this thesis would be-

- Indicating the core issues of sustainable forestry management. They are scrutinized and observed again so that the problems and the basic challenges are considered and talked by all concerned bodies.
- While pointing out the possible prospects and challenges of the sector, it contributes to drive a better mechanism to enhance the level of forestry management at sustainable level.
- This research could also play significant role in motivating other researchers to do further study on those areas.
- It could also be used as an academic reference for those having interest to deal and research on this area.

1.6. Scope of the Study

The scope of this thesis is limited in studying and conceptualizing forestry aspects of the environment. In other words the forestry management aspect is to be looked in relation to the legal and policy documents so as to evaluate whether Ethiopia could achieve that goal in that

specific sector or not. The whole input for the research is collected and analyzed in Addis where major institutions of the sector reside.

Thus this thesis mainly focuses on forestry patterns, prospects and on the challenges of meeting the goal in Ethiopia. In this respect Environment protection Authority, Ministry of Agriculture and other related institutions including the role of some non-governmental ones working on such area shall be looked for though they are only few.

1.7. Research Methodology

The research methodology is designed in a manner that both primary and secondary sources are used as an input for the development of the thesis. In relation to this policy documents, national and international laws having relations with the issues are to be studied and employed. Thus a focus is made on the environmental policy and strategy on the conservation of natural resources and also other basic policy documents (PASDEP and GTP and) of Ethiopia. Next to that, the FDRE Constitution, Criminal Code, as well as related legislations are entertained in detail. Moreover additional data is also collected through interview. Here interview is addressed to concerned officials of EPA, MOA, IBC as well as employees of NGOs working on environmental conservation to evaluate and analyze the issue. On the other hand different books, journals, reports as well as related publications and references on the area are also studied and elaborated.

1.8. Limitation of the Study

The topic at hand is much interesting in analyzing the forestry aspects of the country. In doing so the laws, policies, regulations, guidelines, entities having relation with the sector as well as practical undertakings are studied. But the work could not be very much exhaustive due to lack of access to get pertinent data and source available in the country. In addition to such constraint due to shortage of time and finance the regional forestry management aspects and progresses are not physically observed. In trying to fill such gaps journals, reports, related references and interviews are considered. But it is found difficult to access more reference since much is not studied and written on the area.

1.9. Organization of the Thesis

The research paper is organized in to five chapters. The first chapter which is commonly known as the proposal deals with general introductory remarks of the whole paper. So the statements of the problem, objectives, scope, methodology, significance, limitation as well as how the thesis is to be organized are included.

The second chapter provides the basics of environmental sustainability and its international law aspects. Here sustainable forestry management issues are to be discussed from the point of view of its importance. In addition the different causes of forest degradation and deforestation as well as the need to have concern at international level to mitigate those serious problems of nations are studied under the historical development of the Millennium Declaration. Here Goal seven: Ensuring Environmental Sustainability will be the concern of the discussion.

The third chapter of this research deals with the policies, strategy, legal and institutional frameworks of Ethiopia in relation to forestry management. Under this part the issue of forest resources in the country, related strategies and developmental plans of the country, the Environmental Policy of Ethiopia, related legislations and institutions like MOA, EPA, IBC, and EWCA are studied. Moreover, the roles of NGOs working on environmental issues are also looked at.

In the fourth chapter, the actual forestry management efforts and activities taking place in regional states especially basic undertaking cites are to be studied and elaborated including the data obtained. Here the possible prospects as well as the possible challenges in achieving the goal are also scrutinized. Finally the last part of the paper will come up with conclusions and recommendations.

Chapter Two

2. The Basics of Environmental Sustainability and Its International Law Aspects

It is important to deal with the whole aspects of the environment especially with regard to forestry management. In this respect the issues of sustainable management of forests are studied for their wider importance. Moreover this part of the thesis helps to see the whole essence and development of the UN Millennium Development Goals by giving special emphasis on the seventh goal as the focus of this research. Therefore it is to be elaborated in light of environmental sustainability and forestry management.

2.1. An Overview on Sustainable Development

The term sustainable development is amorphous because it incorporates various principles and components. In 1987 the World Commission on Environment and Development sought to address the problem of conflicts between environment and development goals by formulating a working definition in such a manner that sustainable development means development that meets the needs of the present generation without compromising the ability of future generation to meet their own needs.¹⁷ The 1992 Rio Declaration states that the right to development must be fulfilled so as to equitably meet developmental and environmental needs of the present and future generations.¹⁸ In the process of achieving sustainable development, environmental protection is an integral part of development and we can not think of it in isolation from it.¹⁹ More over when we are talking about sustainable development, the environmental, economic and social components are considered without being isolated to elaborate it.²⁰

¹⁷ The 1987 World Commission on Environment and Development.

¹⁸ Principle 3 of the 1992 Rio Declaration on Environment and Development.

¹⁹ Principle 4 of the 1992 Rio Declaration on Environment and Development.

²⁰Id. On the Earth Summit and Agenda 21, the United Nations Conference on Environment and Development (UNCED) made it plain that we can no longer think of environment, economic and social development as isolated fields. In addition to major international treaties and agreements concluded at such summit on issues of global climate change, biological diversity, deforestation, and desertification, the Declaration of Rio contains fundamental principles on which nations can base their future decisions and policies, considering the environmental implications of socio-economic development.

Sustainable development is intended to advance through further integration of those three dimensions in such a way that the contribution brings about transformative change. More over the transformative change which is right-based, equitable and inclusive processes should be ensured at global, regional, national and local levels.²¹

In short the economic dimension requires for the different kinds of capital (manufactured capital, natural capital, human capital and social capital) that make economic production possible and maximizing welfare over time. While a socially sustainable system must achieve fairness in distribution and opportunity, adequate provision of social services including health and education, gender equity, political accountability and education.²² The social and economic dimensions of sustainable development calls for global partnership to provide a dynamic and growing world economy based system ,combating poverty through creation of policies of development, resource management and poverty be integrated. Those dimensions also looks for consumption patterns and life styles which are less dependant on non-renewable natural resources of the earth and more in harmony with its carrying capacity. Population and Sustainability part of those dimensions urges governments to develop and implement population policies integral with their economic development programs. On the other side in relation to promoting human health and sustainable human settlements, it calls for meeting basic health needs of all populations including those living in rural areas, and addressing all accesses (land, building materials, clean water sanitation and others necessary). In order to achieve all aspects of those dimensions calling governments to create sustainable development strategies to integrate social and environmental policies are integrated aspects of those dimensions.²³

The Rio Declaration on Environment and Development has come up with basic principles of sustainable development. These are the principles of interdependence, quality of life, equity,

²¹UN General Assembly (2012), *Secretary-General's Input to the Open Working Group on Sustainable Development Goals*, 12th December 2012, P.3.

²² Jonathan M. Harris , (2003), *Sustainability and Sustainable Development*, International Society of Ecological Economics, February 2003,P.1.

²³ Rio Declaration on Environment and Development (1992), The Earth Summit and Agenda 21, Social and Economic Developments, Article 1-8.

citizenship, diversity, carrying capacity, future generations, uncertainty, precaution, polluter pays and preferable future.²⁴

One of the key concepts of sustainable development is the interdependence of society, economy and the natural environment. Sustainability is related to the quality of life in a population or community whether the economic, social and environmental systems that make up the community are providing a healthy, productive, meaningful life for all community residents, present & future.²⁵ In the context of sustainability, the term equity has to do with fairness whether all people have similar rights & opportunities, basic needs to maintain an acceptable quality of life. Equity, in this context, refers to the idea that all people throughout the community, whether a village, town, city, country or the entire world, have relatively same basic needs. Sustainable development encourages people to share their responsibility for this earth, and empowers people to take action to overcome some of the difficulties society as a whole faces in trying to secure a cleaner future whilst maintaining a stable economy.²⁶

There exists an obvious relationship between the diversity of natural systems (biodiversity) and the diversity, health & sustainability of human systems-cultural, social, and economic. Social & economic capital is ultimately created from natural capital, and its protection should be recognized as a fundamental principle of sustainable development. Whilst sustainable development also promotes interdependence and sense of world citizenship, social, cultural diversity need not be a source of conflict. Rather recognizing the importance of diversity can help one to focus on humanity's capacity to work together to meet the enormous environmental and social challenges. In ecological terms, the carrying capacity of an ecosystem is the size of the population or community that can be supported indefinitely up on the available resources & services of that ecosystem. Living within the limits of an ecosystem depends on three factors: the amount of resources available in the ecosystem; the size of the population or community; and the amount of resources each individual within the community is consuming.²⁷

²⁴ Rio Declaration on Environment and Development (1992), Principles.

²⁵ Dinah Shelton and Alexandra Kiss (2005), Environmental Law Hand Book, UNEP 2005, Hertford Shire SG.14 TP, United Kingdom, P.20.

²⁶ Id. P.21.

²⁷ Ibid.

Sustainable development is development that meets our own needs without compromising the ability of future generations to meet their needs.²⁸ In this definition the recognition of rights of future generations, the right to achieve a sustainable level of development & the right to be able to utilize natural resources are the core issues addressed. Although some philosophers maintain that future generations can not have anything until the future becomes the present, many environmental economists & lawyers increasingly recognize the rights of future generations. Whether future generations possess rights or not, it is certainly accepted that those presently alive today should at the very least take account of the interests that future generations will have & of the way that our present actions will affect those interests.²⁹

In relation to the principles of uncertainty, policy makers look to science to provide hard evidence that an environmental problem is real before action is taken. Similarly, determining whether & how harmful or unsustainable a technology, process or product will be is commonly surrounded by uncertainty.³⁰ In the case of precautionary principle, it is wise to prevent potential adversity, even if we are not yet sure how serious such adversity may turn out to be. It defines much of the way we are beginning to respond to the challenges of sustainable development, particularly within the environmental context.³¹ Precautionary Principle urges a willingness to take action in advance of scientific proof of evidence of the need for the proposed action on the grounds that further delay could prove ultimately most costly to society & nature, and, in the long term, selfish and unfair to future generations. The concept of proportionality or cost-effectiveness is the center to apply this principle. The other principle is “Polluter Pays” Principle. This recognizes that the polluter should pay for any environmental damage created, and that the burden of proof in demonstrating that a particular technology, practice or product is safe should lie with the developer, not the general public.³² While the principle of “Preferable futures” are those we positively hope for & work to create. Some of the criteria available for constructing images of preferable futures are related to commonalities of human experience: sustainability, health, peace, justice, and so on. In the context of sustainable development, a preferable future will hopefully include: a cleaner environment; a sustained level of economic development but

²⁸ See the Rio Declaration, *Supra* Note 18

²⁹ Dinah Shelton and Alexandra Kiss, *Supra* Note 25, P.21.

³⁰ *Ibid.*

³¹ The Rio Declaration on Environment and Development (1992), Principle 15.

³² *Id.*, Principle 16.

not involving excessive waste & pollution; and the protection of natural resources & biodiversity.³³

2.2. Sustainable Forestry management

Since the thesis is all about forestry management issues, it is necessary to deal with the concepts of sustainable forestry management as a sub set of the whole environment. Forests cover about one third of the earth's land surface, and provide various services and resources supporting human subsistence and well-being.³⁴ Forest ecosystems are central to the livelihoods, economic development and cultural values of millions of people especially in developing countries. Forests also host a great part of the planet's terrestrial biodiversity which demand proper conservation and sustainable use.³⁵ On the other hand climate change is generally recognized as one of the greatest challenges of the world. Forests contain a substantial part of the planets carbon therefore, current rate of forest loss contribute to almost 20 percent of total emissions of carbon dioxide. Climate change and forests are intrinsically linked; climate change is a threat to forests, and protecting forests from conversion and degradation helps to mitigate the impacts of climate change.³⁶

Practically all provisioning, regulating, cultural and supporting ecosystem services depend on the complex and balanced interaction of a plethora of different animal and plant species.³⁷ So the need for and proper utilization and conservation of forests is currently needed to sustainably manage and rehabilitate forests.

Considering sustainable forestry management as global basic issue, the United Nations Forestry Forum (UNFF) acknowledged the following thematic elements of sustainable forest management which are considered to offer a reference framework for sustainable forest management. The General Assembly of UN adopted in Dec. 2007 the definition which includes the following elements:

³³ Dinah Shelton and Alexandra Kiss, *Supra Note 25*, P.23

³⁴Costenbader John (2009), *Legal Frameworks for REDD+, Design and Implementation at the National Level*, IUCN, Gland, Switzerland, P. 3.

³⁵Ibid.

³⁶Var Bodegom, Arend Jan, Herman Savenije and Mariece Wit (2009), *Forests and climate change: Adaption and Mitigation*, Tropenbos International (Eds.), Wageningen, Netherlands, P.V.

³⁷Id., P.11.

- a) *Extent of forest resources,*
- b) *Biological diversity,*
- c) *Forest health and vitality,*
- d) *Productive functions of forest resources,*
- e) *Protective functions of forest resources,*
- f) *Socio economic functions and*
- g) *Legal, policy and institutional framework.*³⁸

Therefore sustainable management of forests from its wide perspective needs coordinated efforts for utilization of all forest products and conserving of all forestry elements for the present and future generations.

The importance of forests can be traced from the very fact for the need of sustaining forests since they are important for life. In this respect forest ecosystems have multiple functions and services and therefore are of great importance for the well-being of citizens. It is widely acknowledged that forests and trees provide a wide range of socio-economic and environmental values to human kind. They need to be conserved and wisely used if they are to provide benefits to human beings in general and particularly for those who are dependent on forests.³⁹ In relation to this it is widely known that forests and forest lands are extremely important ecosystems and economic resources with multiple role; they are important producers of biomass, sources of healthy and high quality forest fruits, medical herbs and mushrooms, an important habitat for wild plant and animal species, the main factor for the maintenance and regulation of hydrological regime, provide protection from landslides and erosion, absorb significant volumes of carbon and represent the main air-purifying system.⁴⁰

The importance of forests is well known for their great vitality which can be used as sources of wood, and non-wood products which include foods, fibers, wildlife, water, building, handcraft materials, gums, spices, dyes, animal fodder and medicines which constitute a vital part of sustainable environment. Moreover they conserve watersheds, soil and water.⁴¹

³⁸Dekka Patssari (2004), *Sustainable Forest Management, Forest Certification and MDGs*, June 10, 2004, Yale University, USA, P. 2.

³⁹ See Feyera Senbeta, *Supra Note 1*, P.318.

⁴⁰Maria Markovic (2010), *The Initial National Communication on Climate Change of Montenegro to the UNFCCC*, Podgorice, May 2010, P.40.

⁴¹ See Feyera Senbeta , *Supra Note 1*,P.319.

Therefore the value of forests can be generally grouped into three major components. These are:

- “i) Domestic values of forests products, such as firewood, fodder, and others that are consumed directly,*
- ii) Commercial values of forest products, such as timber, medical plant (“Productive use value”), and*
- iii) Ecosystem functions, such as watershed protection, photosynthesis, regulation of climate, production of soil (“non-consumptive value”), along with the immense values of keeping options open for the future (“option value”) and simply knowing that certain species exist (“existence value”).”⁴²*

In relation to this issue, forests have great significance not only for a specific country and nation but also known to have greater global significance. Even if forests are precious natural resources that provide various functions and services to the globe, deforestation and illegal cutting of trees is advancing at alarming rate in many countries for different uses; especially in least developed countries like Ethiopia.⁴³ Therefore sustainable forest management requires the involvement of both the public (the government through its regulatory enabling and financing powers) and private sectors. The point here is that general policies and laws are necessary but not sufficient and hence they should be supplemented by implementing laws and institutions in maintaining sustainability of forests.⁴⁴ More importantly laws and policies should consider the interests of the community while balancing the management of ecosystem and the beneficiaries.⁴⁵

Though sustainable forestry management gives the aforementioned wider importance, unsustainable forest management and utilization results in devastating negative outcomes. It causes loss of biodiversity, affects forest dependent peoples, climate change, lack of food security and lack and inefficiency of those other importance.⁴⁶

⁴²See Feyera Senbata, *Supra* Note 1, PP. 319-320.

⁴³ *Id.*, P.320.

⁴⁴Mulugeta Mengist (2003), *Enhancing the contribution of Forestry to Food Security: Examination of the Legal Environment*, Proceedings of Food Security Conference, 2003, August 13-15, 2003, Addis Ababa, PP.368-369.

⁴⁵Emru Kelbessa and Camille De Stoop (2007), *Participatory Forest Management (PFM) Biodiversity and livelihoods in Africa*, Proceedings of International Conference, March 19-21, 2007, A.A, Ethiopia, P.51.

⁴⁶ See Secretariat of Convention on Biodiversity, *Supra* Note 8, P.9.

2.3. Common Causes of Forest Degradation

After looking at sustainable management of forests in light of its long lasting outcome, it is very logical to see the causes for depletion of forest resources. The causes are getting serious attention at national, regional and international level for their irreversible impact on biodiversity, climate change, food security and the whole environment. Though the causes of forest deforestation differs from country to country, the reasons are mainly grouped as conversion of forest land to agriculture and other land uses, cutting of trees without replacement to satisfy the demand for firewood, charcoal, poles and construction, improper implementation of the proclamations on forests, lack of awareness of citizens on the importance of forests and attitude towards forest; and lack of strong enforcement mechanisms.⁴⁷

For example the major threats to forest resources in Ethiopia can be broadly categorized in to two. These are:

- “i) Individual elements of the forest are removed without alteration to the overall regulation structure (e.g. selective losing, fuel wood and construction materials collection and others),*
- ii) Overall impoverishment and degradation of ecology of the forest system through (e.g. agriculture and grazing, human settlements, mining extractions, fire and conflict or war) and the act of degradation or destruction will further lead to the decline of the biodiversity and abundance of forest dependent plant and animal species and deterioration of forest productivity and degradation of the whole environment.”⁴⁸*

In all cases forest degradation is one of the most serious problems of the world especially poor countries. Because Forests are shrinking because they are cut for different purposes at rates that exceed their rates of regeneration.⁴⁹ So the establishment of forest reserve areas, restoration of

⁴⁷Tesfay Mebrahtu (2003), *Do Forests and Trees Have Significant Contribution to Food Security*, Proceedings of Food Security Conference, 2003, UNCC, August 13-15, 2003, Addis Ababa, P.309.

⁴⁸ See Feyera Senbeta, *Supra* Note 1, P.321.

⁴⁹ See Emru Kelbessa and Camille De Stoop, *Supra* Note 45, P. xxi.

forest wetlands, continuous cover forest management, prevention of forest fires; and improved management of forest growing plantations and related activities are very important.⁵⁰

Finally one can see the results and outcomes of forest destruction and unsustainable use of forests are common if forests are not properly utilized. The results of deforestation are best clarified as:

- *Destruction of the remaining forests,*
- *Acute shortage of forest products particularly firewood, timber and the like,*
- *Land degradation due to soil erosion,*
- *Loss of valuable plant species which could provide a diverse set of benefits to the whole communities and the country,*
- *Loss of biodiversity,*
- *Extinction and loss of wildlife due to habitat Loss, and*
- *Increase in global warming and environmental change.*⁵¹

We can say that deforestation causes serious and irreversible damage not only on the whole environment but also to the lives of peoples. That is why it is given due consideration at national and international levels. So as to protect the world from such effects, sustainable forestry management is very much important.

2.4. Sustainable Environmental Management and Its International Law Perspectives

The conservation and sustainable use of biological diversity and the eradication of extreme poverty are two of the main global challenges of our time. It has been recognized by the international community that these two challenges are intimately connected, and require coordinated response. In this respect the protection of biodiversity and sustainable environmental management is essential in the fight to reduce poverty and achieve sustainable development.⁵²

⁵⁰European Commission (2003), *Sustainable Forestry and the European Union*, Office of Official Publications of the EU, Luxembourg, P.29.

⁵¹ See Tesfay Mebrhatu, *Supra* Note 47, P.307.

⁵² See Secretariat of Convention on Biodiversity, *Supra* Note 8, P. ii (Forward).

The forest principles non-legally binding authoritative statement of principles for global consensus on the management, conservation and sustainable development of all types of forests. The document produced at the UN Conference on Environment and Development known as the Earth Summit. It is a non- legally binding document that makes several recommendations for the conservation and development of forestry. The Earth Summit and Agenda 21 is a global consensus document, negotiation at Rio didn't settle all disputes to the satisfaction of each participant, not necessarily in the best interests of all, seen from the broadest perspective. It is, however, a unique step forward on the road towards sustainability, and offers a bold plan to mobilize local, national, and global action.⁵³

At the Earth Summit, there were diversified interests of developing and developed nations. The negotiation of the document was complicated by the demands of developing nations in the group 77 to increase foreign aid in order to pay for the setting aside of forest resources while developing nations resisted those demands; and the final document is a compromise.⁵⁴

Therefore the UN Conference on Environment and Development (UNCED) held in Rio de Janeiro in 1992 has given forests an increasingly important role in the context of sustainable development and environment conservation. The concept of sustainable forest management has been recognized as a fundamental guiding principle by all participant countries.⁵⁵ In this respect the following statements made at UNCED still have particular importance in maintaining the world's environment in a sustainable manner.

The following are the basic forestry principles:

- *All countries should take part in "the greening of the world" through forest planting and conservation,*
- *Countries have the right to use forests for their social and economic development needs. Such use should be based on national policies consistent with sustainable development,*
- *The sustainable use of forests will require sustainable patterns*

⁵³ The Rio Declaration on Environment and Development (1992), Earth Summit and Agenda 21, the preamble.

⁵⁴ See European Commission, *Supra* Note 50, P. 12.

⁵⁵ *Id.*

of production and consumption at a global level,

- Forests should be managed to meet the social, economic, ecological, cultural and spiritual needs of present and future generations,*
- The profits from biotechnology products and genetic materials taken from forests should be shared, on mutually agreed terms, with countries where the forests are located,*
- Planted forests are environmentally sound sources of renewable energy and industrial raw materials. The use of wood for fuel is particularly important in developing countries. Such needs should be met through sustainable use of forests and replanting. The plantations will provide employment and reduce the pressure to cut old-growth forests,*
- National plans should protect unique examples of forests, including old forests and forests with cultural, spiritual, historical, religious and other values,*
- International financial support, including some from the private sector, should be provided to developing nations to help protect their forests. Countries need sustainable forestry plans based on environmentally sound guidelines. This includes managing the areas around forests in an ecologically sound manner,*
- Forestry plans should count both the economic and non-economic values of forests, and the environmental costs and benefits of harvesting or protecting forests. Policies that encourage forest degradation should be avoided.*
- The planning and implementation of national forest policies should involve a wide variety of people, including women, forest dwellers, indigenous people, industries, workers and non-government organizations,*
- Forest policies should support the identity, culture and rights of indigenous people and forest dwellers. Their knowledge of conservation and sustainable forest use should be respected and used in developing forestry programs. They should be offered forms of economic activity and land tenure that encourage sustainable forest use and provide them with an adequate livelihood and level of well-being,*
- Trade in forest products should be based on non-discriminatory, rules,*

agreed on by nations. Unilateral measures should not be used to restrict or ban international trade in timber and other forest products,

- Trade measures should encourage local processing and higher prices for processed products. Tariffs and other barriers to markets for such goods should be reduced or removed, and*
- There should be controls on pollutants, such as acidic fall out, that harm forests.*⁵⁶

As said earlier the forest principles are derived on the global consensus on the management, conservation and sustainable development of all types of forests and hence the Summit outlines possible ways for combating deforestation at global level and hence various multilateral agreements are produced containing global commitments, which are commonly known as the “Rio Convention”; the Convention on Biological Diversity, the Convention to Combat Desertification and the Framework Convention on Climate Change (UNFCCC).”⁵⁷

It is noted that the relationship between environmental sustainability and international forest governance dates back to the first recognition of forest deterioration and loss of forest goods and services upon which human societies depend, and to recognition of the need to take measures to sustain forests. From the time immemorial, human societies have manipulated the structure and composition of forests, in response to the same drivers that led to domestication of livestock and food plants in many countries experiences.⁵⁸In considering the point at hand, a full-fledged concern is addressed in such a manner that most of the international institutions consider forest related issues were influenced and interpreted in light of development, expressed in the concept of sustainable development; meeting the needs of the present without compromising the ability of future generations to meet their own needs.⁵⁹On the other hand the impact of environmental degradation is the most severe for the whole nations especially for those people living in poverty since they have few livelihood options on which to fall back have been making this issue very serious to get international attention. Thus the IDGs, then MDGs in 2000 have been established by United Nations to combat poverty, hunger, disease illiteracy, gender inequality and environmental degradation due to the fact that the

⁵⁶ See Supra Note 53 for Forestry Principles

⁵⁷ Ibid

⁵⁸ IUFRO (2010), Embracing Complexity: Meeting the Challenges of International Forest Governance, 2010, IUFRO World Series, Vol. 28, P.75.

⁵⁹Id., P.77.

conservation and sustainable use of biological diversity, and the eradication of extreme poverty are the basic global challenges of our time.⁶⁰ Therefore the whole essence of IDGs and MDGs are to be discussed in the incoming parts in detail especially from the perspective of environmental protection and forestry management.

2.5. Historical Antecedence and Development of the UN Millennium Declaration

The 21st century has dawned with the world facing global issues of climate change, critical food and fuel shortage, environmental degradation and natural disaster related global challenges as today's world population continues to grow to an estimated 9 Billion by 2040 where over 60% will be urbanized. This is placing excessive pressure on the world's natural resources. Therefore the UN Millennium Declaration has come up as a blue print agreed by all countries and the world leading institutions to support the mitigation of these global issues.⁶¹ It is to mean that the MDGs are the reflections of different observations gleaned from the various regional, national and international conference organized under the auspices of UN at different times and on different occasions in the 1990s.⁶² Due to the disappointing balance of development in 1980s, IDGs didn't address the basic world problems. It gradually becomes apparent that the basic ideas having various aspects of social and ecological development are dealt in the UN framework to opt for more tenable agenda.⁶³ In other words the Millennium summit is the culmination of the development that began after the end of cold war and it has entitled a paradigm shift in the international development debate and has placed new issues and goals on international agenda.⁶⁴ Therefore the MDGs are referring back the IDGs drawn up in 1996 by the Development Assistance Committee, which is a component of OECD.⁶⁵

Even if the IDGs have been drawn to solve and address different problems at international level in 25 years, with 1990 as the year of its initiation and 2015 the year of attainment of

⁶⁰ See Secretariat of Convention on Biodiversity, Supra Note 8, P. ii.

⁶¹ Stig Enemark, Robin McLaren and Paul Van der Molen (2009), *Land Governance in Support of the Millennium Development Goals, New Agenda for Land professionals*, The International Federation of Surveyors (FIG), Copenhagen, Denmark, P.5.

⁶² See Getachew Adem, Supra Note 6, P.32.

⁶³ Markos Loewe (2008), *The Millennium Development Goals: Chances and Risks*, Discussion Paper 6/2008, German Development Institute, P.2.

⁶⁴ Id., P.1.

⁶⁵ See Getachew Adem, Supra Note 6, P.32.

realization, it didn't get the wholehearted acceptance of developing countries or that of civil society as a whole and had little or no recognition or resonance.⁶⁶ Therefore it necessitates the need to have a new and more practical regime at international level which could get wider acceptance and recognition of the whole nations and institutions. In this respect in the wake of the Millennium summit, a joint working group was constituted with representatives from UN, WB, OECD and other international organizations. This group drafted the Millennium Declaration with its eight goals to be implemented in 2015.⁶⁷ The MDGs are not actually the first time that the global promises have been made about eradicating or rapidly reducing human deprivation and many has been made at international level in order to possibly handle problems of nations and hence it is one of them. But the MDGs are basically the world biggest promise- a global agreement to reduce poverty and human deprivation at historically unprecedented rates through collaborative actions.⁶⁸

Before the coming in to existence of the full-fledged picture of the Millennium Declaration the UN reform forcefully back on the agenda and a series of meetings with a number of states and NGOs was held to select topics that should be the focus of the Millennium Declaration.⁶⁹ Then the MDGs were established by the UN in 2000 to combat poverty, hunger, illiteracy, gender inequality and environmental degradation. They also integrate the 2010 Biodiversity target set in 2002 by the conservation of biological diversity to achieve, by 2010, a significant reduction in the rate of biodiversity loss.⁷⁰ Then in September 2000, 189 member states of the United Nations and at least 23 developed European countries have agreed and signed the document with the view to achieve by the year 2015⁷¹ and hence Ethiopia is a party to the declaration.

The whole development of the declaration is best explained in the UN Resolution as it is adopted by the General Assembly, in September 2000 that:

⁶⁶ David Hulme (2009), *The Millennium Development Goals (MDGs): A short History of the World's Biggest Promise*, BWPI Working Paper 100, Brooks World Poverty Institute, University of Manchester, P.17.

⁶⁷ See Markos Loewe, *Supra* Note 63, P.1.

⁶⁸ See David Hulme, *Supra* Note 66, P.4.

⁶⁹ Global Forum on Reinventing Government Building Trust in Government (2007), *Governance for the Millennium Development Goals: Core Issues and Good Practices*, 7th Global Forum on Reinventing Government Building Trust in Government, 26-28 June 2007, Vienna, Austria, P.vi (Executive Summary).

⁷⁰ See Secretariat of Convention on Biodiversity, *Supra* Note 8, P. ii (Forward).

⁷¹ See David Hulme, *Supra* Note 66, P.8.

“We recognize that, in addition to our separate responsibilities to our individual societies, we have a collective responsibility to uphold the principles of human dignity, equality & equity at global level. As leaders we have a duty therefore to the world’s people, especially the most vulnerable and, in particular, the children of the world, to whom the future belongs.”⁷²

While taking the above resolution in to account the Millennium Declaration was adopted in September 2000 and in September 2000, it was adopted at the so called Millennium Summit, held in the framework of the 55th General Assembly of the United Nations. The Summit was attended by the heads of states of governments nearly all UN members of highest ranking representatives of independent states come together on one occasion. This and the fact that all the representatives of attending made statements of their own on the declaration are clear indication of the importance attached to it even before it had been adopted.⁷³ In September 2001, the MDGs were approved and adopted by the 56th UN General Assembly that was adopted by the largest ever gathering heads of states. The declaration commits countries both developed and developing to do all they can to eradicate poverty, promote human dignity and equality and achieve peace democracy and environmental sustainability.⁷⁴

The MDGs are found to get continuous acceptance and concern for the fact that it is reaffirmed even at the launch of the Doha Round on the International Trade in November 2001 too.⁷⁵ Therefore the Millennium Declaration is presumed to be a landmark incident which has opened a way to the shifting of the development agenda from International Development Goals (IDGs) to MDGs that the global agenda provides a valuable image of the inherently complex, messy and unpredictable processes that incrementally, sometimes by design and sometimes by accident, gave birth to MDGs though it hasn’t brought fundamental change in context except its incorporation of the eighth goal which hasn’t been found in IDGs.⁷⁶

⁷² UN General Assembly, United Nations Millennium Declaration, 55/2 Session, September 2000, Part I (Values and Principles).

⁷³ Id., The heads of state and government, have gathered at United Nations Headquarters in New York from 6-8 September 2000, at the dawn of the new millennium, to reaffirm our faith in the organization and its charter as indispensable foundations of more peaceful, prosperous and just world.

⁷⁴ UN General Assembly, UN Millennium Declaration, 56th General Assembly, September 2001.

⁷⁵ Ibid.

⁷⁶ Ibid.

Here it is understood that the aim of MDGs is to encourage development by improving social and economic conditions of nations especially the poorest countries of the world and it is derived from IDGs which is officially established and announced by the UN Millennium Summit. Therefore one can generally say that the UN Millennium Declaration has come up to address and mitigate world's serious problems which have been scrutinized by members of UN within agreed commitment period through collective responsibility and coordinated effort since those problems directly and indirectly affect all nations especially less developed ones.

2.5.1. The Basics about MDGs

As stated earlier the MDGs are a blue print agreed by all countries and world's leading institutions to support the mitigation of these global issues and hence the first seven goals are mutually reinforcing and are directed at reducing poverty in all its forms. While the last goal: Develop a Global Partnership for Development is the new one formulated to achieve the first seven goals.⁷⁷ Since the research is on sustainable development of forests, emphasis is given on goal seven: Ensuring Environmental Sustainability.

2.5.1.1. Goal Seven- Ensure Environmental Sustainability

This is the other basic goal of the declaration so as to resist and mitigate the challenges of food shortage, environmental degradation and natural disasters which are to a large extent caused by the overarching challenge of climate change, while the rapid urbanization is a general trend that in itself has a significant impact on climate change. That is why the measures for adaption to climate change must be integrated in a strategy for poverty reduction to ensure sustainable development with ensuring environmental sustainability and meeting the MDGs.⁷⁸

So as to ensure environmental sustainability three targets are put in the declaration and these are:

⁷⁷ The Millennium Declaration recognized eight goals. These are Eradicate Extreme Poverty and Hunger, Achieve Universal Primary Education, Promote Gender Equality and Empower Women, Reduce Child Mortality, Improve Maternal Health, Combat HIV/AIDS, Malaria and Other Diseases, Ensure Environmental Sustainability and Develop a Global Partnership for Development. Generally there are 18 targets and 48 indicators.

⁷⁸ See Sting Enemark, Robin McLaren and Paul Van der Molen, Supra Note 61, P.12.

- “i) Integrate the principles of sustainable development in to country policies and programs and reverse the loss of Environmental resources,*
- ii) Halve, by 2015, the proportion of people without sustainable access to safe drinking water and sanitation; and*
- iii) Achieve a significant improvement in the lives of at least 100 million slum dwellers by 2020.”⁷⁹*

It has been indicated that each goals have got their own indicators and targets. Accordingly the indicators for first target are:

- a) Proportion of land area covered by forests ,ratio of area protected to maintain biological diversity to surface area,*
- b) Use of kg oil equivalent per \$ GDP(PPP)(A measure for the efficiency of energy use),*
- c) Carbon dioxide emissions per capita,*
- d) Consumption of ozone-depleting CFS(indicator included in 2002 during Johannesburg Summit on Sustainable Development), and*
- e) Proportion of population using solid fuels (indicator included 2002 during Johannesburg Summit on Sustainable Development.⁸⁰*

In addition to this, proportion of population with sustainable access to an improved water resource: urban and rural, and proportion of population with access to sanitation: urban and rural are the two indicators for the second target.⁸¹ Where as target three of the goal incorporates one indicator i.e. proportion of households with access to secure tenure.⁸²

When we are dealing with ensuring environmental sustainability, it will only be achieved if agriculture-the largest user of the world’s land & water is practiced in environmentally sustainable manner. No one can be an environmentalist on an empty stomach. More importantly increased access to safe drinking water and sanitation is critical in reducing malnutrition. On the other hand environmental sustainability is unthinkable without resource

⁷⁹ See UN General Assembly, Millennium Declaration, Supra Note 72, Goal Seven.

⁸⁰ See UN General Assembly, Millennium Declaration, Supra Note 72, Indicators for the first target.

⁸¹Id., See the Indicators for the second target.

⁸²Id., See the indicator for the third target.

management especially forestry management and biodiversity conservation.⁸³ The first indicator for the first target; Proportion of Land Area Covered by Forests is the concern of the research and hence it is given much more emphasis.

Since climate change has brought renewed attention and new ideas to forests and the forestry landscapes, novel initiatives are emerging that aim to manage forest specially for climate change mitigation, adaption and for the purpose of maintaining environmental sustainability. So the new climate-related objectives including the MDGs result in reinvigorated forest conservation effects and alterations to forest management regimes.⁸⁴

In order to mitigate climate change and to maintain sustainable environment as whole, forests should be managed in several forest related options;

- *Maintained or increased forest land area;*
- *reduced deforestation;*
- *increased afforestation and reforestation (by planting and natural regeneration approaches);*
- *maintained or increased forest carbon density; reduced forest degradation;*
- *forest conservation;*
- *wild fire management*
- *increased use of wood products from sustainably managed forests;*
- *increased long term carbon storage in timber products;*
- *substitution of fossil fuels; and*
- *Incorporation of forestry management aspects in the policy, programs as well as strategies of a country along with enforcement and administration institutions.*⁸⁵

On the other hand activities which are carried out outside an ecosystem and in unsustainable manner may lead to environmental degradation. For example, overgrazing can accelerate desertification in the process endanger transportation corridors, wild life migratory routes and related impacts as well.⁸⁶ That is why due consideration is given in the goal for the reason that

⁸³Wunder, S. (2005), *Payments for Environmental Services: Some Nuts and Bolts*, Bogor, CIFOR, Indonesia, P. 32.

⁸⁴Seppala, R., A. Buck and P. Katila (2009), *Adoption of Forests and People to Climate Change. A Global Assessment Report*, (eds.), IUFRO World Series, Vol. 22, Helsinki: International Union of Forest Research organization, P.221.

⁸⁵ See Wunder S., Supra Note 83, P. 223.

⁸⁶ Kameri Mbote, Joel Musaasizi and Micheal Waithaka (2007), *Effective Natural Resource Management for Conflict Prevention*, ECAPAPA Monograph Series 8, August 2007, P. 1.

the converse is also true; protecting and rebuilding healthy ecosystems through sustainable management of forests can benefit not only immediate resource users but also peoples in other regions and countries. Therefore to support sustainable intensification, diversification and conservation of natural resources and the environment, forests are playing the most significant role.⁸⁷

Since the world is threatened by environmental degradation and poverty as a result of population increase, deforestation, desertification, soil erosion, etc., this goal is very important to address and combat all the adverse effects.

⁸⁷Ibid.

Chapter Three

3. Forestry Management, Policy, Legal and Institutional Aspects of Ethiopia

Ethiopia is found in the horn of Africa covering an area of about 1.2 Million Square Kilometers. It is mountainous country with a rich diversity in climate, biodiversity, variety of forests, ethnicity and culture.⁸⁸ Though Ethiopia's forest resource has been depleted for a long time, she has been well known for variety of forests and biodiversity.

In this part of the thesis the whole aspects of goal seven will be looked from the perspectives of forestry management. Here the policy documents, related legislations and concerned institutions are to be studied. Like what is being done in many states and countries, the issue of environmental sustainability is a concern in mitigating all the adverse effects of unsustainable environmental pattern. After looking at the basis of environmental sustainability with regard to MDGs, it will be important to deal with forestry aspects and related frameworks of the country.

3.1 Forest Resources in Ethiopia

Historical sources indicate that a large portion of Ethiopia was once covered by high forests and woodlands. In fact, the natural forest patches seen at present and the climatic condition prevailing in the highlands suggest that a large portion of highland area was once covered by forests than the present.⁸⁹ Ethiopia has some of the world's rarest animals and plants but these are now in danger of disappearing forever due to overuse and loss of natural habitat. Uncontrolled population growth puts ever increasing pressure on the country's natural resource base. Moreover inadequate economic policies have deepened poverty and widened inequalities and forced rural people and others to exploit biodiversity at rates that are no longer sustainable.⁹⁰

⁸⁸Ministry of Finance and Economic Development (2006), *Ethiopia: Status Report on the Brussels Program of Action (BPoA) for Least Developed countries (LDCs)*, January 2006, Addis Ababa, P. 2.

⁸⁹ Federal Democratic Republic of Ethiopia, Institute of Biodiversity Conservation (2005), *National Biodiversity Strategy and Action Plan*, December 2005, Addis Ababa, P.5.

⁹⁰ Ibid.

As a result, processes such as deforestation, overgrazing, soil erosion, desertification, wild fire and the like have become major threats to the remaining biodiversity in Ethiopia.⁹¹

In the late 19th century about 40% of Ethiopia was covered with forests. Due to the causes mentioned above, Ethiopia is believed to have had extensive regulation (forest cover).⁹² That is why the need to protect and conserve as well as sustainable use of forests and biological heritages and biodiversity needs fundamental legal, policy and institutional framework in order to act in coordinated manner. Though there are threats to the environment, Ethiopia still own diverse vegetation resources.⁹³ The large terrestrial land surface with biologically productive climate and soil also prevents the country with a huge forestry development potential. Thus the forest resources are an important endowment of the country in contributing production, protection and conservation functions in themselves.⁹⁴ In addition home gardens which are found in many parts of southern and southwestern regions of Ethiopia: such as coffee, enset, pepper, and numerous kinds of vegetables are making component part of the diversity of forests in the country.⁹⁵

It is noted in the earlier chapter that forest resources contribute a significant wealth of products that can be used for various purposes. In this respect Ethiopia's forest resources have a direct impact on food security.⁹⁶ This means that peoples of Ethiopia are still dependent on the natural environment for their survival. In relation to the variety and types of forests, man-made forests, dry green montane vegetation (Junipers forest, podocarpus forest), moist Montane forests, broad leaved deciduous woodland, small leaved deciduous wood land; and low and dry forests are common in Ethiopia.⁹⁷

⁹¹ See Feyera Senbeta, Supra Note 1.

⁹²FAO (2010), *Global Forest Resources Assessment 2010*, Main Report, FAO Forestry Paper No. 163, Rome, P. 218.

⁹³Mulugeta Lemenih and Tadesse W/Mariam (2010), *Review of Forest Woodland and Bush land Resources in Ethiopia up to 2008*,(ed.) ,Ethiopian Environmental Review No 1, Forum of Environment, Addis Ababa, P.131.

⁹⁴Ibid.

⁹⁵Abdu Abdelkadir and Badege Bishaw (2003), *Agro forestry and Community Forestry for Rehabilitation of Degraded Watersheds on the Ethiopian Highlands*, International Symposium on Contemporary Development Issues in Ethiopia, July 11-12 2003, Addis Ababa, Ethiopia, P.10.

⁹⁶See Feyera Senbeta, Supra Note 1.

⁹⁷Id., P. 319.

In recent years, environment has become a key issue not only in Ethiopia but also in many other countries. But the main environmental problems in Ethiopia include land degradation, soil erosion, and deforestation, loss of biodiversity, desertification, recurrent draught, flood and water and air pollution. While the causes of most disasters are climate related, the deterioration of natural environment due to unchecked human activities and poverty has further exacerbated the situation.⁹⁸

The expansion of agriculture in Ethiopia has been taking place at the expense of the natural vegetation, particularly forests, woodlands and other wildlife resources, leading to loss of both flora and fauna, and ultimately, destruction of habitats as a whole.⁹⁹ The deforestation activities, expansion of agriculture and unsustainable use of environmental resources especially forests and forest products have been increasing at alarming rate. Such destruction in Ethiopia has resulted in soil erosion, poverty, food insecurity and recurrent draught, extinction and loss of biodiversity, and global warming and climate change.¹⁰⁰

Therefore not only the government of Ethiopia but also other nations are very much concerned in mitigating the adverse effects of environmental degradation. Hence the Millennium Declaration has come up with those goals including goal seven which is the concern of this research.

3.2. Development Framework, Legal and Institutional Aspects of Ethiopia.

According to the elements of sustainable forestry management the legal and institutional aspects are significant along with those other elements discussed earlier. In light of such issues those points are placed in the MDGs. In the national context, Ethiopia is among the first countries in Africa to embrace the MDGs and put them in its policy and strategy in response to those adverse conditions of poverty, malnutrition and environmental degradation.¹⁰¹ In relation to the first target of goal seven: Integration of the principles of sustainable development in to country policies and

⁹⁸Federal Democratic Republic of Ethiopia, Ministry of Water Resources National Meteorological Agency (2007), *Climate Change National Adaptation Program of Action (NAPA) of Ethiopia*, June 2007, Addis Ababa, Ethiopia, P.16.

⁹⁹Ibid.

¹⁰⁰ See Tesfay Mebrhatu, Supra Note 47.

¹⁰¹ Federal Democratic Republic of Ethiopia, Ministry of Finance and Development (2008), *Ethiopian Progress towards Achieving the Millennium Development Goals: Successes, Challenges and Prospects*, Addis Ababa, PP.2-3.

programs and reverse the loss of environmental resources is the base to study the policy and legal documents of the country.¹⁰²

3.2.1. Related Policies and Strategies of Ethiopia

In order to monitor the progress of the above three targets, the MDGs specify six indicators in which the first one is very important for the purpose of the research: proportion of Land Area covered by forests¹⁰³ and the first target is also the one which is crucial in assessing forestry aspects of Ethiopia.

The seventh goal of the declaration includes one of the main targets aiming at the integration of the principle into the country's policies and programs in order to reverse the loss of environmental resources. It will be very important to scrutinize the policy documents of Ethiopia. The Plan for Accelerated and Sustained Development to End Poverty (PASDEP), one of the Ethiopia's comprehensive program and framework spanning the period 2005/06-2009/10, its successor the Growth and Transformation plan (2010/11-2014/15), Climate-Resilient Green Economy and Strategy, Environmental Policy of Ethiopia, Forest Management, Development and Utilization Policy and Strategy are to be discussed and contextualized in light of sustainable forestry management.

3.2.1.1 The Environmental Policy of Ethiopia

Though it was issued in 1997 before the coming in to full-fledged picture of the Millennium Declaration, it focuses on sustainable environmental development. The objective of the policy is stated as:

To improve and enhance the health and quality of life and to promote social and economic development through the sound management and use of natural, human made and cultural resource and the environment as a whole so as to meet the needs of

¹⁰²See UN General Assembly, Millennium Development Declaration, Supra Note 72.

¹⁰³ Federal Democratic Republic of Ethiopia, Ministry of Finance and Development and the United States Country Team (2004), *Millennium Development Goals Report: Challenges and Prospects for Ethiopia*, Volume 1, March 2004, Addis Ababa, P.5.

*the present generation without compromising the ability of the future generation to meet their own needs.*¹⁰⁴

The environmental policy of Ethiopia recognized a number of sectorial and cross sectorial policy elements. Among others, forest, woodland and tree resources are one of them.¹⁰⁵ It recognizes the roles of communities and entrepreneurs, forestry management activities including afforestation and conservation of forest ecosystems to ensure the wellbeing, promoting modern agricultural and natural resource management, pursue agricultural policies and programs, finding substitutes for construction and fuel and promotion of protected forest areas to reduce the pressure on forests.¹⁰⁶ A number of guiding principles are stated and the need for peace and personal security, sustainable management of resources, adaptation of alternative technologies, social equity in resource utilization, the recognition of local, regional and international environmental interdependence, the issue of integrated implementation of cross-sectorial and sectorial federal, regional and local policies and strategies as a prerequisite to achieve the objectives are the major ones.¹⁰⁷ In relation conservation of genetic, species and ecosystem biodiversity, the policy demands both in situ and ex situ conservation methods. Here the involvement and community participation in the management and planning activities is considered important.¹⁰⁸

We can say that though the environmental policy has been approved before the coming into picture of MDGs, it addressed all the concerns of sustainable forestry management aspect. In other words even if it is the first comprehensive Environmental Policy for the FDRE approved by the Council of Ministers in April 1997;¹⁰⁹ it has included environmental management aspect

¹⁰⁴ Environmental Protection Authority (1997), *Environmental Policy of Ethiopia*, April 2, 1997, Addis Ababa, Article 2.1.

¹⁰⁵The Environmental Policy of Ethiopia recognizes ten sectorial and ten cross sectorial policy elements. Soil Husbandry and Sustainable Agriculture; Forest, Woodland and tree Resources ;Genetic ,Species and Ecosystem Biodiversity; Water resources; Energy Resources; Mineral Resources; Human Settlement, Urban Environment and Environmental Health; Control of Hazardous Materials and Pollution from Industrial Waste; Atmospheric Pollution and Climate Change; and Cultural and Natural Heritages are sectorial elements. On the other hand, the cross sectorial environmental policies are Population and Environment; Community Participation and Environment; Tenure and Access Rights to Land and Natural Resources; Land Use Plan; Social and Gender issues; Environmental Economics; Environmental Information System; Environmental Research; Environmental Impact Assessment; and Environmental Education and Awareness.

¹⁰⁶See Federal Democratic Republic of Ethiopia, *Supra* Note 104, Article 3.2.

¹⁰⁷ *Id.*, Article 2.3.

¹⁰⁸ *Id.*, Article 3.3.

¹⁰⁹ Jonathan Mckee (2007), *Ethiopia: Environmental Profile*, August 2007, Addis Ababa, P.19.

especially forest, woodland and tree resource issues as policy concern. After this policy is issued in 1997, proclamations on Environmental Protection Organs, Environmental Impact Assessment and Environmental Pollution Control and related Proclamations are approved and issued.¹¹⁰

3.2.1.2. Forest Development, Conservation and Utilization Policy and Strategy

It is the first ever comprehensive policy and recently, in April 2007, the Council of Ministers adopted this policy for the first time in history¹¹¹. The government has given due attention to forest development and conservation considering its significance to the national economy, food security and sustainable development of the nation through community participation.¹¹²

In its preamble or introductory part, the policy stated that the degradation of resources such as soil and vegetation cover caused desertification; increased recurrence of severe draught and also migration of rural population to urban areas¹¹³. Moreover it is also stated that the strategy is developed to bring sustainable development through community participation and pursued a systematic control of forest resources to overcome those problems.¹¹⁴

The overall objective of the policy is to conserve and develop forest resource properly so that there could be sustainable supply of forest products to the society in satisfying the demand and contribute to the development of the national economy through appropriate conservation and developing forest resources.¹¹⁵ In addition the specific objectives of the policy are:

1. *To encourage sustainable forest development by rendering technical assistance to farmers, pastoralists, investors and institutions engaged in forest resource development;*
2. *To adequately meet the forest and forest product demands of the public through sustainably enhancing the production of forest*

¹¹⁰Ministry of Finance and Economic Development (2004), *Millennium Development Goals: Challenges and Prospects*, March 2004, Addis Ababa, P. 6.

¹¹¹Sisay Nume (2007), *Ethiopian Government Efforts to increase Forest Cover: A Policy Oriented Discussion paper, Policies to Increase Forest Cover in Ethiopia*, September 18-19,2007, Addis Ababa Ethiopia, P.11.

¹¹² Federal Democratic Republic of Ethiopia, Ministry of Agriculture and Rural Development (2007), *Forest Development, Conservation and Utilization Policy and Strategy*, April 2007, Addis Ababa, P.3(Introduction)

¹¹³Ibid.

¹¹⁴ Ibid.

¹¹⁵ See Sisay Nume, Supra Note 111.

resources in areas that are suitable for forest and forest resource development;

3. *To foster the contribution of forest resources to food security and industrial distribution development through identification, rejuvenation, multiplication and of tree species that are suitable for our country and capable of giving diverse benefits;*
4. *To lay the foundation wherein forest resources deliver all-embracing services to the country in a sustainable manner, through the prevention of threats as well as conservation and development of forest resources; and*
5. *To ensure maintenance of the natural ecological balance through adequately conserving and developing the forest resources of the country.*¹¹⁶

In the policy document six policy statements are given due recognition for their direct relationship with the increase of forest cover. These are:

- 1) **Fostering Private Forest Development and conservation:** It is put as a strategy so as to encourage the development of private forest through different mechanisms. Such mechanisms, among others, include tax holidays, lease-free land, technical support, and subsidy on tree seeds and seedlings, rendering technical and professional support and designation of productive forest areas to be afforested by individuals and private organizations.¹¹⁷ Moreover availability of loan can be facilitated for those who wish to involve in forest development and forest product processing industries.¹¹⁸
- 2) **Expansion of Forest Development Technology:** Under it forest development will be fostered and widely made use of through the appropriate use of technologies destined for forest development, conservation and utilization.¹¹⁹ In relation to this, the policy emphasized effective afforestation and reforestation which can be facilitated by generating, developing and disseminating technologies that are cost effective and suitable to both the agro ecological zone & the local people.¹²⁰ In this respect technologies should focus on the suitability of local people economic viability and environmental friendliness, seed supply system development

¹¹⁶ See Federal Democratic Republic of Ethiopia, Ministry of Agriculture and Rural Development, *Supra* Note 112, PP.3-4

¹¹⁷Ibid.

¹¹⁸Ibid.

¹¹⁹ Id., P. 6.

¹²⁰Ibid.

(both indigenous and exotic), research on indigenous tree species, agro-forestry, transfer of skill and knowledge on forest management and technology package development in which best practices are included.¹²¹

3) **Expanding Market Development for Forests-** Under this farmers agro-pastoralists, investors, associations, government and non-government based enterprises and institutions are encouraged to place forest products; that are up standards and competitive to domestic and international markets.¹²² The strategies to achieve this include supporting those who are engaged in the production of seedlings, enabling forest products to meet trade and industry standards based on proper forest management plan, establish systematic development of forest products that have high demand in markets, create awareness and provide training on forest development, conservation & marketing for rural people who live in agro-ecological zones that are suitable to grow trees. It is aimed to enhance the market while the development and conservation of forests is not adversely affected.¹²³

4. **Administration and Management of State Forests:** State forests and forest lands in the country will be administered based on a management plan to be drawn on a two-pronged approach of protected forest and productive forest management system and by setting boundaries of protected areas particularly for that are hot spots for indigenous tree species from being threatened at all levels.¹²⁴ Moreover demarcating forest boundaries and decentralized forests up to kebele level by pertinent government body are recognized.¹²⁵ In order to implement such aspects detailed strategies are set and most important ones are prioritizing forest areas and state forests to be administered, designing and implementing participatory forest management action, promotion of demarcated boundary as source of fuel wood and construction material for the surrounding community, encouraging farmers /agro-pastoralists/ to plant trees by giving technical assistance too. Moreover enhancing the role of

¹²¹See Federal Democratic Republic of Ethiopia, Ministry of Agriculture and Rural Development, *Supra* Note 112, PP.6-7.

¹²²*Id.*, P.8.

¹²³ *Id.*, PP. 8-9.

¹²⁴*Id.*, P.9.

¹²⁵*Id.*, PP. 9-10.

private sector and individuals concession and hasten development of forests particularly tree species.¹²⁶

5) **Protection of Forest Resources from Threats-** the strategies to implement remedial actions to avert threats are to be made through community participation, agreeing multilateral agreements and putting system to control communicable diseases.¹²⁷ In addition, taking of preventive and regulatory measures on illegal movement of forest genetic resources that are threatened with extinction by insuring laws and guidelines.¹²⁸ It is also included that the establishment of regulatory bodies and integrating with pertinent agencies such as customs, heritage protection authority, police, kebele administration and the community itself. In order to protect forests from threats the promotion of scientific breeding systems and techniques (in- situ and ex-situ) are also designed to protect forests from extinction. On the other side, the issue of adopting appropriate regulatory system to control illegal movement of forest product by establishing forest resource regulatory posts and by encouraging appropriate agencies and institutions to collaborate in taking actions as well as standardizing and controlling forest products by encouraging all bodies including individuals to undertake strict regulation and implementing laws on the basis of community participation.¹²⁹

6. Establishing Modern Information Systems on Forest Development, Conservation and utilization is the last policy statement in which an appropriate system of data collection, analysis and distribution on the area and exchange of information at national and international information networks are of such aspects so as for better protection, conservation, management and utilization of forests.¹³⁰ In order to ensure modern information system it is underlined that the collection of information based on the status and organizing and analyzing so that the information is disseminated to the public. It also opts for rendering of training to upgrade the skills of those engaged in the process. More importantly educating the public by using media is also considered as one of the strategies.¹³¹

¹²⁶ See Federal Democratic Republic of Ethiopia, Ministry of Agriculture and Rural Development, *Supra* Note 112, PP.9-10.

¹²⁷ *Id.*, P.12.

¹²⁸ *Id.*, P. 13.

¹²⁹ *Ibid.*

¹³⁰ *Id.*, PP. 14.

¹³¹ *Ibid.*

It is the first ever comprehensive policy of the country to meet the forest product demands of the society and increase the contribution of forest resources to the national economy through appropriate management employing the above six strategies to achieve the objective.¹³² Therefore one can say that though this policy and strategy come in to existence much more lately after the adoption of the Millennium Declaration, its role is significant in the conservation, management and utilization of forest. Thus the Ministry of Agriculture is the responsible body authorized to overall management and execution of such aspect.

3.2.1.3. Plan for Accelerated and Sustained Development to End Poverty (PASDEP)

The PASDEP is Ethiopia's guiding strategic framework for the period 2006-2011. It carries a key strategic directions pursued under the first Sustainable Development and Poverty Reduction Program (SDPRP).¹³³ It has also embodies new direction. Among these it focused on economic growth and a scaling-up efforts to achieve the MDGs.¹³⁴

The PASDEP represents the second phase of Poverty Reduction Strategy Program (PRSP) process, which began under the Sustainable Development and Poverty Reduction Program (SDPRP), which covered the past three years from 2002/03-2004/05.¹³⁵ It can be viewed that the PASDEP's environmental programs are highly urban oriented; it does address environmental problems facing the rural population. These include issues of fuel wood consumption and charcoal, land degradation under increasing population pressure, waters led management and biodiversity.¹³⁶

On the basis of the development plan, it is aimed to attain the goals and targets set in the MDGs at minimum. Furthermore the main objectives of the plan is to lay out the directions for

¹³² See Mulugeta Limenih and Tadesse W/Mariam, Supra Note 93, P.163.

¹³³ Austrian Development Cooperation (2007), *Ethiopia: Country Strategy from 2008-2012*, November 2007, P.7.

¹³⁴ Federal Democratic Republic of Ethiopia, Ministry of Finance and Economic Development (2006), *A Plan for Accelerated and Sustained Development to End Poverty (PASDEP)*, September 2006, Volume I, Addis Ababa P. 21(Introduction).

¹³⁵ Ibid.

¹³⁶ Ethiopia- European Community (2007), *Country Strategy Paper and National Indicative Program for the Period 2008-2013*, December 2007, P.20.

accelerated, sustained and people centered economic development as well as to pave the ground for the attainment of the MDGs by 2015.¹³⁷ In this respect, the main objective of the plan is stated as:

*The Five Year Development Plan is to layout the directions for accelerated, sustained, and people centered economic development as well as to pave the ground for the attainment of the MDGs by 2015.*¹³⁸

The natural resource conservation and management aspect of the plan considered forest resource management which stated the forest area about 4.1 Million hectares of relatively dense forest (3.56% of the country and it is planned to cover 4.7 Million hectares of degraded areas with forest).¹³⁹ The plan also included the program of surveying and mapping of 1.44 Million hectares to better understand the extent and spatial distribution of dense forests as well as determine their capacity and implement a sustainable management plan¹⁴⁰ which includes area of forestry research too.

The role of women in environmental management and protection is included in the plan by promoting women's participation and empowerment at all levels, increase women's access to information improved technology, and alternative livelihoods, creating strong institutions and institutional mechanisms that guide and support efforts to address gender and environment issues; and ensuring adequate housing conditions, access to portable water, improved sanitation and fuel.¹⁴¹

Recognizing the relation between poverty and environmental degradation, environmental degradation threatens physical and economic survival. It is therefore included that national

¹³⁷ See Federal Democratic Republic of Ethiopia, Ministry of Finance and Economic Development, *Supra* Note 134, P.44.

¹³⁸ *Ibid.*

¹³⁹ *Id.*, P. 86.

¹⁴⁰ *Ibid.*

¹⁴¹ *Id.*, P. 173.

area of natural forest, developing 4,390.6 area of forest of trees that shed leaves, strengthening climate change resistant green economy and measures will be taken by all tiers of government for preparation and implementation of environmental action plans in all regions, putting policies, laws strategies and action plans in the place to address climate change and mitigation, passing and implementing laws in regions and cities/town to build a measurable and achievable green economy. The establishment of national system for NGOs to assist them in the efforts to build green economy, to make environment policy effective, prepare a proposal for five additional environmental protection laws, reporting to the public on the performance of the five year environment development plan timely, and building a system to build a carbon free economy by 2025 and quality for additional global environment fund support are the related target issues.¹⁵¹

Finally the GTP document pursued for implementation strategies. Preparing a plan of action, standards and guidelines to implement measures to lessen the adverse impacts of climate change. The development of programs to enhance the capacities of those stakeholder who are essential to ensure effective implementation of action plans, laws and guidelines, adopting and correcting local and foreign technologies for climate change mitigation. In relation to these, enhancing the capacities of private sector and community organizations for globally fund raising, increasing and developing environmental activates, public awareness, experience and knowledge sharing on environment management practices and identifying good practices of environmental protection, placing certification, standardization and accreditation of the experts and organizations working on environmental issues are also the focus areas of the strategy. More over ratifying international environmental laws and protocols, and taking appropriate action when offences against environmental laws are committed are also among the strategies.¹⁵²

From the above expression and points stated and included in the GTP, the plan has put great emphasis on environmental issues. It can be said that forestry management is one of the focus of this policy document. Thus, we can say that MDGs in general and the core issues of forestry management are also considered the focus of this policy document with some other issues.

¹⁵¹See Federal Democratic Republic of Ethiopia, Ministry of Finance and Economic Development, *Supra* Note, 148, P.121.

¹⁵²*Ibid.*

3.2.1.5. Climate –Resilient Green Economy Policy and Strategy

Climate change is of critical strategic importance to Ethiopia. It has the potential to hold back the economic progress and also known to exacerbate social and economic problems. On the other hand climate change and the international response bring more opportunities to Ethiopia. In addition, new financial support from industrialized countries for low carbon and climate resilient development such as REDD are likely to become available.¹⁵³The following clearly states the aim of the government.

*Ethiopia aims to achieve middle-income status by 2025 while developing green economy. Following the conventional development path would, among other effects, result in a sharp increase in GHG (Green House Gases Emissions) and unsustainable use of natural resources. To avoid such negative effects, the government has developed a strategy to build green economy.*¹⁵⁴

In this policy document the current level and breakdown emissions of GHG is stated and agriculture and forestry are the major sources of emissions while transport, electric power, industry and buildings are minor sources. In forestry the impact of human activities is a large source of CO₂ emissions amounting to almost 55 Mt in 2010. Forestry emissions are driven by deforestation for agricultural land (50% of all forestry related emissions) and forest degradation due to fuel wood consumption (46%) as well as formal and informal logging (4%).¹⁵⁵

The strategy focuses on four pillars that will support Ethiopia's developing green economy. These are adaptation of agricultural and land use efficiency measures, increased GHG sequestration in forestry, i.e., protecting and re-establishing forests for their economic and ecosystem services including carbon stocks, deployment of renewable and clean power generation, and use of appropriate advanced technologies in industry, transport and buildings.¹⁵⁶

Four initiatives are selected in the country's action plan to create a green economy and the one has got direct linkage with forestry management. In the strategic document it is stated as:

¹⁵³CRGE Vision, *Ethiopia's Vision for Climate Resilient Green Economy*, P.2

¹⁵⁴ Federal Democratic Republic of Ethiopia, *Ethiopia's Climate-Resilient Green Economy and Strategy*, P. 1.

¹⁵⁵Id., PP. 12-13.

¹⁵⁶ Id., P. 20.

The government has developed an action plan to set up a permanent financial mechanism, initiate the stakeholder engagement process, and set priorities for implementation of initiatives. Accordingly four initiatives have been selected for fast-track implementation: attracting the investment required to exploit hydropower potential; promoting advanced, rural cooking technologies on large scale; improving the efficiency of livestock value chain; and Reducing Emissions from Deforestation and Forest Degradation (REDD).¹⁵⁷

As stated earlier the forestry management is among the four pillars hence its role is significant in protecting and re-establishing forests for their economic and ecosystem services, including as carbon stocks. This is best explained in the strategy as follows:

Deforestation and forest degradation must be reversed to support the continued provision of economic and ecosystem services and growth in GDP. Fuel wood accounts for more than 80% of households' energy supply today – particularly in rural areas. Furthermore, forests contribute an estimated 4% to GDP through the production of honey, forest coffee, and timber. They also provide significant and precious eco-system services: they protect soil and water resources by controlling the discharge of water to streams and rivers, preserve biodiversity, function as a carbon sink, clean the air to create important health benefits, and boost land fertility.¹⁵⁸

Despite their economic and environmental value, Ethiopian forests are under threat. The growing population requires more fuel wood and more agricultural production, in turn creating needs for new farmland – both of which accelerate deforestation and forest degradation. Projections indicate that unless action is taken to change the traditional development path, an area of 9 million ha might be deforested between 2010 and 2030. Over the same period, annual fuel wood consumption will rise by 65% – leading to forest degradation of more than 22 million tones of woody biomass.¹⁵⁹

Besides the agricultural initiatives to reduce the pressure on forests the CRGE initiative has prioritized two strategies that could help to develop sustainable forestry and reduce fuel wood demand. These are through reducing the demand for fuel wood via the dissemination and usage of fuel-efficient stoves and/or alternative-fuel cooking and baking techniques (such as electric, LPG, or biogas stoves) leading to reduced forest degradation, increase afforestation, reforestation, and forest

¹⁵⁷See Federal Democratic Republic of Ethiopia, Supra Note 154, P.45.

¹⁵⁸ Id. P. 25.

¹⁵⁹ Ibid.

management to increase carbon sequestration in forests and woodlands. These initiatives would result in an increased storage of carbon in Ethiopia's forests, provide a basis for sustainable forestry, and even allow the forestry sector to yield negative emissions, i.e., store more carbon in growing forests than are emitted from deforestation and forest degradation, and promoting area closure via rehabilitation of degraded pasture land and farmland, leading to enhanced soil fertility and thereby ensuring additional carbon sequestration (above and below ground).¹⁶⁰

All stake holders are involved in executing and implementing the strategy. And among them the MOA, EPA and MOFED the major government institutions and the UNDP has offered its support in establishing a Multi-Donor Trust Fund within this ministry through which funds could be channeled.¹⁶¹

In all these regards the CRGE is very important in promoting green economy in all selected areas in order to avoid poverty and to reach at middle income status in 2025. Here among the pillars the forestry management is focused since it plays a great role in building such type of economy. In other words forests re known for their good carbon sinkers if forest related activities are employed in Ethiopia.

3.2.2. Legal Aspects of Forestry Management

Since the legal aspect of the country contributes in enforcing environmental issues, related provisions of FDRE constitution, environmental offences and punishments enshrined in the criminal legislation of Ethiopia as well as other specific legislations on forestry management are to be discussed in detail.

3.2.2.1 The FDRE Constitution

The Supreme law of the land, the constitution of the Federal Republic of Ethiopia, (Proclamation N^o 1/1995) recognizes the importance of the environment protection and the need for its proper management. As the highest law of the country, the provisions of the constitution are major spring board for subsequent legislations as well as for mainstreaming environmental

¹⁶⁰ See Federal Democratic Republic of Ethiopia, Supra Note 154, PP.24-25.

¹⁶¹ Id.,49.

sustainability in the political, social and economic development sectors.¹⁶² In this scenario article 44 sub article 1 of the constitution envisaged the issue of environment in such a way that “All persons have the right to clean and healthy environment.”¹⁶³ Here the constitution guarantees the right to live in clean and healthy environment.

Under the National Policy Principles and objectives, the FDRE constitution environmental objectives among other objectives are stated as follows.

1. *Government shall endeavor to ensure that all Ethiopians live in a clean and healthy environment,*
2. *The design and implementation of programs and project of development shall not damage and destroy the environment. People have the right to full consultation and to the expression of views in the planning and implementation of environmental policies and projects that affect them directly, and*
3. *Government and citizens shall have the duty to protect the environment.*¹⁶⁴

According to Article 51, powers and functions of the federal government are enumerated. Among them the following are important for our purpose.

*It shall formulate and implement the country's policies, strategies and plans in respect of overall economic, social and development matters,*¹⁶⁵ and

*It shall enact laws for the utilization and conservation of land and other natural resources, historical sites and objects.*¹⁶⁶

By virtue of the formulation of the above constitutional provisions, issues with regard to development or issuing of plans, policies and strategies of the country the power is vested to the federal government. Accordingly the federal government has issued the earlier development strategic policy documents. On the other side the power to enact laws for the conservation and utilization of land and other natural resources like forests is vested to the federal government.

¹⁶²See Mulugeta Limenih and Tadesse W/Mariam Supra Note 93.P.164

¹⁶³FDRE Constitution, *Federal Negarit Gazeta*, 1st Year, No. 1, August 1995, Article 44 Sub Article 1.

¹⁶⁴ Id., Article 92.

¹⁶⁵ Id., Article 51 Sub Article 2.

¹⁶⁶ Id., Article 51 sub article 5.

On the other hand among the powers and functions of states, they have the power to administer land and other natural resources in accordance with federal laws.¹⁶⁷ Moreover, they are mandated with the formulation and execution of economic, social and development policies, strategies and plans of the state.¹⁶⁸ Here we can note that states are given the power to administer land and other natural resources including forests under their state jurisdiction in accordance with the federal law. Therefore they have also the powers to formulate and execute their own state policies and strategies. In this respect most of the states have come up with their own regional plan for adaptation to climate change (subject for discussion on the next chapter).

Generally those provisions of the constitution are very instrumental since the constitution is the supreme law of the land. With regard to forestry management it makes clear the basic constitutional frame work like other constitutional issues. Therefore, though the constitution has come in to force much before the MDGs, it plays a role in the achievement of goal seven. Thus, it can ironically be said that the FDRE constitution has focused on the conservation, development and utilization of natural resources.

3.2.2.2 The FDRE Criminal Code

The FDRE Criminal Code is also very much concerned about environmental issues since it states type of offences committed against environment and the respective penalty or punishment. It gives emphasis on issues related to forestry protection either in explicit and implicit manner.

For instance, propagation of parasite or germ to agricultural or forest crops is punishable.¹⁶⁹ When the act is committed intentionally, it will be punishable with simple imprisonment or fine, or where the act is malicious or intentional to cause substantial danger, the punishment shall be simple imprisonment for not less than three months. While the crime is committed negligently, it entails simple imprisonment not exceeding six months or fine.¹⁷⁰

¹⁶⁷ See FDRE Constitution, Article 52 Sub Article 2 (d).

¹⁶⁸ Id. Article 52 Sub article 2 (c).

¹⁶⁹ Criminal Code of the Federal Democratic Republic of Ethiopia, *Negarit Gazeta*, Proclamation No. 414/2004, 9th May, 2005, Article 516.

¹⁷⁰ Id., Article 515.

In addition, offences of environmental pollution in breach of environmental law, discharges pollutants in to the environment are also punishable from fine to rigorous imprisonment as to the seriousness of the consequences caused by the discharge of pollutants.¹⁷¹

Moreover, issues of environmental impact assessment are also addressed as follows.

*Whoever without obtaining authorization from the competent authority, implements a project on which an environmental impact assessment is required by law, or make false statements concerning such assessment, is punishable with simple imprisonment not exceeding one year.*¹⁷²

We can generally observe that in the above criminal provisions, the issue of environmental protection is given due concern. In this respect those specific provisions of the criminal code have their own implication in deterring environmental offenders though the penalty aspect in some offences especially with regard to offences related to impact assessment is some what mitigated. What ever the case is, it has a role in protecting the environment (forests).By implication the inclusion of environmental concerns in this code have more to do in addressing goal seven.

3.2.3. Sectorial and Cross- Sectorial Legislations

3.2.3.1. Forest Development, Conservation and Utilization Proclamation (*Proclamation No. 542/2007*)

This is the current proclamation on the issue at hand. It has replaced the earlier forest Proclamation No. 94/1994 recognizing state and private ownership of forest compatible with the policy.¹⁷³ On the contrary the repealed one recognized three types of forest ownership namely: state forest, regional forest and private forest.¹⁷⁴

The repealed proclamation gives the mandate for the execution of such legislation to Ministry of Natural Resource Development and Environmental Protection the current EPA while the

¹⁷¹Id., Article 519.

¹⁷² Id., Article 521.

¹⁷³Federal Democratic Republic of Ethiopia, Forest Development, Conservation and Utilization Proclamation, *Negarit Gazeta*, Proclamation. No. 542/2007, 13th year, No 56, 4th September, 2007, Article 22, Sub Article 1.

¹⁷⁴ Federal Democratic Republic of Ethiopia, Forestry Conservation, Development and Utilization Proclamation, *Negarit Gazeta*, Proclamation No. 94/1994, Article 3.

currently working one gives the mandate to MOA in both cases respective regional entities too.¹⁷⁵ Though there are actually important improvements to this law compared to its predecessors in introduction of the principle of benefit sharing with local communities and the invitation for public participation in forest management¹⁷⁶ the importance of sustainable utilization of forest resources, and the administration related not only the forest ecosystem but also wild life to maintain the balance was recognized in the repealed one.¹⁷⁷ But what is new with the current proclamation is the provisions in prevention of forest fires imposing obligations on individuals, governmental and non governmental as well as private institutions to extinguish the fire.¹⁷⁸ What is also new with proclamation No. 542/2007 is that no person is allowed to cut or use endangered indigenous natural trees from state forest.¹⁷⁹ In this respect the prohibition is addressed in general manner thinking that detailed regulations and directives are issued by the Council of Ministers and MOA which seems a good approach since the proper implementation is to be facilitated by incorporating issues to be addressed in detailed manner. But the prohibition to utilize or harvest from state or regional forest lists only specific tree species.¹⁸⁰

This proclamation recognizes private forest other than state forest to be developed by private person, investors, peasant association, and governmental and non-governmental organizations.¹⁸¹ This proclamation goes to the extent of recognizing those actors since their role is significant in the conservation and development of forest ecosystems. On the other hand, this proclamation is instrumental for community oriented concept and access to forest and forest products. Hence article 4 of this proclamation tells about the promotion of forest development in Ethiopia; especially the two sub articles deal with community oriented access as:

¹⁷⁵ See Supra Note 174 and 173, Article 4 and 17 respectively.

¹⁷⁶ See Mulugeta Limenih and Tadesse W/Mariam, Supra Note 93, P.163.

¹⁷⁷ See Supra Note 174, Article 5(f). It stated that for a sustainable utilization of forest resources, and to administer the same in accordance with forest management procedures, here provided appropriate technical and related assistance not only to provide sanctuary to wild life and protect forest ecosystems from imbalance, but also ensure the conservation of biodiversity.

¹⁷⁸ See Supra Note 173, Article 12.

¹⁷⁹ Id., Article 14.

¹⁸⁰ Article 13 of the repealed legislation states that no person shall utilize or harvest *Hagenia abyssinica*, *Cordia Africana*, *Podocarpus gracillior* and *Janiperus procera* from state or regional forest, and cut any tree, utilize the products thereof, or perform other activities in protected forest.

¹⁸¹ Forest Development, Conservation and Utilization Proclamation, *Negarit Gazeta*, Proclamation. No 542/2007, 13th year, No 56, 4th September, 2007, Article 1, Sub Article 9.

Management plan shall be developed, with participation of the local communities for forests that have not been designed as protected or productive state forests, and such forests shall be given to the communities, associations or investors so that they conserve and utilize them in accordance with the directives to be issued by the appropriate body,¹⁸²

Any person who develops forest on his land holding or in state forest area given to him on concession shall be with assurance to his ownership of forest.¹⁸³

Similarly, part III of this proclamation under conservation development and administration of state forest, plans should look for considering the participation of local communities in the development and conservation, and also in sharing of benefits from state forest.¹⁸⁴ Moreover conditions shall be facilitated for inhabitants to live within a state forest without obstructing forest development or in consultation with appropriate body; they shall execute the forest area and settle in other areas suitable for living.¹⁸⁵ The protection of forests from forest fire, unauthorized settlement, deforestation, undertaking of mining activities and other similar dangers and other issues like the need to establish strong bodies are addressed to regulate the development and conservation of forests.¹⁸⁶

On the other hand, the utilization of non-timber forest products from state forest is also considered. Accordingly it opens a room for such utilization in accordance with the management plan to be prepared and approved shall be undertaken by government organizations or persons who are given concessions.¹⁸⁷ In addition, the local community may reap grasses, collect fallen fire woods and utilize herbs from a state forest in conformity with the management plan developed for the forest by appropriate regional body.¹⁸⁸ Though this proclamation prohibits removal of natural resources from state forest or undertake any activity that is likely to cause damage there on, the harvesting of forest may be permitted based on the objective realities of the

¹⁸²See Supra Note 173, Article 4 Sub Article 3.

¹⁸³ Id., Article 4 Sub Article 5.

¹⁸⁴Id., Article 9 Sub Article 3.

¹⁸⁵Id., Article 9 Sub Article 8.

¹⁸⁶ Id., Article 9 Sub Article 7.

¹⁸⁷ Id., Article 10, Sub Article 2.

¹⁸⁸ Id., Article 10, Sub Article 3.

locality.¹⁸⁹ Since tourism is known to generate income, state forests shall be used to generate income for tourism.¹⁹⁰

As said earlier community participation and benefit sharing is given due recognition in this proclamation so that the community is active participant and cooperative in the implementation process of the strategy and proclamation. Therefore this strong element of encouraging people's participation in benefit sharing could amount to the better conservation, management and utilization of forest ecosystems.

In addition to the issues stated above, in this legislation detailed concepts as to how to conserve, develop and administer forest are given recognition. In relation to this, designating, demarcating and registering state forests is also given due recognition under article 8 and its sub articles to enhance better protection and utilization. Moreover in relation to the production and movement of forest products there is a need to have the necessary permit from the concerned bodies, either Ministry of Agriculture or other regional entities and transporters are duty bound to show their permits.

With some other provisions, Article 14 is the prohibitive provision. In this provision no person may be allowed to cut or use endangered indigenous natural trees from state forest.¹⁹¹ Without prejudice to the list of endangered species determined by directives issued by MOA or appropriate body, no one is allowed to cut trees, settle temporarily or permanently, graze domestic animals, carry out hunting activity, carry cutting saws and any other tools used for cutting trees, or keeps bee-lives or extract honey within a state.¹⁹² The removals of natural resources or any other activity which are likely to cause damage are prohibited.¹⁹³ Unless otherwise approved by the Ministry or appropriate regional body, construction of roads, water drilling irrigation, dam construction and other similar investment is also prohibited so as to conserve and protect forests.¹⁹⁴

¹⁸⁹ See Supra Note 173, Article 10, Sub Article 4.

¹⁹⁰ Id., Article 10, Sub Article 5.

¹⁹¹ Id., Article 14 Sub Article 1.

¹⁹² Id., Article 14 Sub Article 3.

¹⁹³ Id., Article 14 Sub Article 4.

¹⁹⁴ Id., Article 14 Sub Article 5.

In addition to the Criminal Code of Ethiopia, this legislation is very objective for exhausting penalty aspects. Unless otherwise the offence committed is punishable with greater penalty by criminal law, offences like cutting and removing trees from state forest, destroying, damaging or falsifying forest boundary marks, causing damages by setting fire, expansion of farm land on forests without permit, giving assistance to illegal actors and commission of other faults on forest ecosystems entails different penalties from simple to rigorous imprisonment and fine.¹⁹⁵

In addition in order to do so, speedy trial will be conducted on those offenders. More importantly in relation to issuance of regulations and directives for the proper implementation of this proclamation the Ministry of Agriculture is mandated.¹⁹⁶ It is also recognized that by virtue of Articles 17 and Article 18 of the same proclamation the MOA and regional entities are empowered with the duties and responsibilities to implement this proclamation.

Though the need to amend the former legislation is necessary to inculcate some important provisions helping for the better regulation, some important aspects of the former proclamation stated earlier had to be incorporated in the later legislation. Any how this sectorial legislation has to do more in addressing and regulating the conservation, utilization and management of forest ecosystems. We can say that this proclamation is very important in undertaking the activities of sustainable forestry management.

3.2.3.2. Environmental Impact Assessment Proclamation (*Proclamation No. 299/2002*)

The environmental impact assessment system considers a number of fundamental and basic issues regarding the procedures, scope and as to the arrangements to be made before a project is established in a certain locality/area. Accordingly, EPA is responsible for the evaluation of an impact study report and the monitoring of its implementation when the project is subject to licensing, execution or supervision by a federal agency or it is likely to produce trans-regional impact.¹⁹⁷ Regional environmental agencies are also responsible for the evaluation and

¹⁹⁵See Supra Note 173, Article 20.

¹⁹⁶ Id., Article 23.

¹⁹⁷Environmental Impact Assessment Proclamation, *Negarit Gazeta*, Proclamation No. 299/2002, 9th Year, No. 11, 3rd December 2002, Article 14 Sub Article 1.

authorization, monitoring and implementation of environmental impact study report if it is unlikely to produce trans-regional impact.¹⁹⁸

As can be noted from the above provisions, the duty and responsibilities are divided and demarcated to the federal and regional states by virtue of the structural arrangement of the FDRE constitution. It empowers regional environmental agencies to undertake, evaluate and regulate such aspects if that project is to be handled by the federal agency or if it doesn't have trans-regional effect. In other words the two dimensions show the federal arrangement of Ethiopia in many respects including environmental management and forestry management.

The other most important aspect of this proclamation tells about public participation in such a way that the respective authority or agency is duty bound to make any impact assessment report accessible to the public and solicit comments on it. Moreover it underlines that the comments made by the public and particular communities likely to be affected by the implementation should be incorporated in the assessment report and evaluation¹⁹⁹.

Considering the whole aspect of environmental impact assessment to forestry management, it has got its own role and wide dimensional effect in protecting and conserving biodiversity of forest resources. Before any project is to be licensed and executed, its impact on the whole environment and community are subject to evaluation. With this view, it is also logical to have this legislation and to empower federal and regional entities for better protection, conservation and management of forest resources.

3.2.3.3. Environmental Pollution Control Proclamation (*Proclamation No. 300/2002*)

This proclamation is another cross-sectorial legislation which has a great role in conserving and protecting forest resources from different pollutants. By virtue of Article 6 sub Article 1 of this proclamation, the Environmental Protection Authority in consultation with competent agencies, shall formulate environmental principles and standards for discharge of effluents, air quality

¹⁹⁸See Supra Note 197, Article 14 Sub Article 2.

¹⁹⁹ Id., Article 15.

standards, standards for amount of substances, noise standard, waste management standards and the like. Regional states are also given mandate to adopt environmental standards based on their scientific situation for those that are more stringent than those determined at the federal level. It is also noted that they shall not however adopt standards which are less rigorous than those determined at federal level.²⁰⁰

In order to control pollution to a wider extent, no person shall pollute or cause any other person to pollute the environment contrary to the relevant environmental standard.²⁰¹ If such happens the authority or the regional environmental agencies are empowered to take an administrative or legal measure against a person who, in violation of law, releases any pollutant to the environment.²⁰²

Therefore this proclamation as a national legal component has got its own role in the control of environmental pollution from different toxic and other harmful substances. In other words it also helps to regulate and protect forests from harmful pollutants.

3.2.3.4. Rural Land Administration and Use Proclamation

When we are dealing with sustainable forestry management, it will be meaningless if we are not saying something on our land context. Therefore we will be looking at Rural Land Administration and Use Proclamation.

According to this proclamation, it has become necessary to sustainably conserve and develop natural resources and pass over to the coming generation through the development and implementation of a sustainable rural land use planning based on the different eco-ecological zones of the country.²⁰³ Accordingly community holding is recognized and given to the local residents for common grazing, forestry and other social services.²⁰⁴ Community holdings in the

²⁰⁰Federal Democratic Republic of Ethiopia, Environmental Pollution Control Proclamation, *Negarit Gazeta*, Proclamation No. 300/2002, 9th Year, No. 12, 3rd December 2002, Article 6 Sub Article 4.

²⁰¹ Id., Article 3 Sub Article 1.

²⁰² Id., Article 3 Sub Article 2.

²⁰³ Federal Democratic republic of Ethiopia, Rural Land Administration and Land Use Proclamation, *Negarit Gazeta*, Proclamation No. 456/2005, 11th Year, No. 44, 15th July 2005, Preamble.

²⁰⁴ Id., Article 2 Sub Article 12.

rural context are very important not only for developing community forests but also ensures grazing lands. This provision is very important for community development and conservation of forests and forestry related activities (PFM, bee keeping, etc.) by the community. On the other hand, state holding of rural land is demarcated and those lands to be demarcated in the future at federal or regional states holding; and includes forest lands, wildlife protected areas, state farms, mining lands, lakes, rivers and rural lands.²⁰⁵ Pursuant to this provision lands are also demarcated for state forest development and for the conservation of wildlife and related ecosystem so that the biodiversity is regulated and managed well. Land use is restricts are made to maintain proper development and utilization of rural land. Accordingly among others, it gives due emphasis that the biodiversity in rural wetland shall be conserved and utilized as necessary, in accordance with a suitable land use policy.²⁰⁶

Therefore this proclamation is very important for regulating rural land administration and it plays a great role in maintaining related natural resources like water, forest and others with its context. It can further be looked that since forests and land are very much related one affects the other; this proclamation is one of the basic cross sectorial legislation helping too much in enhancing the level of sustainable forestry management.

3.2.4. The Role of Government Bodies

When we are dealing with the role of government bodies, Environmental Protection Authority, Ministry of Agriculture, Institute of Biodiversity Conservation and Wildlife Conservation Authority of Ethiopia are basically mentioned. So their roles will be discussed in the forthcoming part.

3.2.4.1. The Environmental Protection Authority

The most important step in setting up the legal frame work to be implemented and regulated for the environment in Ethiopia has been the establishment of the Environmental Protection Authority (EPA) by Proclamation No. 9/1995. It is re-established as an autonomous public institution of the federal government by proclamation No. 295/2002 having the objective of

²⁰⁵ See Rural Land Administration and Land Use Proclamation, Supra Note 203, Article 2 Sub article 13.

²⁰⁶ Id., Article 13 Sub Article 10.

formulating policies, strategies, laws and standards, which foster social and economic development. It is to enhance the welfare of humans and the safety of the environment sustainable, and to spearhead in ensuring the effectiveness of the process of their implementation.²⁰⁷

According to this proclamation, EPA has amongst its powers and duties the mandate of preparing environmental protection policy and laws; and up on approval, following up their implementation and to prepare directives and systems which are necessary for evaluating projects on the environment; follow up and supervise their implementation.²⁰⁸ So EPA is responsible to follow up the implementation of the country's environmental policy, Environmental Impact Assessment Proclamation and Environmental Pollution Control Proclamation so as the whole environment is regulated and utilized sustainability.

In order to facilitate the regulation, sectorial and regional environmental units and agencies are recognized to coordinate and follow up the activities are in harmony with this proclamation and with other environmental protection requirements.²⁰⁹ It is just to mean that each national regional state shall establish independent regional environmental agency so as to coordinate and formulate the implementation, review and revision of regional conservation strategies, and to monitor, protect and regulate regional environmental concerns.²¹⁰ More importantly, as a regulatory body in the environmental aspects, the authority is reestablished as an autonomous public institution of the federal government being accountable to the Prime Minister.²¹¹

In general the establishment of Environmental Protection Authority along with regional environmental agencies is instrumental to properly employ environmental policy, laws and regulations. Such regulatory mechanism is significant in sustainable environmental management including the forest sector.

²⁰⁷Environmental Protection Organs Establishment Proclamation, *Negarit Gazeta*, Proclamation No. 295/2002, 9th year, No 7, 31st October, 2002, Article 5.

²⁰⁸ Id., Article 6 Sub Article 2.

²⁰⁹ Id., Article 14.

²¹⁰ Id., Article 15 Sub Article 1.

²¹¹ See Supra Note 207, Article 3.

3.2.4.2 The Ministry of Agriculture

This Ministry is one of governmental executive organs mandated with handling forestry management and other duties and responsibilities. By virtue of Proclamation No. 4/1995, fifteen Ministry offices are established and the Ministry of Agriculture is one of them.²¹²

The Ministry of Agriculture shall have eleven powers and duties, among them the following are very much related to the issue at hand,

- *prepare land-use policy as well as draft laws on the conservation and utilization of forest and wild life resources;*
- *Establish and direct research and training establishments that may assist the enhancement of the development of agriculture and the improvement of rural technology;*
- *Cause the understanding of studies pertaining to and the protection of the country's plant genetic resources; control the quality of improved seeds produced locally or imported; and*
- *Cause the provision of assistance in necessary extension services to pastoralist peoples.*²¹³

In addition to that, as a higher executive body of the government, each minister shall, as regards the execution of responsibilities, programs and laws concerning a given ministry for our case Ministry of Agriculture, is accountable to the Prime Minister and the Council of Ministers.²¹⁴ That is why the Ministry is concerned with issues related with forest conservation and management. Therefore it mandated to handle the forestry management aspect while the regulatory power is vested to Environmental Protection Authority.

3.2.4.3. Institute of Biodiversity Conservation

After ratifying the Convention on Biological Diversity (CBD) in 1994, the former Plant Genetic Resource Center which focused on plant genetic resources collection and conservation, it was up graded to IBC in 1998 to encompass biodiversity including animals, plants, microbial genetic

²¹²Definition of powers and Duties and Executive Organs of the Federal Democratic Republic of Ethiopia, *Negarit Gazeta*, Proclamation No 4/1995, 1st Year, No 4, 23rd August, 1995, Article 9 Sub Article 1.

²¹³ *Id.*, Article 12.

²¹⁴ See *Supra* Note 212, Article 12 Sub Article 1.

resources and associated indigenous knowledge.²¹⁵ It is established by Proclamation No. 120/1998 and further amended by Proclamation No. 381/2004 being accountable to Ministry of Agriculture.²¹⁶ It is established to ensure the appropriate conservation and utilization of the country's biodiversity.²¹⁷

In this institute forest conservation takes place. In order to do so, inventory of forests primarily takes place. Then those trees species are prioritized according to their economic importance and degree of vulnerability to threats.²¹⁸ Accordingly the institute employs in situ and ex situ conservation methods to conserve forest resources. In the case of in situ conservation of forests takes place in their natural habitat. Under this type of conservation method area closure mechanism (protected areas) or seedling and planting of trees are included. But in ex situ conservation seeds and genes of forests are conserved outside their natural habitat. It can either be under natural site condition (field gene banks) like botanical garden or conservation under artificial conditions (gene banks).²¹⁹

About 68,998 accessions belonging to 403 plant species are conserved under the ex situ conditions in cold storage and field gene banks.²²⁰ Among them seeds of 38 forests and tree shrubs species are collected and conserved in cold storage gene banks. The field gene banks organized in Oromia, Amhara, SNNPR and Benishanul Gumz regional states are the basic ones to conserve different forest species. The specific field gene banks in Bale Goba, Shashemene, Lepis, Adullala, Debretabor, Wendo Genet, Assossa, Choche and Mandura are the focus areas of the institute to conserve forests and other species of plants.²²¹ (Translation mine)

²¹⁵ Institute of Biodiversity Conservation (2012), *Biodiversity Newsletter*, Biannual Newsletter, Volume I, Number I, January 2012, P.3

²¹⁶ Institute of Biodiversity Conservation Establishment (Amendment) Proclamation, *Negarit Gazeta*, Proclamation No 120/1998, 10th Year, No 16, 13th January, 2004, Article 4 Sub Articles 2.

²¹⁷ Id., Article 5.

²¹⁸ W/ro Snework Dagnachew, Seed Physiologist and Researcher, and Acting Director, Forest and Rangeland Resources Sub Process in IBC, December 3, 2012.

²¹⁹ Institute of Biodiversity Conservation and Research (2002), *Forest Genetic Resources Conservation Strategy of Ethiopia*, July 2002, Addis Ababa, PP.31-33.

²²⁰ See Institute of Biodiversity Conservation, Supra Note 215, P.20.

²²¹ See Institute of Biodiversity Conservation, Supra Note 215, P.23.

In relation in situ, the conservation is undertaken in around 36 sites in dry and wet mountainous areas. Some of the basic in situ conservation areas are Mandura Addada in Benishangul Gumz, Bonga and Masha in SNNPR, Setema kebele ,Terro Becho and Bishan Gari in Oromia can be mentioned to exemplify the role of IBC in conserving forest ecosystems of the country.²²²

In general IBC has the objective of conserving and preserving different genetic resources in scientific manner so that they are protected from extinction. So it plays a great role not only in the conservation but also in the rehabilitation of biodiversity including different types of forests.²²³

3.2.4.4. Ethiopian Wildlife Conservation Authority

It is also one of the regulatory government bodies having the objective of creating conducive environment whereby the country's wildlife their habitats are protected and developed in sustainable manner, and to enable the sector to play an important role in the economic development of the country.²²⁴ EWCA is established by Proclamation No. 575 /2008 as an autonomous public agency of the federal government being accountable to the Ministry of Culture and Tourism.²²⁵

Among the powers and duties the following have got direct and indirect relation with forestry management. These are

- Develop and administer wild life conservation areas established under it and control illegal activities committed in relation thereto,*
- Ensures that wildlife conservation areas are established in accordance with international standards with a view to facilitating their registration by the World Conservation Union, and follow up their administration accordingly, and*
- Supervise wildlife conservation areas administered by private investors accordance with concession agreements entered into with the federal government.²²⁶*

²²² See Institute of Biodiversity Conservation, Supra Note 215, P.23.

²²³ Interview with Dr. Alishum Ahmed, Coordinator of Forest and Rangeland Plants Genetic Resources in Institute of Biodiversity Conservation, November 16, 2012.

²²⁴ Ethiopian Wildlife Conservation Authority Policy and strategy, II(objectives of the policy).

²²⁵ Federal Democratic Republic of Ethiopia, Ethiopian Wildlife Conservation Authority Establishment Proclamation, *Negarit Gazeta*, Proclamation No. 575/2008, Article 1 and 3.

²²⁶ See Supra Note 225, Article 6.

When we are talking about the conservation of wild life, one can not separate the habitat from them. There fore the conservation aspect is obvious to include the habitat of those wild animals i.e. forests. Article 4 of the regulation provides for wildlife development, conservation and utilization of Ethiopian National Parks and Sanctuary areas to be administered by the federal and regional governments.²²⁷ In order to facilitate the conservation of wildlife, natural resources including forest prohibited activities are enumerated and amongst them the following are instrumental in conserving of both wildlife and their habitats.

- Picking, disturbing, destroying, damaging or defacing any natural or man made object,*
- Undertaking agricultural activities or preparing land for cultivation,*
- planting, cutting, chopping, removing, taking, damaging or transferring any plant species, and*
- setting or attempting to set fire and others are some of the prohibited activities.²²⁸*

In relation to community wildlife conservation areas, the local community shall undertake development activities which are non detrimental to the natural resources of the wildlife conservation areas.²²⁹ More over no person may hunt or capture any game animal, take wildlife products, conduct filming with in or outside of protected areas or undertake research on wildlife and their habitat unless he is the holder of a license.²³⁰

The establishment of EWCA as government institution with its powers and responsibilities has to do a lot in the conservation of natural resources. It plays a great role in the protection and conservation of forests along with the protection of wildlife and national parks where by most dense natural forests are abundant. Therefore its establishment can be considered as one of the

²²⁷ According to regulation No. 163/2008, the Semein Mountains National Park, Awash National Park, Nechsar National Park, Omo National Park, Awash National Park, Senkele Swayne's Harte-beest Sanctuary National Park, Abijiata Shala Lakes National Park, Babile Elephant Sanctuary, Gambella National Park, Alatish National Park, Kafta Shiraro National Park and Geralle National Park shall be administered by the EWCA provided however, the authority may where necessary, delegate its powers to appropriate organs of the regional governments. But wildlife conservation areas other than those stated shall be administered by the regional governments and local communities.

²²⁸ Id., Article 5.

²²⁹ Council of ministers regulations to provide Wildlife Development, Conservation and Utilization, Regulation No. 163/2008, Article 7 sub article 4 (c).

²³⁰ Id., Article 8.

concern of the government to ensure sustainable forestry management along with conserving wildlife resources of the country.

3.2.5. The Role of Non- Governmental Organizations

With respect to forest conservation, management and development, the roles of NGOs are known in the context of their effort in financial, technical, awareness creation, capacity building and participatory forest management assistance in Ethiopia.

In the early 1990s Participatory Forestry Management (PFM) was introduced to Ethiopia to solve the problems associated with open access forest resources.²³¹ According to Ato Tefera Tadesse, PFM was introduced by FARM- Africa for the first time in Ethiopia.²³² PFM promotes sustainable forest management through involving the local communities share the benefits accruing from it. After its introduction, it is recognized that PFM shifts forestry management from state-centered toward local level forest management.²³³ In this respect FARM –Africa, SOS Sahel, GTZ (GIZ) and JICA are the most common working on this area.²³⁴ Therefore NGO's have been most active in promoting and supporting the development of PFM in Ethiopia which goes to the extent of lobbying for its inclusion in the national environmental policy and legislations.²³⁵

NORAD and GTZ are known to be very active donors in activities related to environmental restoration, preservation and sustainable development.²³⁶ Moreover the EC, FARM –Africa, SOS-Sahel, JICA and World Bank are commonly mentioned, especially for the introduction of SSLFMP.²³⁷ It has also been reaffirmed by Ato Tefera Tadesse that EU, WB, FAO, CIDA Canada, GTZ (GIZ), FARM-Africa, Lem-Ethiopia and Melca-Ethiopia are the most important NGOs and development partners which contribute a lot in rendering technical, financial,

²³¹ See Mulugeta Limenih and Tadesse W/Mariam, Supra Note 93, P.154.

²³² Interview with Ato Tefera Tadesse, Substitute PFM Project Coordinator, Senior Forester and Acting Directorate Director of Natural Resource Management, Ministry of Agriculture, July 12, 2012.

²³³ See Mulugeta Limenih and Tadesse W/Mariam, Supra Note 93.

²³⁴ See Interview with Ato Tefera Tadesse, Supra Note 232.

²³⁵ See Interview with Ato Tefera Tadesse, Supra Note 232.

²³⁶ See Jonathan Mckee, Supra Note 110, P.73.

²³⁷ Id, P. 74.

awareness creation and related supports to Ethiopia in all the activities of ensuring and up scaling sustainable forestry management.²³⁸

Here we can generally understand that the role of NGOs is so significant in the process of enhancing sustainable forestry management up on introducing and launching PFM activities, supporting CDM and REDD projects, and strengthening sustainable livelihood and forest management program.

²³⁸ See Interview with AtoTeferaTadesse, Supra Note 232.

Chapter Four

4. Major Undertakings, Possible Prospects and Challenges of Forestry Management in Ethiopia

So far we have seen that the adoption of the MDGs almost by all member states of the UN is very important to mitigate those global issues including environmental problems. Environmental sustainability is considered as one of the basic goals for the fact that its role is so holistic in solving related global problems too. With this view, the issue of environmental sustainability is studied from the context of forestry management and MDGs aspect of the country. In order to look at this area, we have seen the policy, legal, institutional frameworks and related aspects of the country. Taking such aspect in to account, it will be so logical to study the practical forestry undertakings of the country especially major areas and regions where such projects and activities are taking place. Thus forestry management activities of regions, their possible prospects and challenges will be studied to evaluate the actual achievements and failures.

4.1. Major Undertakings of Regions

To have a better understanding, it is better to consider and dichotomize the activities and the roles of forestry management from the perspective of federal state structure. Therefore the management, conservation and development are to be studied in the context of the activities and projects of regional states in detail.

4.1.1. Oromia Regional State

The Oromia Regional state has got variety of animals and plant varieties where PFM, as well as demarcated and protected conservation where by most of the remnant forests of the region are designated as Regional Forest Priority Area and the conservation, utilization and development of forests is taking place for sustainable utilization and enhancement of forest ecosystem.²³⁹

²³⁹See MulugetaLimenih and Taddesse W/Mariam, Supra Note 93, P. 157.

This regional state has promulgated a proclamation named “Forest Proclamation of Oromia, Proclamation No 72/2003” to regulate forest resources of the region. This proclamation recognizes state, private and community forest resource ownership types.²⁴⁰ It incorporates detailed regulatory provisions. Among the issues the development and protection of forests and as to how forests of the region are utilized can be mentioned. This legislation also enumerates prohibited activities with their respective penalty.²⁴¹ The state also adopted program of plan on adaptation on climate change identifying the impacts of climate change on the ecosystem and pointing out vulnerable sectors while identifying and recommending adaptation measures.²⁴² This regional state has also issued a regulation for establishing an enterprise named “Oromia Regional State Forest and Wildlife Enterprise”. This regulation inculcates among other things, the powers and duties of the enterprise and concession areas of the enterprise in which the enterprise shall administer.²⁴³

In collaboration with development partners or NGOs, participatory Forest Management Programs are going on in some comfortable areas of the region to rehabilitate forest ecosystems and to increase the forest distribution of the country.²⁴⁴ In Oromia National Regional State, 1,008,400 hectares has been demarcated and conserved and among this the Bale, the Western Shoa, and Arsi eco-regions are major areas in promoting the projects especially with PFM²⁴⁵

According to Fekadu Tefera, PFM Expert and Scaling Up PFM Coordinator in Oromia Forest and Wild Life Enterprise, the Dandi, Guje, Arero, Yabello and Liben, in Bale Dollo Mena, Harena, Buluk, Gobaand Agarfa woredas, in Arsi Adaba, Kokosa, Nansebaand in Tena Adaba Dodola, Harana, Chillimo Galama area, in Eastern Showa eco-region Limu woreda Mojo area, in Jimma Shaba-Sombo Geraand, in West Harerge Gamachis and in Jelo Muctar woreda and areas are PFM conservation sites.²⁴⁶ In Oromia regional state there are about 444 forest management

²⁴⁰Forest Proclamation of Oromia, *Megeleta Oromia*, Proclamation No. 72/2003, Article 3.

²⁴¹ Id., Article 4, 7, 9, 14 and 15.

²⁴²*Oromia National Regional State Program of plan on Adaptation on Climate Change*, February 2011, P. IV.

²⁴³Oromia Regional State, Oromia Forest and Wild Life Enterprise Establishment Regulation, *Megeleta Oromia*, Regulation No. 122/2009, July 23, 2009, Article 7 and 16.

²⁴⁴Interview with Ato Sertse Sebh, Agriculture Sector Climate Resilient Team Coordinator in MOA, July 14, 2012.

²⁴⁵W.W.W. Irish aid, *Ireland's Commitment to the World without Poverty and Anger*, July 9, 2012.

²⁴⁶ Interview with Ato Fekadu Tefera, PFM Expert and SUPFM Coordinator in OFWE, July 5, 2012.

groups, 74 coups and 2 unions working to enhance the conservation and development of forest resources under PFM.²⁴⁷

In this regional state especially the Bale eco-region in southern Ethiopia is home to 1,600 varieties of plants, 300 types of birds and about 250 endangered Ethiopian foxes. There is also a close connection between nature and livelihoods. In Oromia eco-regions the Irish Aid with Farm Africa and SOS Sahel Ethiopia are working since 2006 in the conservation of natural resources as well.²⁴⁸ The Local communities are supported to turn traditional activities in to income generating enterprises (e.g. bee keeping, bamboo furniture manufacturing, mead production, wild coffee harvesting) and plans at an advanced stage to harness, support from carbon markets rewarding for their success in reversing forest depletion trend.²⁴⁹

According to the final report of European Commission Civil Society Found in Ethiopia, there have been 27 projects working on water-shed management, environmental protection, solar energy and mud technology promotion to reduce pressure on natural resources (forests) and community awareness creation.²⁵⁰ The Ministry and regional entities are grouped in to forestry sector or case team where by conservation, development; follow up (pre and post planting, monitoring and evaluation) is scale up including PFM and integrated water shade development so as to rehabilitate degraded area.²⁵¹ More interestingly many hectares of land area are already covered by forests and to be covered and conserved are subject to PFM in the region.²⁵² In addition a protected and demarcated forest area around Hotela 'Suba Park' shows some sort of development and improvement. Two basic projects have been launched in collaboration with FARM-Africa and SOS Sahel Ethiopia. These are Sustainable of forestry management in Bale-eco region, Western Shoa, Jimma and Arsi and SSLFMP (Strengthening Sustainable Livelihood

²⁴⁷ See Interview with Ato Fekadu Tefera, Supra Note 246.

²⁴⁸ See WWW.Irish aid, Supra Note 245.

²⁴⁹ Ibid.

²⁵⁰ ECCSFE (2008), *Supporting Non-State Actors: Building Partnerships, Framework Contract Benf. Lot No 7,2007/146027*, Final Report, July 2008,P.74.

²⁵¹ See Interview with Ato Tefera Tadesse, Supra Note 232.

²⁵² Ibid.

and Forest Management Program) in three zones of the region named Illubabur, Qelen in Wollega and Borena.²⁵³

In Ethiopia, various bio-carbon initiatives are recognized. Among these the following CDM based afforestation / reforestation projects are recognized in the region.

*Abote District afforestation/reforestation project with an area of 2000-3000 hectares and Ada Berga District afforestation and reforestation project with an area of 4,500 -6,000 hectares can be mentioned for their bio- carbon initiatives.*²⁵⁴

According to the 2011 report of Forum for Environment the Chillimo, Anferara, Arero, Asebot, Menagesha Suba and Dodolla forests are mentioned as the major eco-regions of the region.²⁵⁵

It is generally explained that with regard to forestry management legislation, the establishment of Oromia Regional State Forest and Wild Life Enterprise and the adaptation plan with other cross sectional activities like water shed management are the developmental aspects of the region. So we can say that the region is trying to show effort to employ PFM and bio carbon projects and related activities so that the conservation and development does a lot in ensuring environmental sustainability.

4.1.2. The Amhara Regional State

The Amhara Regional State has been known for high population density in which forest ecosystems have been affected by different anthropogenic factors. Though it is much disturbed due to those factors 39,900 hectares of protected areas including lowland forests, woodlands and parks are demarcated and protected.²⁵⁶ Like the projects in Oromia National Regional State, bio-carbon initiatives have been made to mitigate and adapt to global climate change and an

²⁵³Interview with W/ro Meseret Kebede, Communication, Information and Profile Officer in Farm- Africa/ SOS Sahel Ethiopia, November 20/2012.

²⁵⁴See Mulugeta Limenih and Tadesse W/Mariam, Supra Note 93.

²⁵⁵FfE (2011), *Forest Types in Ethiopia: Status, Potential Contribution and Challenges*, Occasional Report No. 7, May 2011, Addis Ababa, PP.84-86.

²⁵⁶ See Mulugeta Limenih and Tadesse W/Mariam, Supra Note 93, P. 157.

afforestation/reforestation project are under discussion compromising over 20,000 hectares.²⁵⁷ In different area of the region including North Showa in Debre Birhan Kewot woreda PFM is given great concern to increase the forest coverage of the region.²⁵⁸

In this region PFM which is different from conventional forest management mainly based on the conservation, development and utilization of the resource is currently undertaken and the application of this practice has shown important development because the government has prioritized to promote and scale up its adoption in Amhara regional state and other regions too.²⁵⁹ North Showa, Kewot woreda natural forests are highly protected, conserved and developed. Planting and conservation practices are taking place in North Showa Menz area assisted by World Vision and Red Cross organizations.²⁶⁰ In this region the Yegof and Denkoro forests in South Wollo are also forestry management and conservation eco-regions contributing a lot in the rehabilitation of degrading forests²⁶¹

It is also recognized that environmental protection and community asset creation is one of the long established areas of NGOs in Amhara. Physical conservation structure like terraces, hillside tree plantations and backyard tree plots become common features of regional landscape. Therefore in more than 14 woredas of the region NGOs (development partners) coordinate the implementation of the ongoing environmental rehabilitation, asset creation activities including forest and watershed management.²⁶² Since 2010 SSLFMP (Strengthening Sustainable Livelihood and Forest Management Program) is launched in four regions including Amhara so that the livelihood of the community is permanently and sustainably changed. This program helps to change the dependency on forests and forest products for by promoting energy saving stoves and rendering technical and financial support in order that the community can engage in bee keeping, and animal husbandry.²⁶³ On the other hand Organization for Rehabilitation and Development in Amhara (ORDA) focuses developing forest resources, agro-forestry and

²⁵⁷ See Mulugeta Limenih and Tadesse W/Mariam, *Supra* Note 93, P.160.

²⁵⁸ See Interview with Ato Kassahun Abate, Land Registration Senior Expert and Forester in MOA, July 27, 2012.

²⁵⁹ See Interview with Ato Tefera Tadesse, *Supra* Note 232.

²⁶⁰ *Ibid.*

²⁶¹ See FfE Occasional Report, *Supra* Note 255.

²⁶² See ECCSFE, *Supra* Note 250, PP.116-117.

²⁶³ See Interview with W/ro Meseret Kebede, *Supra* Note 253.

integration of forest development activities with soil and water conservation. In addition the strategy also opts for promotion of alternative energy technologies, capacity building, participatory forest management and policy advocacy and promotion in all woredas of the region.²⁶⁴ ORDA supported the establishment of 25,897 hectares of plantation forest on community and individual holdings and over 120,000 hectares of land have been closed and rehabilitated.²⁶⁵

Currently those developments of the sector are instrumental in conserving and increasing the degraded land of the region with variety of forests and they contribute a lot in sustainable management of forests.

4.1.3. Tigray Regional State

Tigray is the far northern region of Ethiopia bordering Eritrea. The region has one of the highly rugged topography and ecologically degraded natural resource and environmental degradation through which integrated approaches is a major development agenda in the region to overcome such problem.²⁶⁶

Even prior to the publication of the repealed Forest Conservation, Development Utilization Proclamation, the high forests were divided in to “State” forests i.e. more than 200 hectares and “community” forests i.e. less than 200 hectares were classified in to National Forest Priority Areas/NFPAs)²⁶⁷ As to the current practice allowing communal practice of grazing on the individually held croplands after harvest is an important factor in motivating farmers to invest on soil conservation, planting trees on boundaries and bunds, and under sowing legumes.²⁶⁸ As to National Forest Priority Area (NAPA) 11,500 hectares area is protected so as to protect and conserve biodiversity in the region. Though the figure for afforestation, reforestation and

²⁶⁴ Forum for Environment (2009), *Proceedings of 2009 Public Meetings on Pertinent Environmental Issues*, Occasional Report No 4/2009, December 2009, Addis Ababa, P.2.

²⁶⁵ Ibid.

²⁶⁶ See ECCSFE, *Supra* Note 250, P.92.

²⁶⁷ Tigray Regional State (2003), *A Strategic Plan for Sustainable Development Conservation and Management of Biomass Resources*, Final Report, March 2003, P.73.

²⁶⁸ Ibid.

rehabilitation cannot be quantified to show its current status in the region, NAPA and PFM in many mountainous areas of the region show the development of forests.²⁶⁹

As stated above in this regional state, good developments are currently shown with regard to communal and state forests and hence sustainable afforestation and reforestation activities are taking place in many woredas and areas like Hawzen, Ambalage, Raya and Azebo, Mereb Ayzana and Kola Tenben.²⁷⁰ In this regional state the Hugumburda and Grat-Kashu forests are also the two contagious forests contributing a lot to the conservation of forests.²⁷¹ Here the efforts of the community and the region in implementing community based conservation can be taken as a model for other regions too.²⁷²

4.1.4. Southern Nations Nationalities and Peoples Region (SNNPR)

The SNNPR is the most multi-ethnic regional state in Ethiopia and well known for its extensive geographic area where plenty of plants and animal species are abundant with a largest population of high diversity that lives in unity.²⁷³

Like the Federal Forestry Law, the SNNPR Forest Management, Development and Utilization (Proclamation No. 77/2004) is also concerned about the ecosystem, and public participation on forest development and management as well as the benefit sharing schemes of the people.²⁷⁴ This law addresses many issues as to the conservation and utilization of forests. Among this Article 4 of this proclamation, there are two types of forest ownership i.e. regional state and private individuals (groups). All forests which are not owned privately can be designated for the regional state.²⁷⁵ With respect to issuance of forest and forest products it states that a license shall be given to individuals, who are interested in engaging in woodworks, based on the supply and resource

²⁶⁹ See Mulugeta Limenih and Taddesse W/Mariam, Supra Note 93, P.158.

²⁷⁰ See Interview with Ato Kassahun Abate, Supra Note 258.

²⁷¹ See FfE Occasional Report, Supra Note 255, P.83.

²⁷² See Interview with Ato Kassahun Abate, Supra Note 258.

²⁷³ See ECCSFE, Supra Note 250, P.78.

²⁷⁴ Mellese Damtie and Mohammad Abdulahi (2007), *Forests of Sheka: Multidisciplinary Case Studies on Impacts of Land use/Land cover Changes, Southwest Ethiopia*, Melca Mahber, Addis Ababa, P.170.

²⁷⁵ SNNPR Forest Management, Development and Utilization Proclamation, Proclamation No 77/2004, Article 4.

forest products.²⁷⁶ Though Proclamation No. 77/2004 does not recognize community forest as opposed to the case in Oromia Forest Proclamation No. 72/2003, it tries to address forestry issues.²⁷⁷

This region also comes up with climate change adaptation plan in 2010 to adapt basic challenges of climate identifying vulnerable sectors identifying deforestation as the main cause to forestry sector.²⁷⁸ (Translation mine) Capacity building and awareness, coordinated participatory decision making and implementation, increasing and upgrading the capacity of service rendering sectors are mentioned as response measures.²⁷⁹ (Translation mine)

Currently there are many projects and NGOs, working in watershed management, reforestation, conservation and management of forest resources, wild life, soil and water. A number of CDM projects are also recognized in the region due to its suitability for forestry management.²⁸⁰ For example Humbo Wolaita Assisted Natural Regeneration Project targeting an area of 2728 hectares and Sodo Farmers Managed Natural Regeneration and Agro forestry project with an area of 2,200 hectares is basic CDM project areas.²⁸¹ PFM activities which are also undertaken by Ethio Wet Lands Organization in Masha, Anderacha and Humbo Projects are instrumental in the area.²⁸² In addition to this PFM activity projects in Bonga supported and sponsored by FARM-Africa and SOS Sahel and Belete Gera supported by JICA are basic developments in the region. The Yayu & Gedo forests which cover about 190,000 hectare also show good progress are one of the future prospective areas for bio-carbon initiatives.²⁸³

According to the study on woody species inventory on high forests by the Forest Genetic Resources Conservation Project and Institute of Biodiversity Conservation the result show that woody species was highest in Yayo (146 species) lowest in Limalimo (35 species). Other high

²⁷⁶ *SNNPR Forest Management, Development and Utilization Proclamation*, Article 15 Sub Article 2.

²⁷⁷ Mellese Damtie and Muhammad Abdulahi, *Supra* Note 274, P.16.

²⁷⁸ የደቡብ-ብሔሮች፣ ብሄረሰቦችና ህዝቦች ክልላዊ መንግስት ተፈጥሮ ኃብትና የአካባቢ ጥበቃ ባለስልጣን (2003 ዓ.ም)፣ ክልላዊ የአየር ንብረት ለውጥ ማጣጣሚያ መርህ-ግብር፣ ጥር 2003 ዓ.ም፣ ሀዋሳ፣ ገፅ 57።

²⁷⁹ *Id.*, P.74.

²⁸⁰ See ECCSFE, *Supra* Note 250, P.86.

²⁸¹ See Mulugeta Limenih and Tadesse W/Mariam, *Supra* Note 93, P.161.

²⁸² See Interview with Ato Tefera Tadesse, *Supra* Note 232.

²⁸³ See *Supra* Note 281.

forests with highest species diversity included Mana Angutu (130 species), Godere (123 species), Masha-Anderacha (118 species), Jemjem (110 species), Bonga (160 species) and in Belete Gera forest there are around 101 species.²⁸⁴ In this regional state SSLFMP (Strengthening Sustainable Livelihood and Forest Management Program) and PFM is also one of the focus areas of FARM-Africa/SOS Sahel Ethiopia to scale up sustainable forestry management.²⁸⁵

Therefore one can understand that the regional legislation of the sector and climate adaptation plan facilitates the execution and developmental activities of the region. Thus PFM, SSLFMP, CDM and bio-carbon incentive in the region have been contributing more in the process of sustainable development and conservation of forests not only in the region but also Ethiopia.

4.1.5. Gambella Regional State

Gambella is low-lying area through which the major rivers arising from South-Western highlands flow in to Southern Sudan where by dense variety of plant and animal species are abundant.²⁸⁶

This regional state prepared the adaptation plan identifying and prioritizing venerable sectors.²⁸⁷ In this policy document, the region considers forestry management as one of the issues to adapt climate change encompassing national forest priority areas as:

*The Gambella high forest encompasses three national forest priority area namely, Abobo-Gog, Mesengo forest and Godere high forests. These priority areas which are estimated 540,000 hectares were a source of a variety of wildlife, unique plant species, and wild fruits. The major river Baro, Gillo and Alwero are flowing through these forests. The rich fish resource of Gambella region is also recorded in these rivers. The future great expectation of the region in particular and the country as whole lies on the irrigation potential of the abovementioned rivers. The Alwero dam is one of the many dams proposed to build in the region which has a potential of 10,000 hectares.*²⁸⁸

²⁸⁴International Year of Forests (2011), *Multiple Role of Forests in Ethiopia Vs. Associated Challenges: Maximizing Benefits while Curbing Limitations*, April 2011, Addis Ababa, P.65.

²⁸⁵Interviews with W/ro Meseret Kebede, Supra Note 253 and AtoTsegaye Tadesse, Program Officer in Farm- Africa/SOS Sahel Ethiopia, November 20/2012.

²⁸⁶ See ECCSFE, Supra Note 250, P.135.

²⁸⁷Gambella National Regional State (2011), *Adaptation Plan to Climate Change*, March 2011, Gambella, P.3.

The plan incorporates detailed aspects to mitigate the effects of climate change which include adaptation measures (coordination with stakeholders, capacity building and developing small and large scale irrigation) and intervention measures. Therefore as to forestry management area the adaptation plan of the region can be considered as a good development since it contributes for the development, conservation and utilization of forest resources of the country in sustainable manner.

With respect to forestry related projects, there are about three highly prospective bio-carbon initiatives in Ethiopia. These are the Bale eco-region (500,000 ha) in Oromia, Yayu & Gedo forests in SNNPR (190,000 ha) and in Gambella Regional State, the Baro-Akobo in the South West forest (7,610,300 ha) are known to encourage forest regeneration.²⁸⁹ Since the region is suitable for such types of projects, the region is showing some sort of commitment to do additional tasks though there are some challenges related to resettlement, investment and anthropogenic factors.²⁹⁰

4.1.6. Benshangul Gumz Regional State

The Benishangul Gumz Regional State is one of the regions very rich in biodiversity by which variety forests and animals are abundant.²⁹¹(Translation mine) In this region 93.2% of the peoples are dependent on agriculture (farming and animal production) for their livelihood.²⁹²(Translation mine)

This region is highly affected by climate change and induced hazards and hence the density of biodiversity is deteriorating from time to time. Due to anthropogenic factors including wild fire and illegal settlement and investment, the deforestation is increasing. Moreover as a result of environmental change the propagation of new species and weeds like stringa “akenchira”, dodder

²⁸⁸See Gambella National Regional State, Supra Note 287, P. 19.

²⁸⁹See Mulugeta Limenih and Tadesse W/Mariam, Supra Note 93, P.159.

²⁹⁰ See Interview with Ato Tefera Tadesse, Supra Note 232.

²⁹¹በቢ.ንቫንጉልጉምዝከልላዊመንግስትየአካባቢጥበቃ፣ መሬትእስተዳደርናአጠቃቀምቢሮ (2003 ዓ.ም)፣ ክልላዊየአየርግብርትለውጥማግባባሚያመርሀ-ግብር ፣ ጥር 2003 ዓ.ም፣ አሰሳ፣ ገፅ 30።

²⁹² Id., P.8.

“yenuganbessa” and partinium “sarchequagn”)which dominates the biodiversity seriously.²⁹³(Translation mine)

In order to overcome those multidimensional problems of the region, the regional state come up with Regional Program of Plan on Adaptation to Climate Change. Among other issues, the plan addresses intervention and mitigation measures considering sustainable forestry management and related activities as a solution. Among them the protection of the propagation of dangerous weeds, establishment and seedling planting sites, environmental protection and sustainable forestry management activities in watershed areas, protecting wild fire, capacity building and awareness creation, demarcating forest areas to conserve biodiversity, conserving and rehabilitating various plant species, developing peaceful conflict resolution mechanism created between the community and neighboring regional peoples due to lack of resources, engaging in activities to change the livelihood of the community to reduce destruction of forests through supporting development partners working on environment.²⁹⁴(Translation mine)

Since environmental degradation is given serious consideration in the region, reforestation and rehabilitation activities have been taking place in Banbasi and Pawee woredas to mitigate the deforestation.²⁹⁵(Translation mine)

The role of development partners is one of the target areas in the region. For instance FARM-Africa/SOS Sahel Ethiopia Participatory Management Unit is currently employing SSLFMP (Strengthening Sustainable Livelihood and Forest Management Program) in this region by rendering awareness creation, financial support, capacity building and technical support to conserve, utilize and rehabilitate forests sustainably.²⁹⁶

²⁹³See Supra Note 291, P.16.

²⁹⁴Id., PP. 50-57.

²⁹⁵Id., P. 14.

²⁹⁶See Interview with W/ro Meseret Kebede, Supra Note 253.

4.1.7. Afar National Regional State

Geographically, the Afar Regional state is located in the northeastern part of Ethiopia. The total geographical area of the region is about 270,000 km². It is geographically located between 39°34' and 42°28' East Longitude and 8°49' and 14°30' North Latitude. The region shares common international boundaries with the State of Eritrea in the north-east and Djibouti in the east, as well as regional boundaries with the Regional States of Tigray in the north-west, Amhara in the south-west, Oromia in the south and Somali in the south-east.²⁹⁷

The Afar National Regional State is characterized by an arid and semi-arid climate with low and erratic rainfall. Afar is increasingly drought prone. The production system of Afar region is dominated by pastoralist (90%) from which agro-pastoralist (10%) is now emerging following some permanent and temporary rivers on which small scale irrigation is developed.²⁹⁸

Since the issue of environment is a serious issue as a result of climate change and human intervention, this region issued a Program of Plan on the Adaptation to Climate Change as a policy issue. In this policy document, identifying and prioritizing response measures to enhance regional capacity to climate change adaptation, the plan includes sectorial intervention strategies. Among others, the natural resource management aspect considers various traditional natural resource management strategies such as management of rangeland and livestock (identifying dry and wet season grazing, herd management, controlled soil burning, proper water management system, weed and pest management). It also aimed at the promotion of traditional institution “mad’aa” for proper management and fair utilization of rangeland and water sources.²⁹⁹

According to the regional adaptation plan, vulnerable sectors are identified and prioritized. Based on that different response measures are adapted to enhance the regional capacity to climate change adaptation. Taking natural resource management is one of the measures, the following intervention mechanisms are recommended.

²⁹⁷Afar National Regional State (2010), *Afar National Regional State Program of Plan on Adaptation to Climate Change*, October 2010, Semera, P. 6.

²⁹⁸Id., P. II.

²⁹⁹Id., P.47.

- *Catchment treatment through land management, moisture and soil conservation and flood control methods,*
- *Implement soil and water conservation programs and projects that promote local community participation,*
- *Focus on rehabilitation and reclamation of degraded land, reforestation, conservation, management and protection of natural resource,*
- *Rehabilitate and manage dry season rangelands,*
- *Implement measures to control aggressive weeds and other invasive plants such as Prosopis juliflora, Partenium; and*
- *Implementation of planting multipurpose trees at house hold level in areas where water is available from irrigation structures.*³⁰⁰

As clearly stated in the regional adaptation plan, the reforestation, management and conservation of natural resources and the implementation and planting multipurpose trees with those other interventions are the possible solutions for enhancing sustainable forestry management in the region.

Furthermore, the introduction of mud bricks for housing, soil and water conservation practices and awareness creation are the good practices of the region in ensuring environmental sustainability.³⁰¹ In this policy document, discouraging unsustainable livelihood and mismanagement of resource, increasing investments in tree planting, water harvesting and drought and disease tolerant crops, paying particular attention to regeneration of degraded pastures and related mitigation actions, developing irrigation and water harvesting schemes, asset protection and livelihood enhancement/diversification (alternative livelihood sources with focus on non-pastoral livelihood options including the protection and collection of non-timber products (gums, incense, fruits, etc...), bee keeping, petty trade and other urban-based income-generation activities which can cut unsustainable production and the daily dependence on natural resources) and enhancing political momentum and institutional capacity are mentioned as suggested adaptation measures and strategies.³⁰²

³⁰⁰See Afar National Regional State, Supra Note 297, PP. 47-48.

³⁰¹ See Interview with Ato Kassahun Abate, Supra Note 258.

³⁰² See Afar National Regional State, Supra Note 297, PP.58-62.

The introduction of the regional climate change adaptation plan with those possible intervention schemes presumed to contribute a lot in the process of sustainable forestry management and in the mitigation of the adverse effects of climate change. So we can say that the region is showing some sort of commitment to mitigate the devastating environmental challenges.

4.1.8. Somali Regional State

The region is remote with a mobile pastoral population and inadequate infrastructure. The climate is mostly desert with high average temperatures and low bi-modal rainfall. Its economy is weak and reliant predominantly on traditional animal husbandry and marginal farming practices.³⁰³

The adaptation plan of the region identifies drivers of vulnerability. Among them environmental degradation due to increasing deforestation rates and degradation of pasture and farmland, as well as desertification are important drivers of vulnerability. The recurrent drought, increased felling of trees for firewood, charcoal production and livestock feed (especially during drought), overgrazing, agricultural expansion and inappropriate agricultural practices have led to increased soil erosion, lower quality of pasture and farmland, bush encroachment, and the likes are also mentioned as drivers of vulnerability since they affect the biodiversity of the region.³⁰⁴

Like what has been stated in policy document of Afar Regional State, this document also opts for similar response measures to enhance regional capacity to adapting to climate change. Rangeland development and management is one of the measures to conserve and properly utilize the resources. The other most important measures are strengthening natural resource management through catchment treatment through land management, moisture and soil conservation and flood control methods, implementing soil and water conservation programs and projects that promote local community participation, focusing on rehabilitation and reclamation of degraded land, reforestation, conservation, management and protection of natural resources, rehabilitating

³⁰³ Somali Regional State, Environmental Protection and Energy and Mines Resources Development Agency (2011), *Climate Change: Impacts, Vulnerabilities and adaption Strategies in Somali Region, Regional Program of Plan to Adapt to Climate Change*, March 2011, Jijiga, P.13.

³⁰⁴ Id., P.48.

and managing dry season rangelands, implementing measures to control aggressive weeds and other invasive plants such as *Prosopis juliflora* and *Partenium*, and implementing of planting multipurpose trees at house hold level in areas where water is available from irrigation structures.³⁰⁵ Moreover it incorporates impact assessment measures to control mal-adaption including emergency and development interventions like transfer of food, cash aid, and livelihood diversification, enhancing the role of development actors and NGOs for sustainable management of resources.³⁰⁶

Therefore the adaption of such policy document is one step forward since its contribution is significant in the whole context adapting climate change. Especially the natural resource management, the implementation of multipurpose trees plantation and reforestation measures using irrigable water are the most important possibilities to enhance the contribution of sustainable forestry management in the region.

4.1.9. Harari Regional State

When we are dealing with the practical undertakings of regional states, this regional state has also formulated its own adaptation plan to climate change identifying the forestry sector as one of the focus area of the region. According to the plan, forests are developed and managed as productive forests for industrial construction and fuel wood and managed through various systems. In Harari the remnant of the natural vegetation indicate that the high land area such as Awhakim (Hakim Gara), Aboker plateau and the north eastern part of Harar town covered with natural high forest and wood land. This indigenous species remnant indicator also confirms that the low lands in the eastern and south east were also covered with low land wood and bush land vegetation in the past.³⁰⁷

The impact of climate change on ecosystems of the region is stated in the document. Thus the one is the impact on forests stating the dependency on natural rainfall, disappearance and

³⁰⁵ See Somali Regional State, Supra Note 303, P.88.

³⁰⁶Id., 273, PP. 107-108.

³⁰⁷Harari People Regional State (2011), *Program of Plan on Adaption to Climate Change*, January 2011, Harar, P.9.

damage of forests degradation. Moreover causes of forest degradation in the region are mainly caused by cutting or not planting the trees, notably, the indigenous trees which are important for nitrogen fixation. In order to promote the fertility and productivity of farm lands, one of the feasible intervention areas mentioned is the introduction of on farm and home forestry practices.³⁰⁸

In order to address climate change impacts natural resource management schemes are mentioned and hence the following are basic with regard to sustainable forestry management.

- *Enrich the sparsely stocked vegetation cover through reforestation and area closure for natural regeneration;*
- *Introduce and promote alternative energy sources that can reduce the consumption of fuel wood;*
- *Create alternative income source for those whose livelihood largely depend on fuel woodland charcoal selling;*
- *Catchment treatment through land management moisture and soil conservation and flood control methods;*
- *Implement soil and water conservation programs and projects that promote local community participations;*
- *Implementation of planting multipurpose trees at household level in areas where water is available from irrigation structures;*
- *Create awareness on the healthy co-existence of the communities and the natural resource base of the area.*³⁰⁹

It is also planned to build institutional capacity, establishing functional early warning system that also integrates traditional conventional and timely response. The introduction and extension of modern information technology like data processing, strengthening market and information system, strengthening financial institutions (microfinance, credit and saving household asset building) to change the livelihood of peoples is also included. The need for Strengthening linkage among different development programs/actors (government and NGOs) and enhancing learning and experience sharing plus supporting environment and climate friendly development initiatives are also the strategic issues of the region.³¹⁰ As to the natural resources management aspect, soil and water conservation activities and the introduction of mud bricks for housing are good experience of the region which contributes to reduce the rate of deforestation.³¹¹

³⁰⁸See Harari People Regional State, Supra Note 307, P.31.

³⁰⁹Id., P.76.

³¹⁰ Id., PP. 86-90.

³¹¹Ibid.

Therefore when we are talking about sustainable forestry management of Ethiopia, the adaptation plan of Harari has got its own positive impact to facilitate the execution of sectorial aspects of the region. This is because the mitigation measures stated in relation to natural resource management especially the reforestation, area closure for natural regeneration and the implementation of planting of multipurpose trees are the possibilities to develop forests in the region.

4.1.10. Addis Ababa

As the capital city of the federal state there are attempts to contribute to meet goal seven of MDGs. In many areas especially Entoto mountain, Jemo, Yeka and Kotebe soil and stone bund terrace have been done to cover those areas with indigenous and exotic trees. In those areas around 1300 hectares of land are covered with different types of trees. On the other side forest inventory and assessment of open spaces and degraded areas are identified.³¹² Especially the reforestation activities with eucalyptus and other indigenous trees around Entoto have been supported by a development partner known as “Ethiopian Heritage Trust”.³¹³ As a capital city the demarcation of green areas, and activities of raising and distributing seedlings as well as biological, physical and water conservation measures are taking place.³¹⁴

The Gullelie Botanical Garden which is established and organized under Addis Ababa City Administration is one of the developments in upgrading sustainable forestry management of the region.³¹⁵

So those activities of the state in the sector can be mentioned in the sector though there are some challenges to be discussed in the forthcoming part of this thesis.

³¹² Interview with Ato Mekonnen Biru, Biodiversity and Ecosystem Research Team Coordinator in AAEPA, June 13, 2012.

³¹³ Ibid.

³¹⁴ FDRE, MOFED (2010), *Progress towards Achieving MDGs: Success, Challenges and Prospects*, September 2010, Addis Ababa, P.42.

³¹⁵ See Interviews with Dr. Alishum Ahmed and Ato Mekonnen Biru, *Supra* Notes 223 and 312 respectively.

4.1.11. Dire Dawa City Administration

The total area of Dire Dawa Regional Administration is 128,802 hectare and the administration shares common boundaries with Somali National Regional States in the West, North and East and with the Oromia National Regional State in the Southern part of the country.³¹⁶

Since unsustainable exploitation of natural resources has resulted in serious biodiversity loss with some species being close to extinction, it necessitates for having the adaptation plan to ensure the region's long term development.³¹⁷In other words the plan to adaptation to climate change preparation has been a timely opportunity to look at climate change related vulnerabilities in various sectors including forestry management. So it is deemed that sustainable development can be achieved when strategic actions, both short term and long term are put in place to address climate change impacts on agriculture and other key economic sectors.³¹⁸

In this administrative region, collaborative forest management, area closure, ensured ecosystem stability through conservation of forest biodiversity, water catchment and soil fertility, community based forest management practices through a participatory approach, homestead and hillside afforestation, and integrated water resource practices are the actual activities carried on.³¹⁹

Therefore this administrative region has also considered the issue of climate change as one of the serious challenges since it affects many sectors. Thus the adaptation program of the region focuses on forestry management and those other sectors too.

4.2. Possible Prospects and Challenges of Forestry Management

When we are dealing with forestry management aspect of Ethiopia, we can see some developments in the process of sustainable forestry management. On the other hand though there are prospects, the challenges are also much more than the progress and developments. Unless

³¹⁶Dire Dawa Administration (2011), *Program of Adaptation to Climate Change*, September 2011, Dire Dawa, P.5.

³¹⁷Id., P.VII.

³¹⁸ Id., P.11.

³¹⁹ Id., P.75.

those challenges and prospects are discussed, it will be pointless to talk about forestry management. Therefore the prospects and possible challenges of the sector are elaborated in the incoming parts to evaluate the achievements and failures.

4.2.1. Challenges

When we are dealing with the possible challenges of the sector we can categorize them in to policy related, institutional, and capacity and human induced factors, even if there are many developments towards achieving goal seven.

Despite the fact that environmental sustainability has impact almost on all sectors, goal seven includes three key elements. These are access to safe drinking water, reversing soil and forest degradation and improving the conditions of urban slum-dwellers. Though some encouraging conditions have been made, the fragile initial condition combined with continuous major population pressure could be considered as a challenge.³²⁰ In other words, due to population increase and lack of proper implementation of the activities of sustainable forestry management, it is still weak to coordinate the entire population.³²¹ This most serious challenge of the sector (population increase and dependency on forest and forest products for livelihood), highly aggravates the deforestation rate.³²²

Though there are varieties of forest species in the country, the challenges are getting more serious as a result of poverty and dependency on forest products for livelihoods in many Ethiopian regions. Protected forest species and areas are also threatened by unsustainable harvesting, wild fire and other anthropogenic factors in many regions. So it would be unreasonable to expect the trees and forests in Ethiopia are untouched and totally protected.³²³

In addition to those other anthropogenic factors, forest fire has been noted to be a potent threat to country's forests. The following instances can be mentioned in relation to wild fire due to extreme temperature, burning of trees for farm land and charcoal. In Dire Dawa Administrative

³²⁰International Year of Forests (2011), *Multiple Role of Forests in Ethiopia Vs Associated Challenges*, April 2011, Addis Ababa, P.16.

³²¹ See Interview with AtoTefera Tadesse, Supra Note 232.

³²² Interview with Dr. Million Belay, Director of Melca-Ethiopia, November 21, 2012.

³²³ USAID (2008), *Ethiopian Biodiversity and Tropical Forests 118/119 Assessment*, August 2008, P. 40.

region, dry conditions and prolonged droughts create conducive conditions for spread of wild fires (the case of woodlands of Chirimiti, Geldessa & Gerbaaneno rural kebeles).³²⁴ The fire incidents that occurred between the years 1997 and 2000 in Bale, Borena, East Hararge, North Omo zones and other places destroyed 155,966 hectares of forest land and such scale of loss of forests affects not only the timber and non-timber forest products but also all forms of wild life.³²⁵ In other words wild fire is also common in many areas of the country especially in Bale eco-region, Wollega, Gambella, Afar, Somali and Benishangul Gumz too due to the reasons stated above. It is known to destroy not only forests but also wild animals though some interventions are made through PFM and community forest conservation schemes.³²⁶ So we can generally say that wild fire can be one of the major challenges of the sector causing serious destruction of forests in the country.³²⁷

As stated earlier the first part of goal seven is “to integrate the principles of sustainable development in to county policies and programs to reverse the loss of environmental resources” has been met. But measuring the specific progress on the second part of the goal, “reduce biodiversity loss achieving by 2010 a significant reduction in the rate of loss” seems to be difficult and still found to be difficult because of the early stage of development systems to measure, for example forest cover and biodiversity on consistent basis.³²⁸ This challenge is still a basic challenge to the sector because we don’t still have Biomass Inventory System which has been organized before. Moreover there is no even an ad-hoc integrated organ responsible to study and analyze data as to the forest coverage of the country. So currently it is found to be very difficult to give relevant and pertinent information or data on the percentage coverage and variety of forests in the country.³²⁹ In relation to this problem, access to reliable information on the status of country’s forests is one of the prerequisites for formulating effective strategies supporting efforts towards sustainable forest management.³³⁰ However in Ethiopia, like most developing countries, reliable information on the vegetation resources such as their spatial coverage, distribution changes overtime (deforestation or re-growth), growing stock in the standing vegetation,

³²⁴ See Dire Dawa Administration, Supra Note 316, P.55.

³²⁵ See FfE Occasional Report, Supra Note 255, P.91.

³²⁶ See Interviews with W/ro Meseret Kebede and Dr. Million Belay, Supra Notes 253 and 322 respectively.

³²⁷ See interviews with Dr. Alishum Ahmed and Dr. Million Belay, Supra Notes 223 and 322 respectively.

³²⁸ See Secretariat of Convention on Biodiversity, Supra Note 8, P.23.

³²⁹ See Interviews with Ato Tefera Tadesse and Ato Kassahun Abate, Supra Notes 232 and 258 respectively.

³³⁰ See Mulugeta Limenih and Tadesse W/Mariam, Supra Note 93, P.135.

regeneration and recruitment status and other eventual information are lacking or difficult to get. This is because of no additional database and lack regular resource inventory and monitoring unit to provide reasonably good and up to date information. Consequently conflicting statistics are often found in different reports.³³¹ The challenge even goes to the extent that after the work of Woody Biomass Inventory and Strategic Planning Project is officially closed after 2004, there is no any organ in the Ministry to deal with inventory issues. This creates difficulty to know the failure or achievements of goal seven especially with regard to forestry management.³³²

The other most critical challenge to this sector is the recurrent droughts that the country faces on a regular basis is due to depletion of environmental resources such as soil and forests. Among other things anthropogenic factors like afforestation, over grazing, cutting and burning of trees (forests) for fire wood and other purposes are causes of mismanagement in the country.³³³ This basic challenge is also recognized in the 2010 MOFED report for the fact that most of the direct threats causing the devastation of the ecosystem come from clearing land for agriculture, over harvesting, over grazing, over hunting and climate change. It is manifested in the form of increased desertification, flooding, reduction in agricultural production and loss of variety of plants and animals species.³³⁴ During the second half of the 20th century, the country has experienced severe deforestations and degradation. The annual rate of deforestation was 150,000 to 200,000 hectares annually. The major drivers are agricultural expansion, unsustainable harvest for timber and fuel wood extraction.³³⁵

Ethiopia has shown bold political commitment (will) by establishing Environmental Protection Agencies at all levels including the formulation of policies and legislation. Despite the establishment of environmental protection institutions and different related proclamations, policies related to environment are adopted by the states, there is still lack of implementation and enforcement to integrate those polices and laws of the country.³³⁶

³³¹ See Mulugeta Limenih and Tadesse W/Mariam, Supra Note 93, P.135.

³³² See Interviews with AtoTefera Tadesse and Ato Kassahun Abate, Supra Notes 232 and 258 respectively.

³³³ See MulugetaLimenih and Tadesse W/Mariam, Supra Note 93, P.135.

³³⁴See FDRE, MOFED, Supra Note 314.

³³⁵Environmental Protection of Ethiopia (2012), *National Report of Ethiopia for United Nations Conference on Sustainable Development (Rio+20)*, Addis Ababa, P. 36.

³³⁶See FDRE, MOFED, Supra Note 314, P.37.

The first reason could be lack of strong coordination and lack of stability in the sector to implement and enforce the laws and legislations. Lack of stability in the sector's organizational structure can be cited as one of the major bottlenecks because it has brought lack of coordinated, effective, long term management and development successes in Ethiopian forestry.³³⁷ Ethiopian forestry sector is basically characterized by frequent changes in its organizational structure. At present, it is under the Directorate of Natural Resource Management organized as forestry case team. The reorganization resulted in the interruption of activities, destructions of materials, loss of data, financial costs and loss of institutional memories which totally affects the sector. More over though it is the Ministry that is preparing MDGs of the forestry sector, it has no direct involvement in managing and administering countries forests.³³⁸ On the other side even if EPA including its regional entities and the MOA and EWCA are established to undertake their respective duties and responsibilities, their relation in administering, protecting, utilizing forests and related natural resources is at its infantile stage. In spite of the fact that forests can not be separated from other natural resources like wildlife, land and others, they are working separately or with out coordination.³³⁹ The main administrative and organizational problems at all levels of forestry administration and regulation can be summarized as:

- *Inappropriate institutional organization and insufficient attention to the sector,*
- *Inefficiencies in the organizational processes and the absence or lack of forestry professionals even at higher decision making level,*
- *Shortage of experienced and skilled manpower indifferent areas of specialization, for example forest biometricians; forest policy advisors; forest economists; and natural forest silviculturists, to provide technical support for forest management activities in different regions and to develop policies and guidelines for sustainable forest management; and*
- *Lack of coordination between the federal and regional forest administrations including other related resource conservation units.*³⁴⁰

³³⁷ See International Year of Forests, Supra Note 284, P.19.

³³⁸ Berhanu Mengesha (2008), *Ethiopian Forest Conservation, Development and Utilization: Past, Present and Future*, Forum for Environment Occasional Report No 1/2009, September 2008, Addis Ababa, P.44-45.

³³⁹ Interview with Ato Tariku Geda, Environmental Expert at EPA, June 13, 2012.

³⁴⁰ See Berhanu Mengesha, Supra Note 338, PP.47-48.

Another serious challenge in the sector relates to the implementation and enforcement of laws and regulations. In this context prosecuting forest offenders is not an easy task. The reasons for this have been identified as the nature of the crime (which is done in forests without being noticed) and due to reluctance of the justice organs (police, prosecution offices and courts).³⁴¹ Since environmental consciousness is still low, harsh penalties would be perceived by the public illegitimate and not commensurate with what are generally viewed as minor offences. This same level of feeling exists in the justice administration organs. For instance, on workshop conducted at Sebetta town of the Oromia Regional State on environmental awareness creation workshop conducted on December 19, 2010, many judges and prosecutors argued that the penalty clause by the Oromia Forest Proclamation was so harsh and they rarely implemented it since it appeared to them as against the Constitution and Criminal Code.³⁴² Furthermore, although several events come across on this critical issue, bringing illegal deforesters to law is always considered to be the job of the Ministry and the Authority.³⁴³ Ato Kashay Zerea Biruk, in his long year experience of being judge states that even if there are so many legal issues and cases brought before courts, environmental crimes are not commonly brought before justice like other offences. Only some environmental offenders are prosecuted and brought before courts.³⁴⁴ So we can say that though the law/s is/are there entailing from simple to rigorous punishment, due to lack of awareness, reluctance and lack of enforcement the sector is not regulated very well.

According to the MOFED, 2010 report, what is also explained by Environmental Protection Authority is also another challenge to the sector. Here settlement and investment activities are basically mentioned. Because of them the biodiversity is left in a precarious state. Settlement and investment activities that do not take biodiversity in to account and increasing the amounts of toxic substances and pollutants are causing devastating damage on forests. In general it is underlined that the extent of degradation faced on forests and vegetation cover has been inflicted by a weak effort to protect and conserve biodiversity and the severe extent of poverty.³⁴⁵

³⁴¹Mellesse Damtie and Solomon Kebede (2012), *The Need for Redesigning Institutional Roles for Environmental Governance in Ethiopia*, MELKA-Ethiopia, August 2012, Addis Ababa, P.58.

³⁴² Id., P.58.

³⁴³ See Interviews with Ato Sertse Sebu and Ato Tariku Geda, Supra Notes 244 and 339 respectively.

³⁴⁴ Interview with Ato Kahsay Zerea Biruk, Vice President at Addis Ababa City Appellate Court, September 3, 2012.

³⁴⁵ See FDRE, MOFED, Supra Note 314, P.40.

The Impact Assessment Legislation and related legislations are very crucial in regulating the problems created against the environment. Although the objective of those legislations are protecting the damage and destruction of the environment(ecosystem) and in protecting illegal infliction of peoples as well as resources, the practice seems quite different that some investments are known to cause environmental degradation especially deforestation.³⁴⁶

One can for sure say that investment is very important in any country to bring economic development. Actually not all investments are causing environmental problem but some of them have been causing serious damage to the environment. Regarding the problem related with investment, the Godere, South Omo sugar plantation and investment controversies and the current threats to Sheka forests can clarify the seriousness of the issue. In the case of Godere investment case, the Gumare forest is a high forest that comprises different high land tree species like Aningeria, Ecuberiga, Olea, tree ferns, etc. was Godare's priority forest area of the country located in Gambella Regional State.³⁴⁷ Due to the attractive investment policy of the country, the regional government issues license for 434 investors till 2010. Among them an Indian investor "Verdanta Nervest PLC" received 3012 hectares of land in Mezenger zone Godere woreda Gumare kebele for tea plantation.³⁴⁸ (Translation mine) Despite all the attempts to save this natural forest, the company has already cleared around two hectares of high forest for the establishment of tea nursery site with more deforestation possibility of three to five thousand hectares of the intact forest very soon.³⁴⁹ Since such investment is causing devastating damage to the existing natural forest of the area, the community has protested against the investment choosing the forest to stay as it is. While calling the attention of higher officials of the government and concerned institutions, Girma Woldegiorgis, President of FDRE, EPA and various institutions/groups have written letters to MOA stating the enormous economic, social and environmental benefits of the intact forest and urge to rethink and reverse the decision already passed though no positive response is made.³⁵⁰

³⁴⁶ See Interviews with Ato Tefera Tadesse, Ato Tariku Geda, Supra Notes 232 and 339 respectively.

³⁴⁷ Forum for Environment (2011), *Assessment of Gumare Forest and Recent Dynamics*, Occasional Report No. 6, May 2011, Addis Ababa, P. 19.

³⁴⁸ ሪፖርት: የአማርኛ ሳምንታዊ ጋዜጣ፣ ረቡዕ፣ ሰኔ 20 ቀን 2004 ዓ.ም፣ አዲስአበባ።

³⁴⁹ See Forum for Environment, Supra Note 347, P.26.

³⁵⁰ Ibid.

The East African Holdings Tea Plantation and the Gemadro Coffee Plantation Projects are also causing direct threats to the Sheka forest. The threat of deforestation rate accounts for 38% and 34% of the total deforestation between 1987-2001 and 2001-2005 respectively.³⁵¹

The other good example which shows the negative aspects of investment is the South Omo's case. Since 2008 the state-run sugar plantations, foreign companies and some Diasporas have been investing in South Omo. Meanwhile such investments have been causing serious damages on the whole ecosystem. Significant percentage of the 245,000 hectares of state-owned plantations lies within the boundaries of Omo National Park while between 30,000 and 40,000 hectares in the South Omo-Mago National Park are on the way to be given to investors for industrial agricultural development.³⁵² The point here is that the clearing of approximately 130,000 hectares of prime natural habitat and culturally critical grazing lands has been causing further detrimental impacts not only on the peoples but also on the whole ecosystem.³⁵³

Another basic challenge for the country's forest ecosystem is resettlement since it is one of the policy options practiced by Ethiopian governments previous and current to tackle the problems of land degradation and food insecurity in the high lands.³⁵⁴ The resettlement taking place especially in Gambella and Benishangul Gumz regional states is still known to affect our forest ecosystems.³⁵⁵ In recent years, the resettlement practices, which are region based, are affecting the low lands where the remaining forests of the country are situated.³⁵⁶ The rate of deforestation due to new settlements are increasing from time to time since 2001 resulting in the conversion of forested land in to agricultural and other land use system.³⁵⁷

Poverty and dependency on forests as a livelihood is also a serious threat to forests and other natural resources. They have been causing destruction of forests and environmental degradation. This point is further elaborated that many people in our country are dependent on forest and

³⁵¹ Casey Vaughn (2002), *Sheka Project Assessment*, MELCA-Mahber, Addis Ababa, PP.14-15.

³⁵² WWW.oaklandinstitute.org, *Understanding Land Deals in Africa*, September 2011.

³⁵³ Ibid.

³⁵⁴ See FfE Occasional Report, Supra Note 255, P.64.

³⁵⁵ See Interviews with AtoTefera Taddesse and W/ro Meseret Kebede, Supra Notes 232 and 253. respectively.

³⁵⁶ See FfE Occasional Report, Supra Note 255, P.64.

³⁵⁷ See Mellesse Damtie and Mohammud Abdulahi, Supra Note, 274, P.160-161.

forest products. They cut and sale firewood and charcoal or use forest products for cooking and construction. As a result such integrated effect contributes for the destruction of forest resources. Such challenge is facilitated by the weaker enforcement mechanism, lack of alternative energy sources especially in country sides. But less effort is made to change the livelihood of peoples who are dependent on the cutting and selling of fire woods for household purposes.³⁵⁸ Here almost all interviewed officials recognized such problems as a challenge against sustainable forestry management in our country.

The establishment of government executive bodies having the power and duty to protect and conserve forests and related natural resources to enhance sustainable environmental development is vital. Though they recognize the role of institutions and development partners on forestry management in promoting community participation, the functional linkages in between related sector offices is at early stage. And some of them which have been accountable to the same organ have been reorganized to be accountable to different bodies. As stated earlier we can note the establishment and accountability of EPA, EWCA and MOA ³⁵⁹

As a result of resource and financial problems the planting, distributing as well as conserving of seedlings and forest resources is at stake. Though much have been tried to be done, the resource problems (financial and human resource) starting from federal to regional states is creating some drawback in the development, utilization and conserving of forests. According to the report of 2011 International Year of Forests, forestry management especially urban forestry in the country is hampered by lack of resources aggravated by lack of implementation. It affects the urbanization and expansion of cities against the environment with no space left for ornamental tree planting and green areas. ³⁶⁰

The other most serious challenge to such aspect is lack of regulations, directives as well as guidelines so as to implement Proclamation No 542/2007. Though the draft regulation is prepared; it is not yet approved by the Council of Ministers. By virtue of Article 23 of the above

³⁵⁸ See Interviews with AtoTeferaTadesse,W/ro Meseret Kebede and AtoTsegaye Tadesse, Supra Notes 232, 253 and 285 respectively.

³⁵⁹See Mellesse Dantie and Solomon Kebede, Supra Note 341.

³⁶⁰See International Year of Forests, Supra Note 284, P.17.

proclamation, the Ministry is empowered to issue regulations and directives for the proper implementation of the proclamation (as to listing endangered species and list of quantity of forest products to issue transport permits). It has been a long time than expected to put these legal frameworks in place. Currently though the forest development, conservation and utilization regulation is finalized and presented to the Council of Ministers, it is not yet endorsed.³⁶¹ Even if such issue has been repeatedly advocated and raised by NGOs like Melca-Ethiopia and Farm-Africa, this regulation is not approved. So due to lack of the required regulation, the forestry management activities are highly affected.³⁶²

Lack of understanding and awareness problem could also be mentioned as a challenge to integrate and coordinate the efforts so as to achieve the intended result. Despite the efforts of implementing PFM, SSLFMP and environmental friendly projects, there is still lack of understanding and awareness to actively participate and involve. It goes to the extent that the importance of forests with regard to maintaining environmental sustainability is not as such reaches at its high level.³⁶³

As any reasonable person knows information is very crucial for decision making on environmental issues and for the dissemination of current environmental information to the public at large. In view of the pivotal role that information plays, the environmental policy has incorporated it as one of the cross sectional policy issues. At present however, it is difficult to say that there is an efficient and consistent environmental information system in the country.³⁶⁴ Such problem is highly reflected in the different reports and explanations of regions that there is no consistent and data based reporting system and what has been reported one month may sometimes shows discrepancy and contradiction with the next report.³⁶⁵

³⁶¹ See Interviews with Ato Tefera Tadesse and Ato Sertse Sebh, Supra Notes 232 and 244 respectively.

³⁶² See interviews with Ato Tefera Tadesse, Ato Tsegaye Tadesse and Dr. Million Belay, Supra Notes 232, 285 and 322 respectively.

³⁶³ See Interviews with Ato Tefera Tadesse and Ato Sertse Sebh, Supra Notes 232 and 244 respectively.

³⁶⁴ FDRE, EPA (2004), *The Third National Report on the Implementation of UNCCD/NAP in Ethiopia*, February 2004, Addis Ababa, P.24.

³⁶⁵ See Interviews with Ato Tefera Tadesse, Ato Sertse Sebh and Ato Tsegaye Tadesse, Supra Notes 232, 244 and 285 respectively.

4.2.2. Possible Prospects

In this research, it is also very important to look at those possible prospective situations and efforts so as to evaluate the process of ensuring forestry management in the country. So the positive sides and prospects are subject for discussion in this part of the paper.

It can be observed that there are encouraging attempts to manage and utilize forests. Among these the political will for the establishment of Environmental Protection Agencies at federal and regional levels including the adaption and formulation of various sectorial and cross sectorial legislations do more for the protection and conservation of forests and the environment at large. The ratification of various international conventions and the coming in to legal effect of sectorial policies and legislations could also be mentioned among the prospects since they facilitate and enhance the process of implementation of the sector.³⁶⁶

The introduction and recognition of climate change as major global concern brings about the concern of all members of UN including Ethiopia. Under the UNFCCC government parties are taking various actions to either sequester the carbon from atmospheric carbon dioxide or to mitigate emissions of greenhouse gases that are indicated as causing changes in the earth's climate.³⁶⁷ So such recognition resulted in the launching of various bio-carbon initiatives and projects (the Humbo Assisted Natural Regeneration Project, Abote District Afforestation /Reforestation Project, Ada Berga District Afforestation /Reforestation Project, Sodo Farmers Managed Natural Regeneration & Agroforestry Project).³⁶⁸ An afforestation projects, reforestation, PFM and SSLFMP activities in SNNPR, Amhara, Tigray, Benshangul Gumz and other regional states are also instrumental towards achieving the goal.³⁶⁹ As a result of the internalization of this issue: climate change and global warning, the concern of forestry management shows some development. It increases/promotes not only government concern but also the incoming of financial supports and funds from different NGOs (development partners)

³⁶⁶ See FDRE, MOFED, Supra Note 314, P.37.

³⁶⁷ See Mulugeta Limenih and Tadesse W/Mariam, Supra Note 93, P.158.

³⁶⁸ Ibid.

³⁶⁹ See Interviews with Ato Tefera Tadesse and Ato Kassahun Abate, See Supra Notes 232 and 258 respectively.

for such projects. In addition technical and related supports are also obtained from many development partners.³⁷⁰

The management approach which is commonly called Communal Forest Management and Participatory Forest Management in scaling up forests in many areas could also be the positive factor contributing to prevent further degradation of forests. So the introduction, employment and propagation of such type of forestry management scheme from a single undertaking to benefit sharing is also an effective solution to solve those serious problems of environment. Such promising results indicated in Oromia and SNNPR and the expansion to Benshangul Gumz, Amhara and other regions have something to do with ensuring forestry management in the country.³⁷¹

The importance of NGOs could also be explained for their greater roles in the introduction of alternative energy sources and technologies in many regions. The introduction of such technologies helps reduce the use of forests for fire wood and related livelihoods. Their roles are concrete in reducing deforestation and health problems related to indoor pollution. Therefore their role is visible not only in the development and introduction of alternative energy sources like bio fuel, different fuel saving cookers mud bricks prepared from local out puts and materials contribute a lot in reducing deforestation. Their roles are also significant in awareness creation and scaling up the intervention of the community towards forestry management.³⁷²

The development and increments of micro-finance institutions in many areas of regions contribute a lot in changing the livelihoods of those who have been previously dependent on forests for their livelihoods. Almost in all regional states these institutions have been giving loans to be paid in the long run for many peoples especially low earning peoples to permanently change their livelihoods.

³⁷⁰See Interviews with Ato TeferaTadesse, W/ro Meseret Kebede and Dr. Million Belay, Supra Notes 232, 253 and 322 respectively.

³⁷¹ See USAID, Supra Note 323, P.42.

³⁷² UNDP (2005), *Energy Services for the Millennium Development Goals: Achieving Millennium Development Goals*, 2005, P.39.

Therefore those efforts of the country could contribute to enhance the development of forestry management of the country.

Chapter Five

5. Conclusion and Recommendation

After looking at the actual undertakings, prospects and challenges, the developments and/or failures in achieving goal seven (sustainable forestry management), the writer reaches the following conclusions and recommendations.

5.1. Conclusions

- The commitment of the government to formulate policies and strategies and the inculcation of MDGs in the policy documents is the commitment of the government. On the other side the establishment of government institutions to regulate and manage the sector is among the developments of the sector towards achieving sustainable forestry management in the country.³⁷³
- Though there are serious threats standing against sustainable development of forests, the recognition of those threats with intervention schemes in state's adaptation plans to climate change show the focus of regions to mitigate the negative effects of climate change. Even if those regional states come up with such adaptation plans, until this research is organized, all of them do not have regional legislation on forest conservation, utilization and development except Oromia and SNNPR.
- The Current policy document of the country (GTP) calls for the assistance of NGOs to build green economy and environmental actions. Development partners have been working almost in all regional states in up scaling the level of conservation and rehabilitation of forest resources of the country. One can understand that their roles are so significant in the promotion of PFM, technical and financial supports, developing and distribution of alternative energy sources, awareness creation and advocacy services. But only some known NGOs are working on environment.

³⁷³ See Mellese Damtie and Mohammud Abdulahi, Supra Note 274, P.160.

- Despite of the fact that the administration of justice is one of the crucial issues in the process of achieving sustainable forestry management and environmental sustainability at large, justice organs (police, prosecutors and courts) do not as such consider forest offences as very much harmful and serious.
- The various bio-carbon incentives and projects in different regional states contribute not only for rehabilitation, and increasing the forest density of the country but also important to develop the country's economy by attracting such types of projects and enormous amounts of carbon fund for the country.
- We observe that there is no any regulation to implement Forest Conservation, Development and Utilization Proclamation (Proclamation No. 542/2007). Even if such draft regulation is prepared by the MOA and advocated by NGOs (Melca-Ethiopia, Farm-Africa and others) and submitted to the Council of Ministers, it is not yet approved.
- The other conclusion remark can be investment and settlement related problems. In spite of its importance, illegal settlements for better farm land and animal grazing have been causing serious threats to the forest ecosystem of the country. On the other side, though the current policy of the country promotes investment, due to the gaps and implementation problems, dense natural forests are destructed in the pretext of some investment projects. Here the writer can conclude that there is disparity and gap between the objective of investment policy and Impact Assessment Legislation since some of the existing investment projects are known to cause irreversible deforestation and destruction of forests.
- Although there are meaningful efforts towards meeting the goal, the sector has been facing so many challenges and problems in which forests and related resources have been over utilized and eroded from time to time due to various destructive forces mainly anthropogenic /human pressure and related factors. Government forestry administration and management practices have been decentralized and the responsibilities to manage

and administer forest resources have been devolved to the regional governments. They have little capacity to shoulder these challenging responsibilities and could not control deforestation.³⁷⁴ Moreover, institutions which are involved in natural resource conservation and development have had weak interaction and integration even though it is necessary for the formulation of effective plans and strategies. Priorities, plans and strategies are formulated independently within the different sectors are often conflicting and some of them do not consider the importance of sustainable forestry environment.³⁷⁵ Therefore such negative factors for sure hinder back the efforts towards achieving the goal.

- In the due course of analyzing this research, the forestry sector is organized at case team level under Natural Resources Management Directorate. The team is suffering from not only lack of professionals but also the necessary budget. There is no any Woody Biomass Inventory Unit even if the forestry management sector needs to handle one of these basic tasks. We can see that all these problems bring about lack of consistent forestry management system in the country. Due to all these problems, controversial figures and reports are available on the sector. In relation to EPA and regional entities, we can also say that due to lack of capacity and lack of enough budgets, their duties are not undertaken as effectively as possible. So we can say that the sector is not given much more recognition despite its wider importance.

Considering all the above important points and explanations, one can conclude that Ethiopia has been showing some sort of effort (development) and commitment in contextualizing sustainable forestry management and the issues of PFM in her policy and legal documents including establishing institutions. But due to those constraints and serious problems faced at all level, the effort towards achieving the goal cannot escape from such difficulty. Therefore the expected achievements are not as such simple and obtainable in the country. Here we can conclude that due to the points stated above, the country's forestry sector hasn't reached at its sustainable level to achieve Goal Seven.

³⁷⁴ See Mellese Damtie and Mohammud Abdulahi, *Supra* Note 274, P.161.

³⁷⁵ See Mellese Damtie and Mohammud Abdulahi, *Supra* Note 274, P.161

5.2. Recommendations

Based on the research findings, much more effort and commitment need to be taken to scale up the conservation, utilization and management of the sector to reach at its sustainable level. Thus it will be very important to take in to account the following recommendations.

- The Ministry should be committed enough to coordinate and implement the administration and management of country's forests. It should reconsider the forestry management team should be equipped with all necessary professionals and budget. In addition the team should also incorporate Woody Biomass Inventory Unit for effective implementation. It is also quite important that the Council of Ministers should approve and endorse the respective regulation to facilitate the implementation of Proclamation No. 542/2007.
- Regional states should issue their own forest conservation, development and utilization legislations. In their legislations they should give recognition to the three types of forest resource ownership namely state forest, private forest and community forest so as to facilitate private forests at the backyard and community forests through PFM. Accordingly justice organs (prosecutors, polices and courts) and the community should not be reluctant to bring those offenders before justice for the respective penalty.
- Bio-carbon projects and PFM activities should get advanced and developed in many other areas and regional states too since the country's climate, soil type, weather humidity, distribution of rain fall, availability of water and other related factors are so good and friendly. In order to achieve sustainable forestry management, afforestation and reforestation programs should also be employed in all regions including arid and semi-arid ones utilizing the highly available irrigable water resources of the country.
- The regulatory capacity of EPA and regional entities should be developed in executing Impact Assessment Legislation. Before an investment plan is approved and investment land is given, the impact of that investment should be evaluated. It should also be

reviewed even after the establishment of that project. In this respect, the existing investments on high forests like Gumare, North Omo and Sheka should be supervised again since they are causing irreversible loss to our immense biodiversity value especially to our forests. Those investment projects should respect the country's policies and protect those natural forests they should undertake their duties while balancing the existence those natural forests. On the other side all concerned bodies should take actions to mitigate those adverse effects. Accordingly for proper endorsement and implementation of the country's environmental policies, laws and regulations, there should be strong coordination and linkage among concerned government organs, NGOs and civil societies working on such area.

- Awareness creation campaign has also be made at all level to drastically change bad cultures and habits of destroying forests for different purposes and even without reason. Therefore such activity should also be mainstreamed to conserve and develop trees in their communities and surroundings. Cultural and traditional institutions like "Gada" system and others should be promoted and given legal recognition to enhance the regulation of the use of natural resources and maintaining peace among the multitude of users. Their role of maintaining and protecting their environment is so prominent since they can easily influence and coordinate the local community.³⁷⁶ Along with this, illegal settlement should be controlled through creating linkage among government, civil societies and cultural institutions to balance with the need of migrating community and the environment.

- The roles of micro finance institutions are so high in changing the livelihoods of peoples especially poor and women dependent on the cutting down and selling of firewood and charcoal. Those financial institutions have been contributing a lot in supporting those groups of peoples to engage in environmental friendly activities like bee keeping, animal husbandry, poultry production and related activities. In addition, their roles are also extended to the extent of ensuring sustainable forest management, distribution,

³⁷⁶ See FFE Occasional Report, Supra Note 255, P.33.

propagation and localization of alternative energy sources like bio-gas technology, energy saving chimneys, agro-fuels and mud bricks. Therefore they should be promoted and distributed especially to the places where the rate deforestation is so high. So employment of alternative energy sources should be supported and promoted at large. Thus the existing and the newly established micro finance institutions should be encouraged to sustain the country's forests. It is also equally important to reconsider and mitigate the limitations imposed on those NGOs working on environmental activities.

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12. Interview with W/ro Snework Dagnachew, Seed Physiologist and Researcher, and Acting Director, Forest and Rangeland Resources Sub Process in IBC, December 3, 2012.

Annex

Interview Questions

Date: -----

1. Please mention the institution you are working for.
2. Your full name, working position and title in the institution?
3. Is there any standard or base line in which one can measure the achievement or failure in meeting sustainability of forestry management specific to the institution or otherwise?
4. If so, what are those baselines or standards?
5. Do you have any experience and causality in which offenders against environment (illegal cutting of trees) are punished so that forests are protected better? Or do you have any experience in which this issue is brought before courts?
6. If not, what are the possible reasons?
7. So far the issue of environment and forestry management aspects are given emphasis in the development plans(PASDEP and GTP) referring MDG as an objective to be attained during those plan periods, Can we observe any achievement in light of the specific aspects of meeting MDGs especially Goal Seven ?
8. To what extent do the institution (MOA or EPA) and other regional entities work in achieving Goal Seven of MDG especially with forestry management? What have been done in the last 12 years in the PASDEP and GTP to achieve the intended goal especially in forestry management?
9. What is to be done until 2015 to achieve the goal? And what are the efforts done to achieve the GTP targets on environment and climate change especially with regard to sustaining forest resources in Ethiopia?
10. Do you have coordination and relation with government institutions like EPA, IBA, MOA and Development partners (NGOs) working on environmental issues especially in the management of forests?
11. If so, what are those development partners? And what are their roles?

2. Can you mention forestry plot lands and areas of afforestation CDM, REDD and REDD+ projects in which the efforts of government and related institutions is executed in enhancing forestry distribution and related plant ecosystem?
11. How do you evaluate the roles and the degrees of special enabling legislation and program to undertake such concern?
14. Could you mention the challenges of the sector?
13. How do you evaluate the enforcement mechanism in relation to natural resource and forest conservation? What are the gaps?
16. What are the roles of government institutions of regional states with regard to forestry management? Or are they granted with specific mandates to undertake, implement and enforce those aspects?
17. What should be done for the better achievement forestry management?
18. Which executive organs and institutions of government supposed to have responsibility in natural resource conservation and forestry management? What would be better? Do you comment any other better arrangement so as to conserve and manage forests better?
19. By virtue of article 23 of Proclamation No 542/2007, the Ministry is empowered to issue regulations and directives for the proper implementation of the Proclamation (list of endangered species, list of quantity of forest products with respect to transport permits and the like), do we have those regulations and if so how they are executed?
20. Is there anything done or to be done at large to permanently change the livelihood of those dependent on the cutting and using of trees for different purposes?
21. Do you have special organizational arrangement specific to conservation and management of forests? What about regional entities?
22. Do you see the roles of other sectorial and cross sectorial legislations like Proclamations on Environmental Impact Assessment, Environmental Pollution Control and the like in supporting forestry management aspects? If so please say something on the roles.
23. Is there any thing you would like to add or say in addition to what we have discussed so far?

*Thanks a lot for your sincere
cooperation in devoting your time!!!*