



Natural Resource Use, Misuse, Strategy, Policy to Regeneration and Conservation in Ethiopia. In Case of Soil and Water

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Abstract

A natural resource is a material that comes from the Earth and in its raw or "natural" state is of value for one reason or another. Thus, this paper was conducted to review use & misuse, strategies & policy of natural resources particularly soil and water conservation & regeneration interventions in Ethiopia. Soils have at least six main functions (uses) relevant to human life [1]. It is to be noted that small-holder farming is the dominant feature of Ethiopia's agriculture (Ethiopian Highland Reclamation Study of 1996). Soil; also bring into play for agricultural production, production of biomass. In Ethiopia, water; have multipurpose, for example, agricultural production, and hydropower but in some context misuse it such as polluting, overexploitation. But, misuse it in various circumstances by overgrazing, over plowing. Therefore, adopt sustainable soil and water conservation interventions and develop effective strategies for the soil and water conservation program are important.

Keywords: Soil; water; Policy; Strategy

Introduction

A natural resource is a material that comes from the Earth and in its raw or "natural" state is of value for one reason or another. Natural resource management is the taking care of natural resources such as land, water. It's about the long-term implications of actions - thinking about the future and not just about now. The goal is sustainability - balancing social (people and communities), economic (money and jobs) and environmental (land, water, air and living things) factors. Misuse of natural resources; refers to excessive use, destructive use or achieving imbalance between resources either individually or in combination. Use of natural resource; appropriate apply of natural resource. Ethiopia use water and soil for much activity. But there is misuse of this resource in various circumstances. Therefore, this term paper was reviewed soil & water use & misuse, strategies & policy to conserve & regenerate in Ethiopia. In Ethiopia there are many numbers of natural resource such as water, soil. But there is information gap about use & misuse, strategies & policy to regenerate & conservation of soil & water. Therefore, this review paper was thus conducted to review use & misuse, strategies & policy of natural resources particularly soil and water conservation & regeneration interventions in Ethiopia.

Use & Misuse of Soil & Water to Regeneration & Conservation in Terms of Ethiopia

Soils have at least six main functions (uses) relevant to human life [1]. The production of biomass by agriculture and forestry filtering, ground water, and the plant cover, protecting the environment and especially humans through the protection of the food chain and drinking water reserves. Soils are biological habitats and gene reserves. Soils serve as a spatial base for technical, industrial and socio-economic structures and their development, e.g. for the construction of industrial premises, houses, transport systems, sports and recreation areas, dumping of refuse, and others. Soils are used as a source of raw materials, e.g. clay, sand and gravel for construction, and also as a reserve of water and energy. Finally, soils are used for cultural heritage, forming an essential part of the landscape.

It is to be noted that small-holder farming is the dominant feature of Ethiopia's agriculture (Ethiopian Highland Reclamation Study of 1996). In this system, Population pressure coupled with unfavorable soil permanent status system has been responsible

for; over- ploughing and over-grazing of farmlands. Environmental degradation has resulted from mismanagement of land (soil) resource, deforestation and inappropriate land use systems. Utilization of dung and crop residues for fuel.

Water is our most precious resource. Water is vital to life. Humans, plants, and animals are made up of mostly water. (Strengthening Water Sector Monitoring and Information System in Ethiopia GIRWI Ethiopia Project [Final Draft July 2009]. Water resource use in Ethiopia for; Drinking, washing, cleaning, cooking, and growing our food as well as many, many other things. Agricultural activity, industries generate electricity, manufacture things, firefighting, street cleaning, hydroelectric plants, Irrigation, Recreation, etc

The water management and utilization problems as related to the environment in Ethiopia are not limited to uneven distribution of water resources and human actions [2]. irrigation often causes severe salinity in dry lowlands, mass deforestation of an area creates adverse impacts on water resources quality and quantity, Soil degradation; decrease water infiltration rates, lack of preventing harmful conditions stop from water-pollution, salinization and alkalinization & Over exploitation; disturbed and deteriorated water cycling.

Regenerate & conservation strategies & policy of soil in Ethiopia

For sustainable development in soil conservation for attainment of food security & poverty alleviation the following tools technique & strategy direction have identified [1].

- promoting participation of the beneficiary population
- Organize Village conservation committee
- Enhancing women participation in conservation activities

Policies, regulations and bylaws of soil conservation & regeneration

Community bylaws: At present, the Ministry of Agriculture is in the process of finalizing the agricultural policy document, which the Government is to approve soon Empowering the community in a way that they assume the responsibilities of planning area enclosures, and in the meantime set bylaws providing for proper implementation of the plans and the protection of assets created would be of paramount importance [1].

Livestock management: According to the response of people interviewed, livestock interference owing to the prevailing free grazing practices in Ethiopia is among the major limitations to sustainable management of government and NGOs to introduce improved livestock husbandry and formulate livestock management policies.

Incentives for practicing farmers

Soil conservation and Sustainable Agriculture. The Policies are:

- To safeguard the integrity of the soil and to protect its physical and biological properties.

- promote the use of appropriate organic matter and nutrient management for improving soil structure
- promote effective ground cover as one of the most important factors in soil erosion control
- soil and water conservation measures [1]
- develop forestry on the farm, around the homestead and on eroding land
- To use biological and cultural methods as well as resistant or tolerant varieties or breeds
- To shift the emphasis in crop breeding from single line plant varieties and animal breeds

Regeneration & conservation strategies & policy of water in Ethiopia

The Ethiopia Water Resources Management Policy (WRMP) was prepared by MOWR and approved by the Council of Ministers in 1999. In dealing with basic principles and general water resources management issues, the WRMP provides for integrated and comprehensive management of water resources [3,4]. These policy provisions emphasize the necessity of an integrated water resources management (IWRM) approach. Involving the management of all aspects of water resources management (including the management of surface and groundwater resources, water quantity and quality issues,

Objectives of the water resources management policy

- Development of the water resources of the country for economic and social benefits
- Allocation and apportionment of water based on efficiency of use, equity of access, and sustainability of the resource.
- Managing and combating drought through, efficient allocation, redistribution, transfer, storage and efficient use of water resources.
- Combating and regulating floods through sustainable mitigation, prevention, rehabilitation and other practical measures.
- Conserving, protecting and enhancing water resources and the overall aquatic environment on a sustainable basis.

The water resources management strategy

Following the adoption of the Water Resources Management Policy in 1999, the Ministry of Water Resources sought to develop a national water sector strategy to translate the policy into action

- The strategy document incorporates the following measures;
- Develop databases on all aspects of water resources, such as surface water, ground water, hydrology, meteorology, wells, boreholes, springs, water works, etc...;
- Review and assess available water resources data and information at all levels, and identify water resources information gaps;

- Identify sources of water information, and initiate a program for data collection to bridge these gaps; Identify and define information requirements of users;
- Develop guidelines on the dissemination of water resources information to enhance information networking;
- Establish/strengthen Ethiopian Water Resources Information Centre (EWRIC) within the Ministry of Water Resources with adequate facilities and professional staff; and,
- Establish interface between federal database and regional databases.

Conclusion and Recommendations

Ethiopia is endowed with a plenty natural resource. Water resource used for improving of the livelihoods. In Ethiopia, water; have multipurpose, for example agricultural production, hydropower.... ..but in some context misuse it. Like polluting, over exploitation.... Soil; also bring into play for agricultural production, production of biomass but, misuse it in various circumstances by overgrazing, over- ploughingThe community externalizes natural resource conservation due to lack of awareness about its benefit. Adopt sustainable soil and water conservation interventions and develop effective strategies to the soil and water conservation program [5-7]. Create awareness of the beneficiaries on the problem of soil erosion. Develop new perceptions and concepts for

sustainable land use. Promoting participation, formulation of sound policies, proper livestock management, formulation of appropriate technological packages.

Acknowledgment

None.

Conflict of Interest

No conflict of interest.

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