IOSR Journal of Agriculture and Veterinary Science (IOSR-JAVS)
e-ISSN: 2319-2380, p-ISSN: 2319-2372. Volume 13, Issue 2 Ser. I (February 2020), PP 59-62
www.iosrjournals.org

Problems Facing the Management of the Jalhak ForestReserved, Upper Nile State

Sotuh Sudan, * Dr. Shadad Wani Lado Worja
Department of Forest Sciencse, Faculty of Forestry and Range Sciences, Upper Nile University, South Sudan

Abstract: *The paper presents selected aspects of the problems associated with conducting forest management in the Jalhak reserve forest in Upper Nile State, South Sudan.*
Jalhak forest reserved is one of the most important natural forests reserved in the Upper Nile State in South Sudan. The main objective of the study is to highlight some of the problems facing the Jalhak reserved forest in northern Upper Nile State.
Data was collected by the social survey (questionnaire), in addition to the observations and exchange views and ideas, references, scientific papers, GOSS, and NGOs reports.
Jalhak forest reserved faced constraints represented in the overgrazing, over-cutting, ownership of the gardens near the forest land, fires overexploitation for different uses in addition to logging of some tree species to fight the birds from farms.
The results showed that the major constraints facing the Jalhak reserved forest in the area were over-cutting, overgrazing and ownership of gardens lands of forest lands. And human activities often referred to as land-use, such as forest exploitation, fishing, agriculture, has resulted in the loss of forest resources, such as deforestation and forest degradation.
The study recommended: new rules should be initiated, protecting the Jalhak forest and involving local people in all forest management activities to promote environmental awareness and to ensure the sustainability of the forest.

Key words: *Jalhak forest, constraints, respondents, South Sudan,Upper Nile State*

Date of Submission: 06-02-2020 Date of Acceptance: 20-02-2020

I. Introduction

Forests provide numerous ecosystem services, including watershed protection, water quality and prevention of erosion. Forest resources in South Sudan are also important economically for both timber and non-timber forest products (NTFP), the benefits of which are described below.

Forest resources are highly important, as these forest resources can mitigate the harmful effect of greenhouse gas emission (FAO, 2007, UNDP and UNEP; 2010).

Natural forests contribute to society and the economy in many complex ways. Unless the socioeconomic values can be adequately enumerated and regulated in policy and regulated systems, there is a danger that certain types of value (often monetary) over-ride the non-market values and undermine the potential achievement of multi-functionality.

The forest resources in South Sudan occur mainly in the high rainfall woodland savannah zone and Montane forests of Didinga and Imatong mountains. They are catchments for many rivers that are a source of water in the country (MAF, 2009).

South Sudan forests are an important source of food, timber, fuel wood and habitat for wildlife, and provide economic opportunities. Fuel wood and charcoal supply 80% of the country needs. Forests also provide fodder for livestock, as well as marketable non-wood products such as honey, gum Arabic, tubers and roots and medicinal plants (Teref, 2011).

Upper Nile state have apart from using forest lands for farming, local people had eleven types of uses of the trees, including charcoal, firewood, poles, timbers, medicine, withies, ropers, fibers, live fences, and carving (FAO, 2003).

II. Problem Statement and Justification

In South Sudan, forests and tree products are rapidly being degraded, logged and cleared for charcoal, firewood, and agriculture.

The rich diversity of South Sudan forests is in decline and traditional methods of conservation are longer sufficient to ensure conservation. This indicates that there is a problem either with the administration or

manner in which it is enforced and that there are other factors that impede the operation of South Sudan forest authorities.

Socioeconomic factors are contributing to alter or delete the forest cover and affect the forest structure and species compositions (FAO, 2003).

Forests in South Sudan are fragile ecosystems that suffer varying levels of degradation through uncontrolled fires, uncontrolled grazing, and over-harvesting (MAF, 2012).

Upper Nile State has been losing its forests at alarming rates. As people displaced by the war returns; demand for land for settlement and cultivation increase. Hence forest cover suffers a result of this demand difficult situation is made worse by the absence of clear and unified government policy for deals with these problems(MAF, 2012).

Human activities often referred to as land-use, such as forest exploitation, hunting, fishing, agriculture, has resulted in the loss of forest resources such as deforestation and forest degradation (FAO et al, 2008; Sanz, 2007; IUCN, 2010).

The socioeconomic consequences of forest degradation and consumption are overlooked. In Upper Nile State many households cooking in the home depend on fuelwood, this dependence on fuelwood has contributed to the growing exploitation of the country forest.

The finding from this study will add input for research, development, and policymakers to promote the uses of forest products for sustainability and poverty alleviation.

III. Objectives

The main purpose of this study: to contribute to improving and protection Jalhak natural reserved forest.

- To highlight some of the problems and constraints facing forestry management and development in Jalhak reserved forest

IV. Description of the Study Area

The study was undertaken in the Jalhak area County of northern Upper Nile State. The study area is located in the north-eastern part of the central clay plain of the Upper Nile State in the dry land savannah zone, it lies between latitude 6 north and 12 and longitude 35 south and 28.5 southeast (GOSS, 2007).

The area has two seasons, namely, rainy and dry seasons. The rainy season commences in May and ends in November, while the dry season lasts from December to March.

Generally, the vegetation of the area is largely dependents on rainfall and soil type. According to Harrison and Jackson (1956), Upper Nile State lies in the low rainfall woodland savannah belt on clay. There various types of tree species in the study area such as *Acaica seyal, Acaica sengal,Balanites aegyptica, Azadrichta indica, Aciaca nilotica, Borassus aethiopum* and wild palm trees (GOSS, 2005).

The study area is composed of many tribes, including Dinka, Shilluk, Nuer, and Boron (Maban).

The most important economic activities in the study area included agriculture, livestock, gums, and fishers.

V. Methodology

The primary data were collected through face to face interviews with farmers, group discussions with key informants and observations. A random sample of 50 respondents was selected from two villages around the Jalhak forest reserve, for this study using multiple-stage random sampling. The tool of data collection for the social survey is the questionnaire that was constructed following the scientific measure to collect information from the local people was obtained.

The collected data were statistically analyzed; using statistical packages for social science.

VI. Results and Discussion

Problems Facing the Management of the Jalhak Reserved Forest

Table 1 Problems facing the Jalhak forest as perceived by the respondents in the study area

Problems facing the forest	Frequency	Percentage%
Over-cutting	61	40.7
Overgrazing	53	35.3
Bypass ownership gardens	41	27.3
Fires	28	18.7

Source: field data, 2017

Results in table 1 showed that there were significant differences among the respondents according to problems facing the Jalhak forest as perceived by the local people in the study area.

Moreover, the results showed that over-cutting, overgrazing, bypass ownership gardens in the forest lands and fires were mentioned by 40.7%, 35.3%. 27.3& and 18.3% of the respondents in the study area as the main constraint respectively.

Moreover, results showed 40.7% of the respondents agreed that over-cutting is the most main problem that facing the Jalhak forest, this activity has a negative in the forest because of the growing demand for firewood and charcoal in the study area. This situation requires the intensification of extension campaigns in the area to reduce this phenomenon.

Overgrazing is on of the problems facing forest sustainability in the study areal. Local people graze sheep and cattle inside the forest, where they eat of the forest plants they want, unaware that they are depleting are source they need most, which in the future.

Meanwhile, overgrazing was classified by 35.3% of the respondents as one of the problems that lead to the deterioration of pastures, especially, when followed by traditional grazing where the wandering of animals in the pasture without regard to the land and regulations pasture.

Hence, rural people in the area should have the right to practice grazing in the forest without causing damage to seedlings and small growing. In addition to that, the number of animals that are allowed to graze per-unit area should be under the supervision of forest authorities in the State.

Moreover, 27.3% of the respondents noted the exposure of forest assaulted by the owners of some gardens near the forest land. This led to a decline of the forest land in the study area due to the ownership of land, which controlled by the local community law.

Traditional use of bush fires is a major threat to forests and tree growing throughoutSouth Sudan. The fires are used for land preparation under shifting cultivation, forhunting, and for rejuvenation of grazing areas. Forest fires also originate fromlightning, smokers, and honey collectors. Sometimes, communities deliberately set fires out of discontent with policies and regulaations. Prevention and control of bush fires therefore requires full enegagment of local communtiies.

Eventually, 18.7% of the respondents mentioned the fires as one treats to the Jalhak forest and these fires caused by farmers for using fire to clear trees, shrubs, and remains of crops when prepared the land for planting. And we cannot ignore the word of caused by human or natural causes, where most of the fire around the forest and the construction of watchtowers, and sensitize the residents to the danger of fire and farmers taking all necessary precaution to prevent fires and how to deal with the blaze when it happens.

Suggestions of Respondents to Develop Jalhak Reserved Forest

Table 2 Showed important suggestions forthe active performance of forest management in the study area

Suggestions	Frequency	Percentage%
Intensification of planting trees around villages	70	46.7
Establishments of community forestry in the study area	69	46
Planting forest trees with fruit trees	60	40

Field data, 2017

From the above table, 2 results revealed that local people in the study area have good knowledge and suggestions to improve the Jalhak forest. 46.7% of the respondents agreed to plant trees around villages. Meanwhile, 46% agreed to establish a community forest in the area as in the village around the forest.

Revealed that the, 40% of the respondents agreed on planting fruiting trees in the forest to bring indirect benefits as environmental benefits, also this practice will provide safety from disease and pests that spread easily in single-type forests.

Nevertheless, the involvement of local communities in the decision-making process is essential to achieve the success of some projects directly related to local communities and to avoid failure and collapse of the projects (Vedeld, 2007).

VII. Conclusion And Recomendations

Fuelwood and charcoal make up approximately 80% of the country's energy supply due to lack of alternative sources of energy such as electricity, wind and solar power, and gas. As a results charcoal making is an attractive economic activity as more people become involved in charcoal production, accelerating the depletion of trees. There is also a growing demand for fuelwood for brick making.

Agriculture is the primary economic activity in the study area. People are nomadic agro-pastoralists who engage in both agriculture and the rearing of livestock, primarily cattle.

The results show that the major activities in the study area were over-cutting (illegal cutting), overgrazing and gardens ownership lands.

Tree cutting is greatly accelerated by illegal cutting of poles and in particular by charcoal making (figure1). Charcoal making is becoming very lucrative because of the easy access to the markets at Jalhak or Melut markets.

Selling firewood, which requires a license with a once-off is widespread in the settlement (to lower degree also charcoal) and is an important source of income especially for households in the study area.

Grass cutting for roofing and fencing has little impact on the ecosystem and management since the grass layer is anyhow annually burnt.

***-** Encourage people to work for the protection of the forest.

***-** Developing new policies and laws for grazing and over-cutting to protect the forest from degradation.

References

[1]. FAO, (2003) Tropical Deforestation Causes, Consequences and Some Land Use Alternative, Rome- Italy.
[2]. FAO, UNDP and UNEP, (2007) Timber Utilization and Management, Rome, Italy.
[3]. FAO, UNDP and UNEP, (2008) Collaborative program on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries.
[4]. GOSS, (2005) Government of Southern Soudan, Draft Forestry Policy Paper for the GOSS
[5]. GOSS, (2007) Sustainable Livelihoods Analysis of Post-conflict Rural Development in Southern Sudan.
[6]. IUCN, (2010)Mangrove Forests in World Decline, Available at: http:// www. Iucn. Org/about work programs species/red
[7]. MAF, (2009) Ministry of Agriculture and Forestry, Annual Report, 2009 Juba, Southern Sudan.
[8]. MAF, (2012) Household Food Security and Forest Policy and Economics, Annual Report.
[9]. Senz, M.J. (2007) Reducing Emission from Deforestation in Developing Countries.
[10]. Teref.D. (2011). Factors Affecting People Participation Forest Management, Addis Ababa University, School of Graduate Studies Regional and Local Development Studies.
[11]. Vedlledd, (2007) Vedlled, P, A, Aneglesen, B, Bob, E, and G.K. Berg. Forest Environmental Incomes and the Rural Poor, Forest Policy and Economics.

Dr. Shadad Wani Lado Worja. "Problems Facing the Management of the Jalhak ForestReserved, Upper Nile State." *IOSR Journal of Agriculture and Veterinary Science (IOSR-JAVS)*, 13(2), 2020, pp. 59-62.