Negative And Positive Social Behaviors of Local People Around Jalhak Reserved Forest Case Study: Jalhak Area- Upper Nile State- South Sudan

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Abstract: The study was conducted at Jalhak area in Jalhak reserved forest at Upper Nile State South Sudan. The aim of this study was to investigate the influence of some positive and negative social behaviors of local people around Jalhak reserved forest in South Sudan. The household was the research unit of data collection. Secondary data was obtained from the documents of corporations and ministries reports, archives related to study. A questionnaire was designed to collect primary data from the respondents at the Jalhak area. In addition to that, field observations and general survey was used to obtained primary data. The study showed, many negative social behaviors such as removal of trees that attract birds and rodents, removal of some trees, according to taboos and over exploitation of some trees for smoking (Dokhan) resulted the depletion of forests and there was high demand of forest products. In addition to that many local people abandoned the animal breeding due to low income, poor production and poor life style. Jalhak forest faced many constraints represented in the weakness of forest laws and policies, repeated rockerries owners attacked on the forest territory, weakness of environmental awareness among respondents, absence of extensional services in the study area and absence of technical and plans. The study also conducted that, the depletion of forest in the Jalhak area was most serious problem. Also a result showed that, the income of local people depends mainly on the forest products. New rules should be initiated, protecting the Jalhak forest and other forest in the State and involving local people in all forest management activities to promote environmental awareness and to ensure the sustainability of the forest were recommended.

Keywords: social behavior, economic behavior, forest depletion, Jalhak reserved forest, forest products, Jalhak area.

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I. Introduction

Forest resources are recognized to have a number of values, including intrinsic, economic, cultural and aesthetic values. Forests have economic value in so far as they are scare and capable of generation human welfare, policy decisions are most frequently determined on economic criteria yet, it is widely acknowledged that market transaction provide an incomplete picture of total economic value(Hultberg, 2005). Forests and woodlands make up roughly 29% of South Sudan land area (roughly 192000 square kilometers). Approximately 20% of the country land area is forest resources that received a special level of protection and management (GOSS, 2007). 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 energy needs. Forest also provides fodder for livestock, as well as marketable non-wood products such as honey, gum Arabic, tubers and medicinal plants. South Sudan is losing its forests. And with no unfilled policy the rate at which people are cutting trees is worrying, if this trend continues future generations are going to suffer and Sudan may be come desert (GOSS, 2010).

Logging is removal of trees from the forest for the purpose of producing, using and exporting of timber. This practice does not only reduce the population of tree species in the forest but also damage or injure the unlogged trees crowns thereby leading to their death. When this happens, tree to non-timber forest produces in the forest are leads to extraction of all species of flora and fauna (plants and animals) in the forests leaving the forest area deforested.

The local people around Jalhak forest in the Upper Nile have been clearing land for agriculture to meet the food needs of the every-growing population. Most of the forest population communities follows shifting
cultivation where they clear a patch of forest, cultivate crops, on it and following seasons, they move into the new areas and follow the same of the often return to the same area, after new year (GOSS, 2010).

II. Research Problem
Forest plays a significant role in maintaining the climate. A forestation is responsible for loss the carbon dioxide, which threatens rates of temperature, and also contributes to reduction of floods, droughts and reduce soil cavity (Wunders, S, 2007). The forest resources in Upper Nile may play a great role in the improvement of the economy of people living in North Upper Nile especially Jalhak forest. The over grazing and over cutting are the main negative practices in Jalhak forest. In addition, to shifting cultivation, which leads to forest deterioration? Moreover, the lack of forest law and policy, extension services, and poor management are the main reasons which lead to depletion of Jalhak forest. Moreover, the disputes and conflict over land ownership between shepherds and farmers leads to deterioration of the vegetation cover in the area. Also, no researches come out to study the depletion and deterioration of the forest cover in the study area, and their impacts on people living around them. This research will throw light on these problems.

III. Objectives
The main purpose of this study is to highlight the influence of some negative and positive social behaviors of local people around Jalhak reserved forest. The specific objectives are:
- To identify the economic activities of local communities around Jalhak reserved forest.
- To assess the social behaviors of local communities and its effects on Jalhak forest.
- To highlight the awareness level of local communities of the Jalhak forest reserved.

IV. Study Area And Methodology
The study was undertaken in Jalhak area locality of Melut County. The climate of the area is semiarid and average of 300–600 mm. The vegetation is characterized by several Acacia species of which important multipurpose species. The area is inhabitant both by settled and nomadic population; their economic is dominated by traditional rained agriculture and seasonal wages. The shorter rains which start in April and the long rains begin in July and end in October. The most important economic activities in the study area included agriculture, livestock, gums and fishery (GOSS, 2007). The study area is composed of many tribes, including the Dinka who are the leading tribe in number. Following the Dinka in number is boron and their areas are Maban, Adar and Bonj, Shilluk who are found in Jalhak town and east Nile from Jalhak area.

The study was carried out in Upper Nile, in South Sudan. People in the study area are mostly depending on agriculture for subsistence livelihood support, producing sorghum, millet, kerkede and vegetables on small scale.

4.1 Methodology
Primary data were obtained through both formal and informal interviews. Secondary data was obtained through the governmental reports, records and papers. All families at Jalhak area constitute the research population. Sample was used. While a household represented the research unit and a sample was used (10%). Data was summarized used descriptive statistical in addition to chi-square test.

V. Results And Discussion

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>98</td>
<td>65.3</td>
</tr>
<tr>
<td>Female</td>
<td>52</td>
<td>34.7</td>
</tr>
<tr>
<td>Total</td>
<td>150</td>
<td>100</td>
</tr>
</tbody>
</table>

Significance
Source: research survey, 2015

Table (1) above showed that 65.3% male and 34.7% female. Results showed that, there were significant differences among the respondents according to gender of respondents. However results showed, That male was higher than female and this due the absence of female in the war area. They migrate to the safe area in the north of the State. According to society, and work division the girls involve in forest activities and agriculture while the male are responsible of animal rearing.
The results in the table (2) above indicated that, 62.7% of the people fall in the age group 20-40 and 23.3% of the age 40-50 years and 14% of the age more than 50 years. Results showed that, were no significant differences among the respondents according to age. However, results showed some traditional societies in Africa allocated certain tasks or services in the community for sex and age (Antadike, 2007).

Where, 38% were literate. The educated groups, 61.9%. There is no any kind of education provided before the primary school level. GOSS and NGOs need more efforts to provide university and pre-informal education in the area and the forest extension should build make use of this high rate of educated categories.

### Table 2: Age of respondents

<table>
<thead>
<tr>
<th>Age</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-30</td>
<td>36</td>
<td>24</td>
</tr>
<tr>
<td>30-40</td>
<td>58</td>
<td>38.7</td>
</tr>
<tr>
<td>40-50</td>
<td>35</td>
<td>23.3</td>
</tr>
<tr>
<td>&gt; 50</td>
<td>21</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Significant

Source: research survey 2015

The results in the table (2) above indicated that, 62.7% of the people fall in the age group 20-40 and 23.3% of the age 40-50 years and 14% of the age more than 50 years. Results showed that, were no significant differences among the respondents according to age. However, results showed some traditional societies in Africa allocated certain tasks or services in the community for sex and age (Antadike, 2007).

Figure: 1 below showed the educational level of the respondents in the study area:

Where, 38% were literate. The educated groups, 61.9%. There is no any kind of education provided before the primary school level. GOSS and NGOs need more efforts to provide university and pre-informal education in the area and the forest extension should build make use of this high rate of educated categories.

### Table 3: positive social behaviors of people around Jalhak forest

<table>
<thead>
<tr>
<th>Positive social behavior</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job opportunities</td>
<td>75</td>
<td>50</td>
</tr>
<tr>
<td>Social service</td>
<td>47</td>
<td>31.3</td>
</tr>
<tr>
<td>Social fencing(taboos)</td>
<td>33</td>
<td>22</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Significant

Source: research survey, 2015

The results in table (3) showed that, job opportunities, social services and social fencing (taboos). 50%, 31.3% and 22% respectively, reported by respondents as positive social behavior in the study area. However, results showed that, there were significant different among the respondents according to positive behavior of people around Jalhak forest. As finding revealed, 50% of the respondents agreed with the importance of the social role of forests in their life because it generates income to them in everyday life. Hence Jalhak reserved forest provides many opportunities for the population in rural areas, where the majority of the local people working in the field of the sale of forest products and non-wood forest products as a secondary source of income.

Meanwhile, 31.3% of the respondents indicated that, the Jalhak forest provides a good place to entertain in the region as well as to residents of other village around the areas, where they come into the forest to entertain during the holidays and feats season. Forest entertainment for humans and through establishment of
hunting a motor trip, parks and markets sell those some handicraft (UNDP, 2009). Moreover, 22% of the respondents agreed to the sanctuary of the trees. Where they have stories and folk tales, vary from one to another are all glorifying the tree and consider it a gift of god because the circumstances of their daily lives and even in animals that they own which provides the forest fodder, grasses and even small branches of the feed shrubs and trees during the summer periods.

Fig (2) above showed the negative social behaviors of the people around the Jalhak area  

**Source:** research survey, 2015

The findings in figure(2) below indicated that, removal of the tree that attracted birds and rodents, removal of trees according to taboos and over exploitation of some trees(Dokhan), 37.8%, 36.2% and 26% respectively were the main negative social behaviors around the Jalhak forest. As the findings revealed 37.8% of the respondents cutting the trees and shrubs around the farms because they harbor birds that damage agricultural crops. In the study area, some farmers are turning to cut down trees around the farms to avoid the birds, especially starling birds, which threaten the largest corn crops in the region, where the bird’s starling’s trees take up notes, which makes farmers resort to primitive ways to fight bird through the cutting trees that harbors birds.

This practice of farmers to fight birds cause damage to the forest because it kills the trees and shrubs as well as grasses and herbs. So the forest administration should organize the control over the birds and prevent these primitive ways in fighting birds so as to ensure the safety of the forest due to this practice. Meanwhile, as mentioned 36. 2% of the respondents were cut down trees of Balanities aegyptica and Zizphus spinachersti for charcoal and firewood more than other species of trees because they haven demons. The successions of this erroneous belief in the region represent a major threat to these species of trees and may be lead to the destruction of these trees. Therefore the forest authority in study area needs to intensive guidance campaigns to raise awareness of people regarding the importance of these species, economic and social aspects of trees, and involve the Mayors, elders in the awareness campaigns. Acacia seyal trees are used for ornamental purposes, where women used Acacia seyal (Telih) in the process of smoking (Dokhan) is usually passed down since ancient times, and this was confirmed by 26% of the respondents in the study area.

Acacia seyal significance to the rural people inherited from ancient times due to its an environmental and pharmacological and economic use as well as, making a lucrative business for many who work in the trade of firewood and charcoal increase demand for different purposes. Through observation, it was noticeable that, there were challenges facing the Acacia seyal trees, including the lack of natural regeneration, overgrazing, excessive cutting of trees due to growing demand by consumers, intensive pieces of charcoal traders and firewood for the quality of firewood in addition, to the overgrazing, which hampers growing of seedlings. Forest authorities should find solutions to these challenges.
Table: 4 ways of forests extracted from the Jalhak forest

<table>
<thead>
<tr>
<th>Ways of forest products extracted from the Jalhak forest</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheating</td>
<td>75</td>
<td>50</td>
</tr>
<tr>
<td>Free access</td>
<td>63</td>
<td>42</td>
</tr>
<tr>
<td>License</td>
<td>37</td>
<td>24.7</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Significant at Source: research survey, 2015

The results in table (4) showed that, 50% of the respondents extracted products from Jalhak forest through cheating, while 42% through free access, in addition to 24.7% through licensee. As showed in the results, 50% of the respondents have access to the various forest products in the study area without permission through cheating. During the debate in the group discussion. The researcher has noted that most of the respondents were active in trade of charcoal and fire wood. Meanwhile, 42% of the respondents have access to forest products in the study area without paying fees for forest administration in the area, where those only allowed taking the branches, shrubs of trees and dead shrubs as well as tree access to non-timber forest products like the fruits of Acacia nilotica, Zizphus spincharsti, Balanites aegyptiaca and other forest products. Moreover, 24.7% of the respondents were getting a license of permission from the forest administration in the area and often there is a tender or auction for the sale wood as customary in the Sudan and other countries.

VI. Conclusion And Recommendations

The depletion of forest in Jalhak area was the most serious problem facing Jalhak reserved forest. The income of local people depends mainly on the forest products. With forestlands by reasons of exploitation trees for many uses, agricultural expansion and other activities of forests products, the large numbers of residents have migrated from their villages searching security, agricultural lands and fodder; in addition to that many people abandoned the animal breeding due to low income and poor production systems. In consequence, some of local residents face an increasing poverty, decreasing food energy and conflicts among land users. In the other hand, the population increase in north Jalhak associated with increasing for food production in forestland, resulting in more pressure on forestlands. The respondents have solutions to overcome these constraints mainly included: cultivation of trees, establishment of the community forestry and cultivation of fruit trees. The study recommended that the two levels of government, local residents can successfully manage this forest in sustainable way, when the appropriate policy and laws actions are enforced. There is some awareness among the people of the study area about conservation in general, and about the relationship between conservation and income generation in particular. There is therefore a foundation on which to build an appreciation of the need for forest protection and agrofoesty.

Abbreviations

F: Frequency
FAO: Food Agriculture Organization
Goss: Government of Southern Sudan
UNDP: United Nations Development Program

References
