



Constraints and opportunities of Social Forestry in Gedaref State as perceived by stakeholders.

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Abstract

During previous years, various models had been adopted for developing community tree growing in the Gedaref State. However, these approaches were not evaluated. This study attempted to look into the endeavor and to explore the opportunities for augmenting people participation in the management of forest resources in the area. Different methods were used for data collection. These included: reconnaissance survey, structured and semi-structured interviews, group discussion, and observation. According to the study illicit tree felling was the most notable constraint that faced the development of social forestry in the study area; in addition to over grazing and fires. Active participation of local people in management of forests was recommended as the main way-out.

Keywords: community forestry, barriers, access

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Introduction:

Forestry is not about trees only, it is about people, and it is about trees only in so far as trees serve the needs of people (Suliman, 1992). Hence, community forestry defined as “any situation which intimately involves local people in forestry activities. It embraces a spectrum of situations ranging from woodlots in area which are short of wood and other forest products for local needs, through the growing of trees at the farm level to provide cash crops and the processing of forest products at the household, artisan or small industry level to generate income, to the activities of forest dwelling communities (FAO, 1992)”.

Life in rural areas is often characterized by scarcities such as lack of improved seeds, fertilizers, farming implements, health care, and schools. Under such circumstances, the planting of trees, even in situations of acute fire wood and building material shortage may not make sense to farmers (Johansson, 1988 and Wellstead *et al.*, 2003). Hence, some barriers usually hinder community forestry initiatives. Meanwhile, in some instance customs and traditions may interfere with tree planting, where certain species may be associated with bad omen or spirits, in other places farmers don't accept growing trees near their fields as they provide a haven for seed eating birds

(FAO,1985, Davis-Case *et al*, 1992 and Glover, 2005). Meanwhile, security of land and tree tenure are an important institutional issues, where farmers and communities have no long-term guarantee on the use of the land they farm it, and they need to be assured that trees will remain their property. Nevertheless, competing uses for land, labor, and capital may hinder community forestry, where tree planting is seen to be one of several possible alternative land uses (Nielsen and Castro, 2001). Also time scale of forestry inevitably conflicts with the priorities of the rural poor who focus on meeting of the day. Eventually, farmers will not participate unless they have full security that they will receive the benefits of their work with regard to the spatial distribution of benefits (Bristow, 1996, FAO, 1985 and Ford Foundation, 1998). The Gedaref State which lies in the central clay plain, is one the most productive areas in the Sudan. The State that largely devoted to rain-fed farming constitutes over 50% of the mechanized rain-fed schemes in the country. This, provide a large quantity of crops residues and other agricultural by-products: in addition the northern part of the State is very rich in natural pastures that extend to other neighboring States. All these led to increased livestock numbers that accounted to over six millions animal heads (Ministry of Agriculture – Gedaref State,2002). Mismanagement and over exploitation of forest resources' resulted in deterioration of the forest cover. This reflected the failure of forest policies or its application to bring about forest protection and sound forest utilization. Forest National Corporation (FNC) alone was not in a position to tackle a large forestry plantation programmes to meet the needs of rural communities. Hence, there is a call for mobilization of other stakeholders to be involved in forestry programmes.

During the past years several social forestry models were adopted for developing community tree growing in the Gedaref State. However, these initiatives have not been evaluated. The overall objective of this study is to look into the social forestry initiatives and to analyze the experiences to improve existing approaches or to introduce new ones. However, the specific objective of the study is to investigate the actual constraints that faced the endeavor and to explore the opportunities to enhance people participation in the development and management of forest resources in the area.

Materials and methods:

The Gedaref State lies in the central clay plain, it's one of the most productive areas in the Sudan especially the mechanized rain-fed farming. This provides large quantities of crops, crop residues and other agricultural by-products; in addition to that its very rich in natural pastures. All these led to increased livestock numbers that accounted to over six million animal heads.

Three sites were selected in the Gedaref State, namely: Rawashda, Doka, and Gadambalyia. The locations represented the various models of community forestry adopted in the State.

The research population consisted of two main categories: the officials and the villagers. The former category included government officers and some experts. Seven of the experts who are familiar for their experience in the study area were interviewed. In addition, the following officers were interviewed: the Federal Forests Manager in the State, State Forests Manager, Head of Extension Section, Head Range Department, Head Animal Production Department, Chief Gum Producers' Union, Chief Farmers' Union, Head Shelterbelts Section, Head Mechanized Agricultural

Corporation, and Head Refugees' Affected Areas Rehabilitation Project.

Selection of the research participants from the villagers' category was based on the snowball technique and theoretical saturation point. In which any group of people from a stakeholder category was randomly selected. Then, the group members were asked to list out other members (key informants) concerning the forest resources as they perceived. Those lists constituted the sampling frame from which a random sample of 20 % of each category was selected, with a total number of 137 villagers (53, 53 and 31 in Rawashda, Doka and Gadambalya respectively).

Different methods and techniques were used during the data collection process such as: secondary data were collected from; literature and archive review; published papers and journals. Primary data collected from; questionnaire, check list, observations, group discussion and reconnaissance survey. Qualitative data analyzed using descriptive statistic (SPSS software).

Results:

The findings cover various approaches being adopted in developing participatory tree

growing in the study area, their drawbacks, constrains, and suggestions to improve community forestry. Meanwhile, the results of the study revealed that local people experience a range of acute deficiencies related to various aspects. These problems, though not directly linked to social forests, but they influence the way people interact with the resource. The most commonly identified problems were: lack of water supply, lack of means of transportation, low income, shortage in educational facilities, lack of extension services, lack of labor at right time, lack of control over use of land and trees.

Rawashda area:

According to the table (1), several constraints affected development of forests in the area such as: illicit felling of trees, over grazing and wild fires as perceived by 67.9%, 30.2% and 11.3% of the respondents respectively. Villagers in this area perceived protection, involvement of local people in management and enforcement of forest laws as the main suggestions to overcome these constraints as stated by 41.5%, 20.8% and 15.1% of the respondents respectively.

Table 1: Constraints and solutions to community forest in Rawashda area

Constraints	Frequency	%	Suggested solutions	Frequency	%
Illicit felling	36	67.9	Protection	22	41.5
Over grazing	16	30.2	Involvement of local people in management	11	20.8
Fires	6	11.3	Enforcement of laws	8	15.1

Doka area:

The findings revealed existence of some constraints that affected the development of the community forests in the area. Meanwhile, most of the respondents 62.4% perceived illicit felling of trees as the major threat to tree growing, compared to 17%

who mentioned fires. Whereas fines and confiscation of the produce and tools used in committing the offence; enforcement of laws; and protection against fires constituted the main solutions to those constraints as perceived by 39.6%, 37.7% and 15.1% of the respondents respectively (Table2).

Table 2: Constraints and solutions to community forest in Doka area

Constraints	Frequency	%	Suggested solutions	Frequency	%
Illicit felling	33	62.4	Fines and confiscation of produce and tools	21	39.6
Fires	9	17	Enforcement of laws	20	37.7
			Protection against fires	8	15.1

Gadambalyia area:

On the one hand, as shown in table (3), Illicit felling of trees was perceived as the major threat to community forests by 67.9% of the respondents, whereas, 29.1% mentioned locust damage to trees. On the other hand,

involvement of local people in management, enforcement of forest laws and application of insecticide were suggested by 61.3%, 35.5% and 29% of the respondents respectively as helpful measures to overcome these obstacles

Table 3: Constraints and solutions to community forest in Gadambalyia area

Constraints	Frequency	%	Suggested solutions	Frequency	%
Illicit felling	21	67.9	People involvement in management	19	61.3
Locust damage to trees	9	29.1	Enforcement of laws	11	35.5
			Application of insecticide	9	29

Discussion:

Several constraints faced the development of community forestry in the study area. Illicit tree felling was the most notable among these constraints. In fact, it is one of the most vital threats, which impeded the development of forest resources. Likewise, other threats included over grazing, natural hazards such as locust plagues and fires. Morewise, the study area is characterized by existence of diverse communities. The sedentary farmers who settled permanently and developed a distinct rural culture and social institutions typical of settled life; and

the pastoral nomads with a livestock raising and tribal culture. The principal consequence of such cultural disparity is a wide range needs, attitudes, interests and use of community forest resources. Farmers view community forest resources as wasteful use of land otherwise could have been used more wisely for crop production. Whereas, villagers and nomads perceive community forests as an imperative land use system that need to be expanded and properly managed. Nomads constitute significant segment of the area population. Consequently, it is logical that their socio-economic mode of life will

influence utilization of natural resources. The fact that the nomads keep large herds of cattle, camels, sheep and goats create conflicts and tension over the land/resource use with farmers. Thus, understanding such conflicting perceptions and interests are prerequisites to formulating community forestry strategies and working plans. Religion is one of the cultural elements that plays decisive role in shaping communities behavior and relationship with natural resources. In this connection, Islam is a common dominator link between the existing communities. This bond has been acknowledged by Katz (1984) and Abu Sin (1986) as an important vehicle to promote forest conservation practices and tree planting activities. Where, relevant verses from the holly quran and/ or sayings of the Prophet Mohamed "Hadith" could be used in forestry extension. One need not to mention that people need more than preaching to behave "wisely". Hence, one expects that availability of suitable standard of living including provision of the basic needs and essential social services will determine the way people act with respect to natural resources in their surroundings. In this respect, the study reflected reality of poor social services mirrored by shortage of water both for human and animal consumption; as well as poor health and education/extension services. Facilitating provision of such services will logically enhance people participation in community forestry endeavors (Furfey, 1988; and Hirvonen, 1988). According to the respondents, involvement of local people in managing their forests resources is the main way-out to avoid probability of drop in their enthusiasm to cooperate. However, other solutions included: protection, enforcement of forest laws in terms of fines and confiscations of tools and produce, application of insecticides and opening of fire lines.

In addition, the official's categories portrayed further suggestions. These suggestions included: provision of funds, training, allocation of land for community forestry activities and simplification of the registration process of community forests. The analysis showed that, the long-term interaction has enabled the local people to acquire valuable traditional knowledge and accumulate precious experiences. These helped greatly in the provision of advise and some solutions of the problems in management. This inline with what was stated by (Colfer *et al.*, 1995 and Elhassan, 2000). However, in order to improve the community forestry management, the stakeholders insisted that these considerations must be taken into account and they perceive that this could be achieved through regular meetings with local people, leaders and officials for acknowledgement, awareness raising and consultation. However, local people can be organized in clubs or trade unions to facilitate communication and involvement. Coordination committees could be formed from different stakeholders at different levels. It is clear from the nature of the stated difficulties that fragmented treatments might not be helpful. Hence, it would be more effective if Government Organizations (GOs) and Non-Government Organizations (NGOs) have joined their efforts to meet the needs and priorities of the local people in the study area. Therefore, an integrated approach dealing with the social services might enhance community participation in tree planting programmes. In addition, the institutional linkages appear to be very weak. GOs and NGOs efforts are fragmented and they seem to be working in isolation from each other.

Conclusion:

The following conclusions were drawn from the study:

As any other initiative that involves many stakeholders, one should not overlook probabilities of drop in their enthusiasm to cooperate.

Illicit felling of trees, over grazing and fire were the notable constraints to community forestry.

Experiences indicated that prolonged registration procedures, expensive registration fees, taxes, on community forests products and lack of extension services constituted the main institutional limitations. The fact that the literacy level is low among local people's category puts more burden on the forestry extension services. Hence, the extension agency will have to deal with a number of realities such as: difficulty of setting up local organizations, the limited opportunities for choosing suitable extension methods and aid materials, disputes between stakeholders over control of land and trees.

References:

- Abu Sin, M.E. and Elsammani, M.O.(1986).socio-economic Aspects of Integrated Management, with special reference to the Forest Resources of Kassala Province-Eastern Region. The case of Rawashda and Wad Kabu Forest.
- Bristow, S. 1996.A social and technical guide to irrigated shelterbelt Establishment in Northern Sudan. SOS Sahel International, U K.
- Colfer, C.J., Pierce, R. and Wolenberg, E. (1995). Principles, Criteria and Indicators: Applying Okhams Razor to the people-Forestry Link. CIFOR working paper NO.8, Bogor
- Davis-Case,D., Heikki, G. and Varpu, V. 1992.Planning and Management of Participatory Forestry Projects. Vol. 2: Readings. FTP. FINNIDA.
- Elhassan, N.G. (2000). Stakeholders Approach for Sustainable Management of Forest Resources. M.Sc. Thesis. University of Khartoum, Sudan.
- FAO1985.Tree growing by rural people. FAO forestry paper no.64.FAO, Rome.
- FAO 1992 Community forestry, ten years in review, community forestry Note 7,Rev.1.FAO, Rome.
- Ford Foundation 1998. Forestry for Sustainable Rural Development. A review of Ford Foundation Supported Community Forestry Programmes in Asia.
- Furfey, R.N. (1988). A survey of women's attitudes towards forestry and fuel wood in eight rural villages in Eastern Sudan. Khartoum, Sudan. Field Document NO.31, FDES (GCP/SUD/033/NET), Forest Administration.
- Glover,E.K. (2005). Tropical dry land rehabilitation, case study on participatory forest management in Gedaref, Sudan.
- Hirvoven, S. (1988). Factors affecting the attitudes of villagers towards the afforestation programme: A socio-economic case study in the Tendulti-Kosti area, Sudan, Sudan-Finland Afforestation Programme, Technical report NO.11.
- Johansson, S.C. 1988. Forestry for Rural Development. Ethiopia National Course.
- Katz, C. (1984). The Social Context of Reforestation: A socio-economic and cultural profile of project area with recommendations for programme of Forestry Extension. Refugee Reforestation Project, Eastern Region, Sudan, Care, Sudan.
- Ministry of Agriculture-Gedaref (2002). Agricultural investment in Gedaref State (in Arabic).
- Nielsen, E. and Castro, A.P. (2001). Indigenous people and co-management: implication for conflict management. *Journal of Environmental Science & Policy*, 4, 229-239p.
- Suliman, F.Y.1992 participation in Gum Arabic Belt Project. M.Sc. thesis,

of representation within the context of local forest management decision making. *Journal of Forest Policy and Economies*, 5:1-11.

Agricultural University of Wageningen,
Netherlands

Wellstead, A.M., Stedman R. and Parkins,
J.R.(2003). Understanding the concept

الغابات الشعبية بولاية القضارف: المعوقات والفرص كما يراها المعنيون بالامر

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المستخلص:

خلال السنوات الماضية بذلت عدة محاولات لتبنى و تطوير زراعة الأشجار بالمشاركة الشعبية بولاية القضارف، ولكن تلك المبادرات لم تجد حظها من التقويم. أجريت هذه الدراسة بغرض الوقوف على تلك التجارب سعياً وراء تطوير الفكرة وتقديم المقترحات التي يمكن أن تسهم في تطوير إدارة موارد الغابات بالمشاركة الشعبية. يستخدم البحث خليطاً من الأدوات لجمع المعلومات، شملت: المسح الاستطلاعي، المقابلات المنظمة وشبه المنظمة، مجموعات النقاش، والملاحظة. تبعاً لهذه الدراسة يعتبر القطع الجائر للأشجار من أكبر من المعوقات التي تواجه تجربة الغابات الشعبية بالمنطقة، بالإضافة للرعى الجائر للأشجار والحرائق. ترى الدراسة بأن المخرج الرئيس يتمثل في المشاركة الفاعلة للمواطنين في إدارة موارد الغابات.