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RESEARCH ARTICLE

CHALLENGES OF IMPLEMENTING COMMERCIAL FORESTRY POLICY IN AFRICA: EVIDENCE FROM NORTHERN UGANDA

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ABSTRACT

Although Commercial Forestry Policy and supportive laws exist for the development of commercial forestry, which together with other socio-economic activities like agriculture contribute to the quality of socio-economic welfare, the population in Northern Uganda has remained largely poor. This study aimed at examining the factors that affect implementation of the current Commercial Forestry Policy in Northern Uganda. A Cross-sectional survey design, with a target population of 127 participants was used in this study. Data were analyzed by measuring the frequencies of occurrence of sets of response. The findings revealed that, inadequate public awareness creation, lack of seeds/planting stocks and funds, were among the major challenges affecting implementation of the current Commercial Forestry Policy in Northern Uganda. The study recommended that continuous awareness creation be conducted, financial and physical incentives be provided to the public and researchers should explore further into other strategies for effective implementation of Forestry Policy, among others.

INTRODUCTION

In Uganda forestry provides a wide range of benefits to government, local communities and the private sector (MLWE, 2001). These benefits from forestry, according to Smith and Scherr (2002), include varieties of forestry related products and services, income, employment, assets, improvement of education and healthcare services, and infrastructure development. According to the Uganda Bureau of Statistics [UBOS] (2011), 95% of households in Uganda use wood fuels (wood and charcoal) as a main source of energy for cooking. Firewood was most commonly used by the rural household (86%) while charcoal is commonly used by urban households (70%). Regional variations reveal that 88 percent of households in the Northern Uganda mainly used firewood. Effective Forestry Policy and laws that can direct and guide forestry interventions, influence markets and guide the decisions and behaviours of consumers, land users and managers (FAO, 2003; MLWE, 2001). Such policy must be adequately translated into operational tactics, strategies and programmes at the local and the national level (Turyahabwe & Banana, 2008). This is because; implementing appropriate policies, legislations and institutional arrangements result in widespread economic, social and environmental benefits (Yasmi, Broadhead, Enters, & Genge, 2010). The development of the Forestry Policy has gone through a series of changes with varying impacts on the socio-economic welfare of the public. According to McDermott, O'Carroll, and Wood (2007), Cambodia's Ministry of Agriculture, Forestry, and Fisheries [CMAFF] in 2007 formulated a Forestry Policy coordinated and reviewed by the International Panel on Forests [IPF], International Forum on Forests [IFF] and the United Nations Forum on Forests [UNFF]. One of the global objectives of the Forest Policy is to enhance forest-based economic, social and environmental benefits with the view of improving the livelihoods of the forest dependent people (CMAFF, 2007; Chaytor, 2002). The IPF, IFF, and the UNFF's forest policy proposal for action placed emphasis on the protection of local benefits, reduction of rural poverty, support of the indigenous knowledge and public participation of local people including women (McDermott *et al*., 2007). On the contrary, the policy did not adequately promote socio-economic benefits in different parts of the world due to limited funds for policy implementation, insufficient knowledge, skills and experience, and poor public participation and lack of support from various stakeholders (CMAFF, 2007).

In Uganda, Forestry Policy and legislation, as well as their impact and outcomes on the forest sector and livelihoods of local people have greatly evolved from the pre-colonial times up to the present. During the pre-colonial era, there was no formal (written) Forest Policy. Localized tribal kingdoms ensured environmental regulations through a system of customary controls. Human needs and resource availability were kept in balance by the subsistence mode. This mode was sustained by low impact hunting, gathering and long rotation shifting cultivation; hence people lived in harmony with nature (Demere, cited by Madondo, 2003). The first Forestry Policy in Uganda was formulated in 1929 by the colonial administrators during the Colonial Forest Service (1898-1961), characterized by a highly regulatory, centrally controlled and

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industry-biased policy with limited local community participation (Turyahabwe & Banana, 2008; Madondo, 2003; Mogaka, Simons, Turpie, Emerton, & Karanja, 2001). Promotion of socio-economic welfare was not the primary goal of the policy and, as a result, it had little impact on the wellbeing of the local people (Madondo, 2003). The forestry policy review of 1948 emphasized capital accumulation, environmental protection and conservation at the expense of livelihoods and other interests of the indigenous people, hence directing benefits to local authorities (Madondo, 2003; Mogaka *et al*., 2001). The policy also denied peasant communities access to extract forest resources on private lands other than for subsistence needs (Nyangabyaki, cited by Madondo, 2003). The Post Colonial Forest Policy of 1962 – 1980s upheld the colonial status quo underplaying the participation of the local communities and therefore did not adequately promote the socio-economic welfare of the local population (Mogaka *et al*., 2001). The forestry policy review of 1988 had limited guidance on the principles and strategies for implementation, excluded local communities adjacent to forests and was also silent on the roles of the private sector and rural communities in forestry; these, led to limited impact on the improvement of livelihoods and the reduction of poverty (Nyangabyaki, cited by Madondo, 2003; MLWE, 2001; Mogaka *et al*., 2001).

According to Langoya *et al*. (2009), there are currently various policies and laws conducive for forestry development. The National Forestry Policy (2001), for example, provides directions for sustainable management of forests in order to achieve increases in economic, social and environmental benefits for all Ugandans. The policy is required to be implemented in partnership and in collaboration with various stakeholders, including but not limited to local communities, the private sector, NGOs/CBOs, local and central government, and the international communities. Other important policies supportive for the developments of the forestry sub-sector include: The National Environment Policy (1994), and the Local Government Decentralization Policy (1997). On the other hand, there are also various laws that reinforce the Forestry Policy in supporting the development of the forestry sub-sector. The most important of these laws are the National Forestry and Tree Planting Act, 2003, which is the principle law for sustainable management of forests; the National Environment Act (1995); and the Local Government Act (1997). The current Forestry Policy in Uganda formulated in 2001 emphasizes multiple use forestry and multiple stakeholder roles and collaboration. It also has the vision and goals which emphasize economic prosperity and social benefits from forests and trees for all the people of Uganda, especially the poor and the vulnerable (Madondo, 2003; MLWE, 2001). Despite the presence of commercial forestry policy, it is observed that the level of involvement in commercial forestry has remained low and the quality of socio-economic welfare of the people of Northern Uganda is poor. There is high level of poverty, with only a modest poverty decline (World Bank, cited by Higgins, 2009), high level of food scarcity and poor housing quality (Lucy, 2000). Northern Uganda has also remained the poorest region in the country (UBOS, 2011) and it also lags behind in almost all aspects of socio-economic indicators with the worst nutrition status, poor infrastructures and other indices of human development (Peace, Recovery and Development Plan [PRDP] for Northern Uganda, 2007). It can also be observed that a large part of the population consists of the unemployed rural poor, who cannot afford to earn substantial amount of income to access basic welfare services for better livelihoods. Although the prevailing socio-economic situation above is attributed to a number of socio-economic programmes, it is believed that Commercial Forestry Policy can play a significant role in contributing to the promotion of quality socio-economic benefits in Northern Uganda.

Literature Review

Challenges to public Awareness about Commercial Forestry Policy

In forestry, a number of significant benefits have also been attributed to public awareness creation. These include making forestry initiatives visible to stakeholders and fostering Forestry Policy acceptance (FAO, United Nations Economic Commission for Europe [UNECE], & the International Labour Organization [ILO], 2000). These authors further stressed that, public awareness in forestry enhances the capacity to mobilize local (i.e. human and financial) resources, capacity for inter-village collaboration and programme management. These findings were limited by the fact that the benefits of public awareness reported above were mainly based on forestry in general and not on commercial forestry specifically. The researcher therefore felt that this study would fill the above gap by revealing the benefits of public awareness about Commercial Forestry Policy and its socio-economic objectives specifically. Various factors were reported to pose challenges to public awareness creation on development programmes. According to Okaka (2009), in many villages, people are still reliant on their own families for knowledge rather than external groups. The same author further revealed that creating trust and changing attitudes cannot happen overnight. This means that awareness creation should be repeated endlessly. Okaka's (2009) study did not reveal the factors that pose challenges to public awareness creation about Commercial Forestry Policy and its socio-economic objectives in Gulu district in particular. This is because, the subject scope of the study was on "National Health Policy Awareness", the geographical scope was Uganda as a whole and data for the study was literature reviewed from internet search engines, websites of health organizations and libraries in Uganda. It, therefore, became difficult to relate the above findings to the challenges of creating public awareness about Commercial Forestry Policy and its socio-economic objectives in Gulu district.

According to Obel-Lawson (2006), mass media campaigns purportedly fail because of the physical and psychological barriers to the free flow of ideas and the existence of uninformed groups in societies. Hyman and Sheets cited by Obel-Lawson (2006) added that, awareness campaigns can also fail because of the chronic "know nothing" of some groups in society that are hard to reach. In addition, some people seek the sort of facts which are congenial to their existing attitudes and different people interpret the same information differently.

Challenges to public involvement in Commercial Forestry

Public involvement in forestry has been reported by different authors to have a bearing on a number of benefits. According

to Charter and Gronow (2005), public involvement in forestry has been associated with increased public awareness, maximizing the total benefits and costs sharing of forests and, the enhancement of the social acceptance of sustainable forestry. FAO, UNECE and ILO (2000) also reported that public involvement in forestry enables the public to secure access to forest resources, promotes local decision making, good governance and better protection of forest resources. These findings were also limited by the fact that they were based on papers presented at the United Nations Conference on Environment and Development (UNCED) held in Brazil (Rio de Janeiro, 3 – 14 June, 1992) and the Third Ministerial Conference (TMC) for the Protection of Forests in Europe held in Portugal (Lisbon, 2 – 4 June, 1998). These imply that, the report was purely based on secondary and tertiary data, not field research. In a study conducted on the development of ecotourism and conservation projects in Budongo forest reserve, Mid-western Uganda, a number of benefits the local people got from their involvement in those projects were identified. The benefits included material support to local primary schools, employment of people in the ecotourism project and income earnings from the sales of handicrafts (Langoya and Long, 1997). The above authors further revealed that the knowledge of the local people about conservation initiatives improved, collaborative forest management expanded and local communities were also trained in income generating activities as a result of the ecotourism project.

In a forestry outlook study conducted in Uganda, a number of factors have been reported to influence public involvement in forestry. These factors include the need to achieve the Uganda's Vision 2025 and the Uganda's Forestry Sector Vision (Kanabahita, 2001). The Vision 2025 for Uganda is that of "a prosperous people, harmonious nation and a beautiful country" (Toure, D., 2005) and the Uganda Forestry Sector has the vision of "a sufficiently forested, ecologically stable and economically prosperous Uganda" (MLWE, 2001). Kanabahita (2001) further disclosed that the reduction in forest resources, the economic contribution of forests to GDP and livelihoods, and the social functions of forestry also influence public involvement in forestry. These imply that, public involvement in forestry is influenced by the need to address the issue of poverty and the need to promote the socio-economic functions of forestry, such as the provision of employment, income, materials for construction and furniture making, energy, food security, cultural and spiritual values. According to FAO, UNECE and ILO (2000), lack of public interest, under-representation by women and young people in forestry matters and public participation in other socio-economic opportunities more than forestry also limit public involvement in forestry. Although, a gender-balanced participation in forestry improves decision making, management and utilization of forest resources (Sun, Mwangi, and Meinzen-Dick, 2010), integrating gender participation in forestry is sometimes constrained by the perception that forestry is a male-dominated profession (Mai, Mwangi, & Wan, 2011). As mentioned earlier, FAO, UNECE, and ILO (2000) findings are limited by the fact that, the report was based on papers presented at the UNCED (Rio de Janeiro, 3 – 14 June, 1992) and on TMC for the protection of forests in Europe (Lisbon, 2 – 4 June, 1998). The report was also about forestry in general. The above limitations therefore, made it difficult to conclude that the above findings are also similar to the factors which limit public involvement in commercial forestry in Gulu district, Uganda.

In a study conducted to assess the efficacy of Forestry Conservation Policy on rural livelihoods in Uganda, a number of issues related to public involvement in forestry conservation were identified. In a study of the rural people around Mabira Forest Reserve in Central Uganda, Agea, Obua, and Fungo (2009), reported that the 2001 Forest Policy is not a panacea for addressing forest conservation issues in Uganda. The authors further revealed that nearly all the people around the forest reserve did not know the intents of the Forestry Conservation Policy. In addition, their capacity in terms of training to manage forest resources was generally weak. The above revelations imply that the level of the forest reserve adjacent local communities' involvement in forestry conservation was generally lower than expected. In a study conducted to review the contribution of forests to growth, employment and prosperity in Uganda; Kaggwa, Hogan and Hall (2009) reported that in Tororo district, people do not embrace tree planting and forest conservation. The people in the district are instead involved in charcoal burning, brick making and selling firewood.

Effectiveness of Commercial Forestry in Contributing to the Promotion of Sustainable Household Income

Commercial Forestry has been reported to contribute to employment creation, income earning, provision of forestry-related products and services, education and healthcare services, assets and infrastructure development (Agea *et al*., 2009; FAO, 2008; FAO, 2006: MLWE, 2001). In an inventory study conducted to assess the critical issues in the Forestry Sector in Uganda", a number of forestry-related products and services which improve rural livelihoods and eradicate poverty in Uganda have been reported. These include sawn timbers, poles, firewood, charcoal and the non-marketable services of forests (Langoya *et al*., 2009). According to Colls, Ash and Ikkala (2009), the non-marketable services of forests are mainly the ecosystem services. These services include boosting the ecosystem resilience for adapting to harsh climatic changes, maintaining water quality and flow regulation and improving soil and crop productivity. The above authors also added that ecosystem services also reduce the vulnerability of communities to floods and soil erosion. Challenges of implementing commercial forestry policy A number of factors have been reported by different authors to hinder implementation of Forestry Policy in promoting socio-economic welfare. At the international level, it was reported that utilizing forests to finance public investments and inadequate local stakeholders' participation in forestry limit the effectiveness of forestry in promoting socio-economic welfare (Scherr, White, & Kaimowitz, 2003). In addition, the same authors reported that the fear for the long term maturity period of forests also limits public involvement and the effectiveness of forestry in promoting socio-economic welfare.

In commercial forestry, based on experiences from the indigenous territories in Bolivia, Nebel, Jacobsen, Quevedo and Helles (2003) reported that the lack of financial resources and weak cultural, background, knowledge and capability competencies limit public involvement and the realization of socio-economic welfare from commercial forestry.

According to Mayers (2006), lack of public awareness, inadequate rights and lack of local decision making are the major challenges limiting the effectiveness of commercial forestry in reducing poverty. These findings were based on a paper prepared for "The Forests Dialogue (TFD)" secretariat at Yale University, USA; based on experiences and opinions discussed at the "Scoping" dialogue in Richard Bay, South Africa in 2006. In a study conducted in 15 countries in Eastern and Central Africa a number of factors have also been identified to hinder the implementation of Forestry Policy in promoting socio-economic welfare. These factors include inadequate economic incentives, the command and the control approach to and over-centralization of forest management and the lack of benefits sharing with the local communities (Mogaka, *et al*., 2001). According to Agea *et al*. (2009), many factors are responsible for the ineffectiveness of Forestry Conservation Policy in contributing to the promotion of socio-economic welfare of local communities around Mabira forest reserve. These factors were mentioned to include weak capacity of the communities to manage forests for their livelihoods, lack of clarity on the forestry policy intent, inadequate training on forestry conservation and the theoretical nature of the Forestry Policy. According to Kaggwa, *et al*. (2009), inadequate political will to deal with illegal forest activities and encroachment of forests limit the effectiveness of forestry in contributing to the promotion of socio-economic welfare in Uganda.

METHODOLOGY

Research Design

A Cross-sectional survey design was used. This involved selection of the study samples from different categories of the study population, which were studied for the same attributes at the same point in time. This study was conducted in Northern Uganda in villages adjacent to forest reserves where commercial forestry is being implemented.

Study Population

The study targeted Local Government Authority, especially the local council executive committee members on production/environment and employees of the Directorate of Natural Resources at the district and the sub-county/division level, personnel of forestry-related organizations, which included National Forestry Authority, FAO and Tree Talk. The target population also included the private tree farmers, forest produce entrepreneurs and opinion leaders at the local community level in Northern Uganda.

Table 1. The Study sample

S. No.	Categories	Numbers	Percentage
1	Opinion leaders at the local community level	25	19.69
2	Local government leaders and personnel	49	38.58
3	Private tree farmers	19	14.96
4	NFA staff	10	7.87
5	Forestry-related NGOs' staff	11	8.66
6	Forest produce entrepreneurs	13	10.24
	Total	127	100.00

Source: Field research, 2012

Sample size

The target population for this study had a total number of 200 participants which included 39 opinion leaders at the local community level, 77 leaders and personnel of local government authority, 30 members of the commercial private tree farmers, 16 and 17 employees of NFA and forestry-related organizations (FAO and Tree Talk) respectively, and 21 timber business entrepreneurs. Using the Krejcie and Morgan (1970) table for determining sample size for research activities, the sample size for the study was therefore 127 participants.

Sampling Techniques

The study used simple random and purposive sampling techniques. The research needs and type of data required warranted the use of these sampling techniques. The leaders and personnel of local government authority and opinion leaders at the local community level were selected using the simple random sampling. This was to ensure that every member of the population have equal chance of being selected for the study. Purposive sampling technique was used for selecting parishes and villages adjacent to forest reserves;; private tree farmers; forest produce business persons; personnel of NFA, FAO and Tree Talk; leaders and personnel of local government authority at the district level; and opinion leaders at the community level. In addition, three forest reserves in the three parishes sampled were also chosen by purposive sampling technique. In the purposive sampling technique, samples are selected on the basis of the knowledge that the individuals have about the information being sought.

Data Collection Techniques

The study used self-report technique. In self report technique, respondents are expected to report their views, opinions, perceptions or attitudes about an issue of interest (Odiya, 2009). The self-report technique therefore consisted of questionnaire survey and interview survey. Other factors which guided the choice of the technique were the nature of the respondents and the size of the target population against the available space and time.

Validity of instruments

In order to ensure that, the research instruments collected appropriate responses, Content Validity Index was used. Three experts were asked to rate each item of the instruments for validity by checking whether it is "relevant", "quite relevant", "irrelevant" or "quite irrelevant". All items of these research instruments whose calculated validity was lower than 0.6 were rephrased and adjusted.

Reliability of instruments

In this study, test-retest reliability was used. This involved the collection of data from the same and few selected respondents using the same instruments at different points in time. Items of the instruments whose reliability was found to be less than 0.700 were adjusted.

Table 2 shows the age bracket of respondents who took part in the study. The majority of the respondents were in the age bracket of 30 to 39 years and the least number were in the age bracket of 19 and below.

Background Characteristics of Respondents

Table 2. Respondents by age group

Age group	Frequency	Percentage	Cumulative Percentage
19 and below	1	1.00	1.00
20 to 29	24	23.80	24.80
30 to 39	37	36.60	61.40
40 to 49	27	26.70	88.10
50 to 59	12	11.90	100.00
Total	101		

Source: Researchers, 2012

Table 3. Respondents by the Organization or activity they work in

		Frequency	Percentage
Valid	Local government	49	48.00
	Private tree farming	19	18.60
	National Forestry Authority	10	9.80
	Other forestry-related organization	11	10.80
	Forest produce business	13	12.80

Source: Field research, 2012

Table 3 above shows a fair representation of respondents who participated in the study by the organization or activity they work in. Most of the respondents consisted of leaders and personnel of the Local Government. This was followed by the commercial private tree farmers, forest produce entrepreneurs and personnel of forestry-related organizations. The least number of respondents were from NFA, Local Government leaders and personnel were expected to be having adequate knowledge about the effectiveness of Commercial Forestry Policy in the areas they represent or work.

Factors affecting implementation of the current Commercial Forestry Policy

This section was specifically intended to explore the challenges to public involvement in Commercial Forestry and its socio-economic objectives. It was also intended to explain the challenges to collaborative forest management including urban forestry, farm forestry, and forest produce business in Northern Uganda. This is because the above mentioned initiatives are the commercial forestry initiatives which form the basis for the commercial forestry policy statements.

Table 4. Challenges to raising tree seedlings and planting stocks in Northern Uganda

Challenge	Percentage response	
	No	Yes
Lack of seeds and materials	27.50	72.50
Lack of money	34.30	65.70
Lack of knowledge and skills	22.50	77.50
Poor perception	72.50	27.50
Involvement in other income generating activities	60.80	39.20

Source: Field research, 2012

Summaries of responses in Table 4 indicate that lack of knowledge and skills for raising tree seedlings/planting stocks, lack of seeds and other nursery materials, and lack of money to meet the expenses involved in the work had the highest percentage agreements of 77.50%, 72.50%, and 65.70% respectively. As a result, they are considered to be the major challenges to raising tree seedlings/planting stocks. On the other hand, poor public perception about raising tree seedlings and planting stocks, and public involvement in other income generating activities had below average percentage agreements of only 27.50% and 39.20% respectively; hence they were not considered to be the major challenges to raising tree seedlings/planting stocks according to the participants.

Table 5. Challenges to tree planting and management in Northern Uganda

Challenge	Percentage response	
	No	Yes
Inadequate funding	43.10	56.90
Lack of seedlings and planting stocks	34.30	65.70
Lack of land	62.70	37.30
Fear of the long maturity period of trees	52.00	48.00
Low public interest in tree planting	61.80	38.20
Women and children are under- represented	70.60	29.40
Lack of awareness on income benefits of forests	44.10	55.90
Negative public perception about tree planting	67.60	32.40
Lack of money for expenses involved	41.20	58.80

Source: Researchers, 2012

Summaries of responses in Table 5 showed that lack of seedlings and planting stocks, lack of funds to meet expenses involved in tree planting and management, inadequate funding for tree planting, and lack of public awareness about the income benefits of tree planting and management had high corresponding percentage agreements of 65.70%, 58.80%, 56.90, and 55.90%, respectively. According to participants interviewed, it is mainly lack of funds and lack of public awareness which are the main challenges to tree planting and management. The above findings therefore implied that the major challenges to public involvement in tree planting and management are lack of seedlings and planting stocks, lack of funds to meet the expenses involved in the tree planting and management, inadequate funding for tree planting and lack of public awareness about the income benefits of tree planting and management. On the other hand, under-representation by women and children in forestry matters, negative public perception about tree planting, lack of land, low public interest in tree planting and the fear for the long term maturity period of trees had corresponding percentage agreements of only 29.40%, 32.40%, 37.30%, 38.20% and 48.00% respectively. Although these challenges cannot be ignored, they were not considered by the study as the major challenges to tree planting and management.

Table 6. Challenges to household income earning from commercial forestry

Challenge	Percentage response	
	No	Yes
Government is the primary owner	71.60	28.40
Command & control approach	70.60	29.40
Lack of benefits sharing	47.10	52.90
Agriculture & settlement	31.40	68.60
People own no trees	56.90	43.10
Poor involvement in forestry	51.00	49.00
Involvement in other income generating activities	52.00	48.00

Source: Researchers, 2012

From the summaries of responses presented in Table 6, encroachment of forest estates through agriculture and settlement, and lack of sharing benefits from government owned forest resources had the highest corresponding percentage agreements of 68.60% and 52.90% respectively. The reasons that government is the primary owner of most commercial forestry resources, the command and the control approach to forestry management, people own no trees, involvement in other income generating activities, and poor

public involvement in forestry, had percentage agreements of only 28.40%, 29.40%, 43.10%, 49.00% and 48.00% respectively. Responses from interviewees indicated that, lack of benefit sharing from government owned forest resources was the major challenge to household income earning from commercial forestry The above results therefore implied that the major challenges to household income earning from commercial forestry are lack of benefits sharing from government owned forests and encroachment of forest estates through agriculture and settlement.

DISCUSSIONS

The study revealed that the lack of knowledge and skills for raising tree seedlings /planting stocks, lack of seeds and other planting materials and, lack of money to meet the expenses involved are the main challenges to raising tree seedlings and planting stocks. Participants' percentage agreements with the above position were 77.50%, 72.50%, and 65.70% for lack of knowledge and skills for raising tree seedlings/planting stocks, lack of seeds and other planting materials, and lack of money to meet the expenses involved in the work, respectively. The study further disclosed that the main challenges to planting and managing trees in Northern Uganda are lack of seedlings and planting stocks, lack of funds to meet the expenses involve in the work, inadequate funding for tree planting and lack of awareness creation on the income benefits of tree planting and management. Participants' percentage agreements on the above challenges were 65.70%, 58.80%, 56.90, and 55.90% for lack of seedlings and planting stocks, lack of funds to meet the expenses involved, inadequate funding for tree planting and lack of public awareness creation, respectively. The study also revealed that the major challenges to household income earning from commercial forestry in Northern Uganda are mainly encroachment on forest estates through agriculture and settlement and, lack of benefit sharing from government owned forest resources with community members, with percentage agreements of 68.60% and 52.90%, respectively. These findings are partly consistent with the findings of Kaggwa *et al*. (2009) that inadequate political will to deal with illegal forest activities and encroachment limit the effectiveness of forestry in contributing to the promotion of socio-economic welfare in Uganda. Kaggwa, *et al*. (2009) findings were based on forestry in general in the whole country of Uganda and respondents in the study also consisted of only personnel and leaders of Natural Resources Lead Agencies.

Conclusions

The main factors/challenges that affect implementation of the current plans/strategies for the development of the various commercial forestry initiatives included raising tree seedlings and planting stocks due to lack of knowledge and skills for raising the tree seedlings/planting stocks, lack of seeds and other planting materials and, lack of money to meet the expenses involved in the work. Challenges to tree planting and management were mainly lack of seedlings and planting stocks, lack of funds to meet the expenses involved in the work, inadequate funding for tree planting and lack of adequate awareness creation on the income benefits of tree planting and management. Encroachments on forest estates through agriculture and settlement and, lack of benefits sharing from government owned forest resources were, on the other hand, revealed to be the main challenges affecting household income earning from commercial forestry. In general, it is concluded that Commercial Forestry Policy is effective in contributing to the promotion of sustainable socio-economic welfare in Northern Uganda; with a high level of public involvement in the commercial forestry which is effective in contributing to the promotion of sustainable household income, and there are also major challenges affecting implementation of the current Commercial Forestry Policy in the district.

Recommendations

Policy Formulation

Policy strategies and the relevant laws on encroachment of forestry estate (settlement and agriculture) need to be strengthened and supported by policy makers. This will boost government and private commercial forest plantation development, community woodlots establishment and management, and the effectiveness of commercial forestry in contributing to the promotion of sustainable household income.

Policy Implementation

These recommendations are considered to be crosscutting to all implementers of Commercial Forestry Policy.

1. Onsite training (e.g. for raising tree seedlings, planting, various silvicultural operations and so on) should be conducted to equip and enhance public involvement in commercial forestry.
2. The necessary support, incentives and inputs (e.g. financial support, tree seeds/seedlings) should be availed to steer and promote public involvement in commercial forestry initiatives. This will enable commercial forestry to improve the household income, enable the provision of forest products such as timber, poles, firewood for urban consumption and ensure the provision of ecosystem services such as controlling soil erosion and floods, improving the micro-climate and maintenance of green belt, which are very important for the welfare of the public.

Suggestions for Further Research

This research initiative could not cover all the relevant aspects of Forestry Policy, given the limited scope. Still it has broken the ground which requires further exploration. A few areas are specifically recommended here for further research.

1. Forestry conservation policy and the promotion of sustainable socio-economic welfare.
2. Forestry policy strategies and the enhancement of Non Timber Forest Products for livelihoods improvement and poverty eradication.

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