PROSPECT OF LAND GRANT FOR FORESTRY DEVELOPMENT IN IGBOLAND, NIGERIA

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Abstract

Forests are assets that can promote community development and improve household livelihood if sustainably managed. The foremost constraint to sustainable forest management however, is land and in Nigeria, the southeastern (SE) region which is the dominant geographical location of Igboland has the lowest forest cover and available land area for development. This paper therefore reports the prospect of land grant for forestry development activities in the region. Multi-stage sampling (involving States in the region, their LGAs, Communities and Households) was used to select 1,133 households at 40%, 30%, 20% and 10% intensities for the study. A set of structured and semistructured questionnaire was administered to households in the sampled communities. Data were analysed using descriptive statistics and multinomial regression at $\alpha_{0.05}$. The proportion of male respondent for the study was high (82.0%). They are engaged in civil service (40.0%), businesses (23.0%) and farming (16.0%). The average cost of a plot of household land is N42,076 and average monthly income was about N79,080. Consent of granting land to forestry development groups by household heads was found to be skewed towards indigenous group (32.1%) followed by NGOs (21.4%) and government forestry department (15.9%). The income of the households as well as market cost of a plot of the household land will positively influence land grant for forestry projects. Age of landowners however showed negative significant influence to land grant for forestry. The possibility of land grant to indigene groups with forestry interests could be comparatively highest in rural communities located away from urban sprawl (Coeff. = 0.092). Thus, for forestry to thrive in Igboland, it should aim at building and foster local content as well as strengthen interest through attractive incentives.

Keywords: Forestry Development group, Land grant, Land owners, Local content, Attractive incentives

Introduction

Land was submitted by FAO (1997) as the most import constraint to forest estate establishment. Most land laws presently operating tend to favour government and associated public agencies in terms of land access. Land grant to private institutions is regrettably often marred by bureaucratic bottlenecks and this negatively limits development in this sector, most especially in developing nations. The fact also that private individuals and groups are not supported by some governments or the public sector in general in the area of forestry development necessitates the wide springing up or emergence of Private Based Organisations (PBOs). Even then, at both domestic and international levels, PBOs with forestry interests was also observed by Young (2008) to be deterred by institutional, policy and socio-cultural challenges in their attempts to access land with a view to complementing conservation and forestry development initiatives.

In Nigeria, for instance, the dominance of forestry by government had not only failed to produce appreciable results but made private sector participation insignificant and discouraging (Oriola, 2009). Unlike other land uses which enjoy appreciable research attention in the area of land grant or access to essential production inputs, forestry (both private and public) is not only relegated but severely constrained by useful and actionable research results/information. Also, Idumah et al. (2006) reported a growing number of forestry practitioners and groups in different locations with emphasis on small scale private outfits that are handicapped by land. Given that most landowners across different communities have learnt to be firmer and more conservative with their landholdings. Erakhrumen (2007) also alerted on the rapid increases in trained practitioners and school enrolments in forestry courses across Nigeria who are expected to expand the frontiers of forestry if lands are afforded them.

These and numerous other issues, which border on land, land grant and landowner consent have direct implications on conservation opportunities and rural development and thus need to be promptly investigated into (Toulmin and Gueye, 2003; Cotula and Toulmin, 2004). Land grant to forestry by landowners in Igboland Nigeria is an aspect of forestry research which is not well researched on and for which no reports (past or current) are readily available and accessible. It is in this region that forestry is least developed relative to other parts of Nigeria. Local and international forest conservation planners and managers are desirous of the information on forest land access, livelihood and poverty reduction to identify and rapidly focus adaptable forestry programmes and activities for different locations and population groups. Gavin and Anderson (2007) have demonstrated the importance of studies on land access in guiding and shaping policies that are likely to positively impact upon different regions and groups especially vulnerable

populations. Such has driven the rate of development with improved benefits on local forest communities in China (Liu, 1998).

Study Area

Igboland describes the area inhabited by the Ibos, which is one of the three (3) major ethnic groups in Nigeria. Although the Ibos can be found in other geographical locations, they largely inhabit the southeastern part of Nigeria (Uchem, 2001). The CIA (2010) documents reveal that this region is about the most densely populated region in Nigeria and as such land is one of the major issues limiting forestry and other development initiatives in the region.

Three major land tenure systems hold in Igboland: communal, individual and statutory. Of these, analyses by rural development experts underline that most large-scale production or development activities across the region have been sited on communal-held lands. Hence, this form of landholding has given encouragement to community support and development. However, findings by Onvema (2014) showed that individual forms of tenure are fast replacing communal land tenure system in the region. In the light of the above, no significant community development project or programme of forestry importance has occurred in most locations in Igboland since the last 1975-1980 National Development Plan (Oloyede, 2008). For instance, annual planting/afforestation targets of 20,000ha for Gmelina and 6000ha for teak in Imo State has perennially been unrealistic over the last 10 years (Anuna, 2006).

Three major categories/groups of people make requests for grant of land from local populations (either from individuals or communities). They are government/public external sector, individuals/bodies community members and themselves (Land and Property Management Information provided Authority, 2010). bv Grusczynski and Jaramillo (2002) show that for different project executions across different locations, each one has met either successes or failures chiefly because of differing perceptions, which landowners have about such requesting bodies as well as peoples' conviction of the short and long term prospects derivable from such grant. Landsat imagery indicates that vast arable lands and vegetation cover as were observable before independence across locations in Igboland have progressively decreased and replaced by built up areas, which manifest low land productivity and severe environmental consequences (Njoku et al., 2010).

Selection of Location of Study

Five major states are found in Igboland Nigeria: Abia, Anambra, Enugu, Ebonyi and Imo States. Anambra and Imo States were purposively selected for this study based on their population size and years of creation. Seven (7) communities were then randomly selected from the States viz: Egbema and Obosime (in Ohaji LGA); Umuezeala (in Ehime Mbano); Amawom (in Owerri Municipal LGA) - all in Imo State as well as Amansea and Isu-Aniocha (in Awka North LGA); Agulu (in Aniocha) LGA - all in Anambra State. The households in these communities formed the respondents for the study. A set of questionnaire was administered to obtain information from household heads across the communities. They supplied information on their household socioeconomic backgrounds; estimate cost (in Naira N) of a unit parcel of household land; and the likely rate at which household lands can be granted to different forestry-based organizations. Representative forest-based organizations considered in this study are the Forestry Department (owned by government), Conservation NGOs (representing external bodies/individuals) and indigenous groups with forestry/conservation interest (representing the community-members themselves).

Data were subjected to descriptive and inferential statistics. Descriptive involved the use of measures of central tendency (percentage, mean, range, mode). Inferentially, household socioeconomic variables (independent variables) were tested to evaluate the dichotomous effects of land grant (dependent variable) on each of the forest land user groups using logit model at $\alpha_{0.05}$. The logit model was of:

$$Z = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots B_9 X_9 + e_i$$

Where:

 $\beta_0 = Constant$

 $\beta_1 \dots \beta_9$ = estimated regression coefficients

 $X_1...X_9$ = independent variables

$$Z = \ln(\frac{P_i}{1 - P_i})$$

Where:

 P_i = estimated probability of a responding household granting land to a forest-based group for forestry development interests

 $1-P_{i}$ = estimated probability of a responding household not granting land access to a forest-based group for forestry development interests The variables are:

- X_1 = Dummy variable for location of the community of the responding household (1= communities close to urban location, 0= communities distant from urban area /described as rural location)
- X_2 = Marital status of the respondent (1= Married, Otherwise =0
- X_3 = Gender of the responding household head (1= Male, 0= Women)

 X_4 = Education (1= Formal education, 0= Otherwise) X_5 = Age (years) of the respondent (continuous variable)

- X_6 = Cost of a plot of household land (in Naira). Also a continuous variable
- X₇ = Estimate of daily income of the respondent (in Naira). Also, a continuous variable
- X_8 = Main occupation (1=Farming, Otherwise=0)
- X9 = Household size (continuous variable)
- $e_i = error \text{ or random disturbance term}$

The explanatory variables were selected based on previous studies of Hardie *et al.* (2000), Papka and Omiyale (1997), Csoka (1997), NPRS-PRF (2000), IFPRI (2011) and Cooperative Research Centre (1999).

Results and Discussion

The proportion of male respondent for the study (Table 1) was high (82.0%) compared to that of females (11.5%). This conforms to findings from past studies in Igboland (Uchem, 2001; Ozoemena and Hansungute, 2009) on the popularity of patrilineal household system in the study area. Age

distribution was found to be skewed towards those less than 30 and 50 years, a pointer to a youthful dominated society and by extension a reservoir of vibrant future labour force.

Residents engaged in civil/public service occupations (40.0%). Some were also business men and women (23.0%) as well as farmers (16.0%). The proportion of farming (16.0%) among main occupations of respondents portrays preference for sedentary, offfarm and faster income generating enterprise activities relative to agriculture in the study area. This finding explained the near relegation of agriculture to the background across the area and the likely dependence of residents' on food purchase and import from agriculturally stronger locations in their neighborhood. This may however be positive for forestry development as productive but non-utilized available lands (arable lands) in the region stands the chance of being put into agricultural/agroforestry benefits by prospective bidding individuals and groups under mutual agreement.

Variables	Category	Percentage (%)	Mode		
Gender	Male	81.8	Male		
	Female	11.5			
Age	<30	22.0	30 – 40 years		
-	30 - 40	32.9			
	40 - 50	25.0			
	>50	24.8			
	Mean = 42 years				
Marital Status	Single	21.0	Married		
	Married	69.4			
Main Occupation	Civil/Public servants	37.9	Civil/Public		
-	Business	22.9	Servants		
	Farming	16.2			
<u> </u>	Others	19.6			
Household size	Small (<5)	16.1	Medium		
	Medium (5 – 10)	59.3			
	11 – 20 (large)	11.2			
	Large (>20)	0.3			
	Mean = 7				
Education	None	3.4	Tertiary		
	Primary	6.8			
	Secondary	31.5			
	Tertiary	51.5			
Daily income (N)	<1,000	26.3	<1,000		
	>1000 - 2000	25.5			
	>2000	18.4			
	Range = $N300 - N142,000$				
	Mean = ₩2,636.35				

 Table 1: Descriptive presentation of socioeconomic characteristics of the respondents

Also, worthy of note is that only 3.4% of the respondents had no formal education while about 90% attained different levels of formal education with more than half (52%) of the households heads having tertiary education certificates (Table 1). By

implication the study population is an enlightened one with high awareness/knowledge base. Such knowledge base can potentially translate into rapid biodiversity development, strategic planning in natural resources conservation and attraction of development-based projects as observed in Paris (OECD, 1996). The range of daily income across households in the study area is over \$110,000. However, more than half of the respondents (51.8%)

earned N2000 and below daily (Table 1). By implication, there is uneven spread/distribution of opportunities to households across the study area.

 Table 2: Distribution of Possible land grant by household landowners to forestry development Groups and Costs of Grant

	Percentage (%)	Mode
Indigene groups	32.1	Indigene groups
Conservation NGOs	21.4	
Forestry Department	15.9	
<100,000	19.0	N 100,000 - N 500,000
100,000 - 500,000	33.8	
$>500,000 - 1 \mathrm{m}$	18.3	
>1m	17.9	
Mean = N 842,076.96		
	(A plot o	of land $= 0.5$ ha)
	Conservation NGOs Forestry Department <100,000 100,000 – 500,000 >500,000 – 1m >1m	Indigene groups 32.1 Conservation NGOs 21.4 Forestry Department 15.9 $<100,000$ 19.0 $100,000 - 500,000$ 33.8 $>500,000 - 1m$ 18.3 $>1m$ 17.9 Mean = $N842,076.96$

In Table 2, the average cost of a plot of household land is $\mathbb{N}42,076$ and average monthly income by extrapolation from income in Table 1 is about $\mathbb{N}79,080$ (or $<\mathbb{N}100,000$ per annum). The size of the household income base reflects low capacity of most households to undertake capital intensive projects or investment especially those in which capital recoupment takes a long time. The implication of this is that the widely publicized livelihood improveent thrusts of government at different levels as well as operational policy strategies do not economically favour households in the study area.

Almost all forest estates and similar vegetation cover in Igboland Nigeria has been established within communal lands (Alagba et al., 2012). Azeez and Onyema (2013) reported the growing trend in land purchase across the region especially by elites and racketeers, which is engendering land commoditization that is inimical to natural resources conservation and management. This may be why average size of landholding by households in Igboland was reported to be 0.5 - 2.5 ha by Azeez and Onyema (2013) although Nneoma (2008) had earlier reported cropland/farmlands of households in some locations in Imo State to be up to an average of 3.4ha. Whatever the household landholding capacity, unregulated land purchase in Igboland could heighten land scramble and racketeering in favour of the bourgeois who may not have the protection of the environment as part of their interest.

Households in spite of their smallholdings could offer part of their lands to some forest-based groups (Table 2). However, the perceivably lowest consent for granting land to government Forestry Department (16.0%) is striking and is an indication of the likely level of mistrust and low confidence in government institutions. If the report of Nmah (2011) is something to hold, the strong attachment the Ibos have to their lands as items of ancestral value could well have played out in their repose of more trust and confidence to indigenous relatives belonging to social groups of conservation interests (32.1%).

Igboanusi (2001) and Gordon (2003) have documented the manifestation of apathy among different categories of persons in the study area and reported same as one key area to examine when considering issues, which have bearing with ancestral property such as land. Such differential favoritism upheld by a significant proportion of persons in the area if built into strategic development contexts like promotion of important cultural heritage, partnership deeds in community valuation of resources to promote local tourism and infrastructure can stimulate development and livelihood improvement.

Although the 1978 Land Use Act (LUA) vests all lands in Nigeria under the ownership of government, this study shows that if exercised at the grassroot level, this may not go down well at the household level where lands serve a variety of economic, spiritual, livelihood and other purposes. Most experts document that the LUA has not favoured forestry development in Nigeria. This is therefore a call for government and her institutions for a more flexible and convenient approach in case of land request, which is acceptable at the grassroot (household) if forestry practice in Nigeria should be taken to the next level.

Household Socioeconomic Variables and Land Grant for Forestry

Table 3 presents the results of the logit regression for the different groups with forestry interests. The income of the households as well as market cost (N) of a plot of the household land will positively influence land grant to the different groups (Table 3). Economic empowerment, poverty reduction and improvement in access to livelihood opportunities at minimal cost among others are possible measures,

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which will likely enhance wealth creation and concomitant cash saving by households. These will have likelihood of impacting positively on request for land grant by forestry bodies. Farming practices a traditionally adaptable practice, which cuts across different strata in the region, rather than lower farmers' interest in forest land use is expected to incite acceptability for agroforestry land use programs and projects. Hence, if household income is improved among other economic measures, which need to be considered in this context, there are possibilities of land requests to be greeted with less constraints. This is more so premised on the record that agroforestry is one land use that is socially, culturally and environmentally compatible with household land use practices in the region.

Age of the landowners in the result (Table 3) is a significant variable to consider in any bid to access land for forestry across the study area. It showed negative significant influence for each of the forestry-based groups considered. This implies that targeting young adults preferably those between ages 30 and 40 years (Table 1) will have higher likelihood of increasing the rate of land grant for forestry purposes. Age grade is a socio-cultural group across Igboland and members often champion and execute landmark community development projects. Local-based community forestry programme of activity, which partners with members of the Age Grade would be a potentially sustainable asset to development particularly in the forestry sub-sector.

Formal education positively influenced likelihood of land grant to both the forestry departments and NGOs just as informal education will likely improve land grant to indigene groups and individuals (Table 3). The Igbos show love and respect to their educated members and this is readily observable in community appointments of their educated relatives into positions of trust, representations and allegiance (Chuku, 2013; Duruji, 2013). The elites can use this instrument to muster solidarity and support from community members on behalf of NGOs and the forestry department for development. From the results of the study, it is possible that they can utilize the above privileged advantage for a common development that can be beneficial to their community. Thus, educated members of the community can command stronger followership, the influence of which the elites can use in propagating any development based programme. Household lands can be less inaccessible to NGOs and forestry departments if proposed, executed and sustainably managed with strong support from community elite groups.

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Indigene g	roups			Conservati	on NGOs			Forestry I	Departme	ents	
Beta	Std	T-	Remark	Beta	Std	T-	Remark	Beta	Std	Т-	Remarks
Coeff.	Error	Value	S	Coeff.	Error	Value	s	Coeff.	Error	Value	
1.979***	0.463	10.951	Positive	0.867***	0.404	7.566	Positive	-	0.461	9.470	Positive
(0.000)				(0.028)				0.013***			
								(0.000)			
-0.027***	0.007	9.073	Negative	-0.028***	0.006	20.847	Negative	-	0.006	46.03	Negative
(0.000)				(0.000)				0.034***		0	
								(0.000)			
-0.024	0.018	0.195	Negative	0.007**	0.015	<mark>3.96</mark> 7	Positive	0.009	0.241	4.399	Positive
(0.134)				(0.058)				(0.885)			
-0.073**	0.246	0.022	Negative	0.271**	0.216	1.561	Positive	0.072	0.241	0.000	Positive
(0.057)				(0.061)				(0.472)			
0.020	0.020	0.018	Positive	0.001	<mark>0.0</mark> 17	1.298	Positive	0.002	0.018	1.805	Positive
(0.416)				(0.827)				(0.620)			
0.000	0.000	1.870	Positive	0.000*	0.000	1.753	Positive	0.000***	0.000	5.291	Positive
(0.160)				(0.089)				(0.034)			
0.000	0.000	0.559	Negative	0.000	0.000	-0.438	Negative	0.000	0.000	0.197	Negative
(0.374)			- K	(0.569)				(0.588)			
0.287	0.148	0.049	Positive	0.264***	0.128	0.537	Positive	0.128	0.138	3.302	Positive
(0.432)				(0.036)				(0.130)			
	0.064	0.129	Negative	0.004	0.057	0.009	Positive		0.062	0.161	Positive
(0.819)		4		(0.874)				(0.794)			
0.092**	0.148	0.421	Positive	-0.012	0.131	0.023	Negative	-0.268	0.142	3.062	Negative
· · ·				(0.959)				· · · ·			
-	,			-	· · ·	,		-		·	58;
Log-Likeli	hood=121	5.943		Log-Likeli	hood=1438	8.74		Log-Likel	ihood=14	52.649	
	Beta Coeff. 1.979*** (0.000) -0.027*** (0.000) -0.024 (0.134) -0.073** (0.057) 0.020 (0.416) 0.000 (0.160) 0.000 (0.374) 0.287 (0.432) -0.012 (0.819) 0.092** (0.081) Chi-square	Coeff.Error 1.979^{***} 0.463 (0.000) -0.027^{***} 0.007 (0.000) -0.024 0.018 (0.134) -0.073^{**} -0.073^{**} 0.246 (0.057) 0.020 0.020 0.020 (0.416) 0.000 0.000 0.000 (0.160) 0.000 0.000 0.000 (0.374) 0.287 0.148 (0.432) -0.012 0.064 (0.819) 0.092^{**} 0.148 (0.081) Chi-square=22.456; I	BetaStdT- Value 1.979^{***} 0.463 10.951 (0.000) 0.463 10.951 (0.000) 0.007 9.073 (0.000) 0.007 9.073 (0.000) 0.018 0.195 (0.134) 0.246 0.022 (0.057) 0.020 0.020 0.020 0.020 0.018 (0.416) 0.000 1.870 (0.160) 0.000 0.559 (0.374) 0.287 0.148 0.012 0.064 0.129 (0.819) 0.092^{**} 0.148 0.421 0.421	BetaStdT- ValueRemark sCoeff.ErrorValues 1.979^{***} 0.463 10.951 Positive (0.000) -0.027^{***} 0.007 9.073 Negative (0.000) -0.024 0.018 0.195 Negative (0.000) -0.073^{**} 0.246 0.022 Negative (0.134) -0.073^{**} 0.246 0.022 Negative (0.057) 0.020 0.020 0.018 Positive (0.416) 0.000 1.870 Positive (0.160) 0.000 0.559 Negative (0.374) 0.287 0.148 0.049 Positive (0.432) -0.012 0.064 0.129 Negative (0.819) 0.092^{**} 0.148 0.421 Positive (0.081) Chi-square=22.456; R ² =0.030; -0.030 ; -0.030 ; -0.030 ;	Beta Std T- Remark Beta Coeff. 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Table 3: Summary of the Logit Regression on the Effect of Selected Household Socioeconomic Variables on Possible Land Grant for Forestry Development Activities

***Significant at 1% **Significant at 5% *Significant at 10% Bracketed values are significant levels of the respective variables

Indigenes and Forestry Land Grant

Results contained in Table 2 highlight the extent (32.0%) which landowners' value indigenization. Based on the foregoing, forestry projects which adopt local content as a working strategy and partners with local groups (e.g Community Based Organisations) will positively influence rate of land grant from them. Socio-cultural groupings are prevalent across different communities in Igboland. In the result (Table 3), possibility for land grant to indigene groups with forestry interests could be comparatively highest in rural communities located away from urban sprawl (Coeff. = 0.092). This is equally anticipated to be the case if informally educated landowners (Coeff. = -0.024)are considered in request in rural-based land communities. If familiarity and local content are values cherished by the landowners in granting land for forestry purposes, then community forestry should be the focus/thrust of forestry stakeholders especially for remotely located environments and areas with comparatively higher prevalence of less educated landholder populations.

It is worthy of note that indigene groups in some areas engage in and indeed drive most development activities and initiatives in their areas even in terms of resource protection. For instance, hunter groups in Mbe Mountains have shown responsibility in the protection of wildlife and policing of their habitats in the conservation project in Cross River State and in the Cameroon (WCS, 2013). This was also reported in Nepal among cooperatives of Village Forestry Association (VFA) who have helped in protecting and conserving huge forest resources (Springate, 2003).

External Agencies, Non-Governmental Organisations (NGOs) and Forestry Land Grant

Apart from indigene population groups who have interest in forestry, external bodies in form of conservation NGOs could have almost similar effects of the selected variables (although of dissimilar magnitudes) with that of forestry department. Education, location (settlement) of the responding landowner, occupation and gender issues are some factors considerable in land grant to the above organizations. From the result particularly that obtained for formal education and settlement, there is reason for most NGOs in Nigeria preferring to work in the cities where there is prevalence of formal sector characteristics. For conservation NGOs, for instance, the ease with which city administrators, planners and residents receive them and license them for operation could justify the reason for the dominant operation across Nigerian cities. This finding was reposed by NBSAP (2005), which submitted the domiciliary of many conservation NGOs in the cities. The above is culpable for the minimal influence of conservation efforts in rural areas.

External private agencies and bodies can likely be granted household lands for forestry where maleheaded households and formally educated populations are prevalent. An approach, which can be adopted by prospective NGOs in this regard will be one that emphasizes strong and mutual partnership with the above key target groups (educated, malepopulation groups. Land-hunt through elites in educational or similar institutions and non-farmer associations will be accessible through existing recognized community groups and institutions.

Government Forestry Departments

In Table 1, the forestry departments will possibly meet low success in their request for land grant from households. However, lowest but significant value for coefficient obtained for age of the responding landowners (-0.034) can be incidental by respondents of younger household heads whose response is suggestive of their level of repose of some government passion/confidence in forestrv department and by extension public institutions at large. In Table 3, these respondents manifested higher proportions in the attainment of formal education (Coeff. = 0.009) than even for the NGOs (Coeff. = 0.007). Such knowledge/enlightenment exhibited by the above younger population group promises hope for possible consolidation of any forestry development programme where already in place.

Formal education positively influenced land grant to the Forestry Department (Table 3). The more educated/enlightened a land owner is, the likelihood of accessing his/her lands by Forestry Department for development. The FDF, SDF and their administrative units at the various LGAs and/or communities can take advantage of this in improving awareness in national conservation and development.

Conclusion

The impact of forests as assets that can promote community development and improve household livelihood is not lost on Igbo people. They would however not grant access to land in their environment, if it will negatively impact their landuse norm and tradition. This informed why locals prefer granting land access mainly to local groups with forestry interest. Even among the educated elites, not all of them would grant lands to strangers. Apart from this, most NGOs that may likely induce access to their land with money prefer to work in cities rather than rural areas where forestry business can really thrive. Thus, for forestry development to thrive in Igboland, it should aim at developing local value addition techniques to forest products while stimulating local interest through locally attractive incentives. The age distribution of household heads in the study area is a tool that can have future implication for forestry development in the study area. However, efforts must be put in place to engender forestry into the education curriculum in the study area with the view to harnessing this potential in the future.

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