

## INDICES OF LOCAL COMMUNITY PARTICIPATION IN FOREST MANAGEMENT IN SOUTH WESTERN NIGERIA

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### ABSTRACT

Community Forestry (CF), a forest management initiative could help solve conflicting barriers to sustainable forest management. This paper reports the factors that will likely promote CF in southwestern Nigeria. Study sites were selected using purposive and random sampling techniques. Lagos State was purposively selected for the study based on its megalopolitan nature in addition to Osun, Ondo and Ogun states, which were randomly selected. Twenty percent (20%) of the Local Government Areas (LGAs) in the selected states were randomly sampled. Information was collected on demographic bio-data, socio-economic variables and participatory forest management indices from the local inhabitants in the sampled LGAs using structured questionnaire. Data obtained were analysed using descriptive and inferential statistics of the ratio scale model. Results revealed that respondents' distribution was skewed towards the Yoruba ethnic group (92.9%); male gender (80.5%), one to five person household size (56.1%), married (87.5%) and illiterate (26.7%) population. Respondents were also mostly farmers (47.9%) associating more with cooperatives (45.0%) and with modal monthly income of between ₦10,000:00 and ₦15,000:00. Awareness about CF among the respondents was very low (23.8%) despite majority's (70.8%) dependent on forest resources. Out of the fifteen indices of participation in community forest management (ranging from awareness of forestry project to contribution of human resource to maintenance of project) tested using the ratio scale model, awareness about forest project was the most important index of participation with mean People Participating Index (PPI) of 85. However, based on all indices of participation, Ondo state ranked highest with a PPI of 57.1% and Lagos ranked lowest (43.6%) in community participation in forest management. The study recommends more efforts at encouraging improvement in the indices of participation in forest management projects in the study area.

**Keywords:** Community Forestry, Participation Indices, Local inhabitants, Forest management, Learning participation

### INTRODUCTION

In Africa, a number of studies have revealed forest service personnel and local groups as having radically different perceptions, values and objectives in forest management and that exclusive management by single entity (i.e. State forest service or local community) has not assured sustainable management (Atte, 1994; Dubois, 1998; Badola, 1999). In Southwestern Nigeria, the forestry sector and rural development are increasingly consisting of various groups that are concerned and dependent on the same resources but often act independently and have conflicting perceptions, values, objectives and knowledge system. These barriers to sustainable forest management as observed by Rescher (1993) are still in place and could be overcome by communication, negotiation, accountability and setting of standard.

As it is, tropical forests in Southwestern Nigeria are facing questionable governance with regards to the rules under which power is exercised in the management of their resources and in the relationship between the State and its citizens. Good forest governance, which centers on sound environmental and public management, has become problematic in the region due to neglect of all the principles of sustainable forest

management. Conservation and increase in existing forest estate is an illusion while destruction of forest resources is becoming increasingly apparent. In addition to these is the increasing de-reservation of forest reserve for agricultural production and urban development (Kuchelmeister, 2000). Dubois (1998) repose these assertions when he submitted forest resources in this area as being centrally managed by the States and that this negate the principles of rights, responsibilities, revenue generation and relationships in resources management.

This situation poses fundamental conflicts between the state forestry services and the local communities resulting in the problems of integrating the customary norms and practices with modern policies and laws, sharing of revenues derived from the exploitation of natural resources, allocating roles and responsibilities among stakeholders in the management of forest resources and faulty and conflicting relations among stakeholders in the forests. Apart from this, man power requirements also constitute a serious problem in Nigeria with staff strength in forestry department being grossly inadequate in relation to the forest extent and forest activities (Enabor, 1981). Akindele (2000) reported that many state forestry services are characterized by shortage of

trained personnel in quality and quantity. The states in Southwestern Nigeria are thus faced with inadequate data, poor supervision, poor law enforcement and inability of the state forestry to sustainably manage the forest estates.

Community Forestry (CF), a management strategy, which develops principle and measures involving and empowering all stakeholders, could contribute to solving the highlighted problems. Community Forestry can provide an opportunity for effective and efficient management. It can be an appropriate strategy for the rational and sustainable management of the forests, useful for decentralized natural resource management and for local development all that are lacking in Southwestern Nigeria. However, the political commitment, policy and legislative environment that will enable the full scale implementation of the concept of Community Forestry is not in place in the region.

The acceptance of the concept of Community Forestry (CF), which is prevalent around the world in space and time (Alden Wily, 2003; Sayer, 2005) is new in Nigeria. Introduction of community forestry initiatives with attendant policies and legal paradigms to support it will not only address how forests are managed and by whom but will proffer solution to question of rights: local rights to regulate local forests and rights of ownership over forest lands. It is therefore, a potent route to the empowerment of ordinary rural people, enabling them to gain more control over resources that support their livelihood and environment and the way in which they organize themselves to act upon their circumstance. But, the pace of spread has been slow and is yet to be introduced to the Southwestern zone of Nigeria.

Apart from this, the forest management system in Southwestern Nigeria is central, unsustainable and conducted only by state forestry services in the past decades. The introduction and strengthening of devolutionary governance allowing for higher level of mass participation in decision making in forest management would be desirable taking into consideration the deplorable situation of the forest estates in Nigeria and in Southwestern zone in particular. In the same vein, widespread land reform that will improve the tenure security of the local communities would equally be promising (Toulmin and Quan, 2000; Alden Wily and Mbeya, 2001). This paper reports the factors that will likely motivate the local custodian of forest resources (the rural dwellers) – a major stakeholder in the participation of its management.

## Materials and Methods

### The study area

The study was carried out in the South West geopolitical zone of Nigeria comprising Lagos, Ogun, Oyo, Osun, Ondo, and Ekiti (Fig. 1). The area lies between Latitude 6° 20' North to 8° 37'

North and Longitude 2° 30' to 6° 00' East (Agboola, 1979) with a total land area of 77,818 km<sup>2</sup>, projected population of 17.6 Million people as at 1998 and population density of 226.168 people per Km<sup>2</sup> (FDF, 1997). The study area is bounded by the Republic of Benin in the West, Kwara and Kogi states in the north, Edo and Delta states in the east and the Bight of Benin (Gulf of Guinea) in the south. The Southwestern Nigeria has 80 constituted Forest Reserves with a total forest area cover of 793,266 ha while the Free Area cover is 1,005,871 hectares (FDF, 1997).

### Sampling and Survey Procedure

Study sites were selected using a combination of purposive and random sampling techniques from the six states making up the Southwestern Nigeria. Lagos State, being a rallying point for others was purposively selected because of its megalopolitan nature. All the remaining five states were assigned numbers and based on random sampling technique; three (3) of them were selected. The selected states were Osun, Ondo, Ogun and Lagos. The Local Governments Areas (LGAs) of the selected states were further identified. Twenty percent (20%) of the Local Government Areas were randomly selected for the study. In all, Six (Ife South, Ejigbo, Ila, Atakumosa, Oriade, Ayedade/ Irewole) LGAs in Osun and four each (Ondo west, Ose, Owo, Akure North), (Ijebu East, Ijebu North, Odeda and Yewa), (Badagry, Ikorodu, Ikeja and Epe) in Ondo, Ogun and Lagos states were respectively sampled.

The target population for the study comprised the local inhabitants and other categories of people such as artisans, civil servants, teachers and traders, living in enclaves and settlements around the forest reserves in the study area. Questionnaires were designed to obtain information on demographic bio-data, socio-economic variables, and forest resource uses of the respondents in and around the forest reserves, perceptions on community forestry and their perceptions towards participatory approach to forest management. A test-retest reliability value of 0.85 confirmed the reliability of the questionnaire.

Other information sources include Focus Group Discussions (FGDs), which was used to elicit information on perceptions about income, household size, various management issues, indigenous knowledge, cultural values and views about other forestry stakeholders, which the respondents would not want to respond to in the questionnaire. Group of people of the same sex were gathered through the village heads for the exercise in the four study states. Notes were taken and pictures and voices were recorded. The participants spoke freely about the status of the forest resources and reserves, status of community forestry /community based forest management, their perceptions on land issues and

benefit sharing if participatory management is introduced as presented in the topic guide questions. Secondary data were also obtained from State Forestry Departments and archives on

available maps, gazettes, staff strength, revenue generation, afforestation programme, budgetary allocation and releases where available and other available reports.

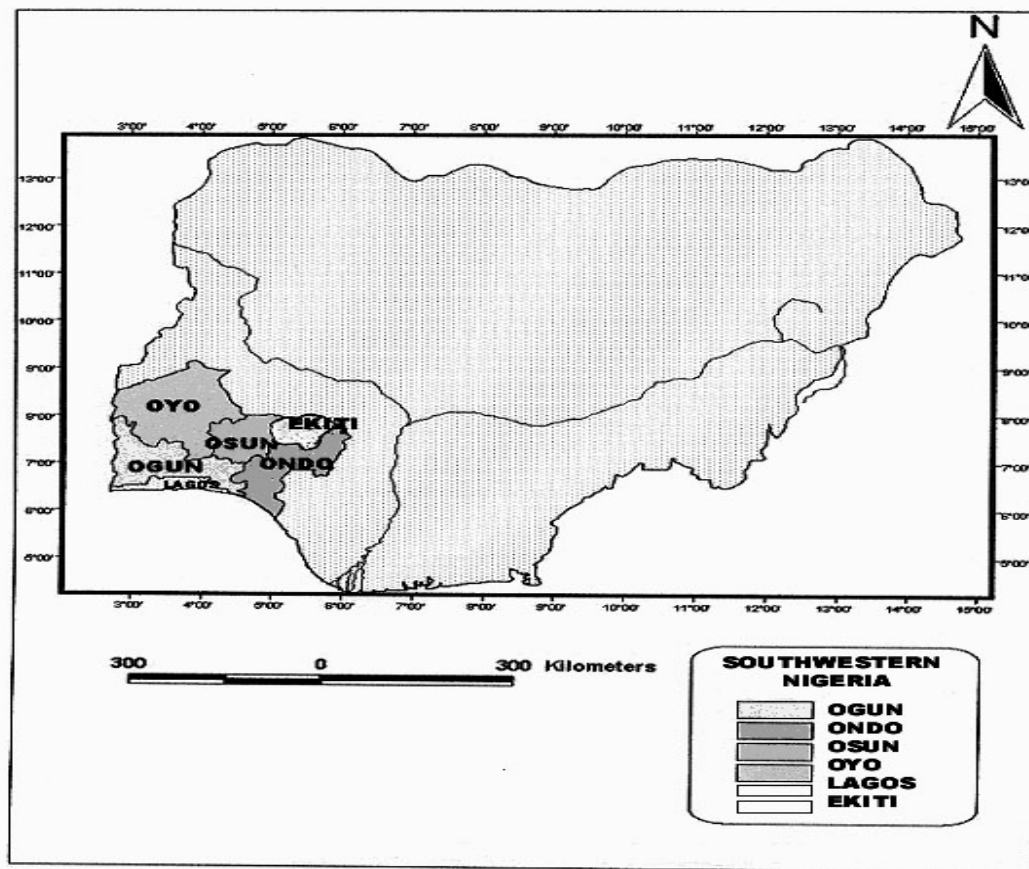


Fig. 1: Southwestern Nigeria showing the States within.

**Analytical technique**

Descriptive statistics employing Frequency and Percentage Distribution Tables was used to analyse the respondents' background, while the inferential statistics of the ratio scale model earlier used by Singh (1991) as well as Bhattacharya and Basnyat (2003) was used to infer the probability of variation in Peoples Participation Indices (PPI) across communities in the study area.

**Procedure for the measurement of PPI**

This was carried out using ratio scale model used by Singh (1991) and Bhattacharya and Basnyat (2003). The model is based on simple quantitative index employing mean and percentages with algebraic method. It has zero as its minimum, indicating 'no participation' and arbitrary maximum of 100, indicating maximum possible participation. The scale was constructed by asking each target beneficiary of the programme, a set of questions to measure participation. Each of the possible answers to a question is assigned some arbitrary number ranging from 0 indicating no participation to 1 indicating full participation. Where there are three

possible options to a question, for instance, 'do you attend the meetings convened by project authority'? The answer could be Always, Sometimes, or Never. These answers were assigned numerical values of 1, 0.5 and 0 respectively. Each of the 15 designed questions was assigned a weight showing its relative importance as a measure of participation. The sum of the weight assigned to all the 15 questions is 100, thus the scale assumes values ranging from 0 to 100. The weight assigned to each question was arrived at by the conglomerate decisions of ten people who are independent of one another and who have nothing to do with this study. Using this method a score for each sampled respondent was computed and all the scores for the ten respondents in a community was added and divided by number of sampled respondents to compute the mean participation rate. The mean Participation rate when expressed in percentage terms is called the People's Participation Index. Using the ranking of Singh (1991) and Bhattacharya and Basnyat (2003), the following rankings were arrived at: Very Low or Least People's Participation Index ranges from 0-25;

Low People's Participation Index ranges from 26-50; Moderate People's Participation Index ranges from 51-75; and High People's Participation Index ranges from 76-100. The null hypothesis which states that "Peoples Participation Indices do not vary from one community to the other" was advanced for the study.

## RESULTS AND DISCUSSION

### Demographic background of respondents

Distribution of respondents by sex (Table 1) revealed a male preponderance study area with an average of 80.5% male and 19.5% female. The male gender is more involved in forestry business than their female counterpart. Also, ethnic background distribution revealed that southwestern Nigeria is ethnically heterogeneous. Although, the mean percentage of Yoruba ethnic

group was the highest (92.8%), the identified ethnic groups were up to 7.2%. This is to be expected since Southwestern Nigeria is a predominantly Yoruba speaking area. However, the cosmopolitan nature of Lagos State deviates its ethnic distribution from others: the Yoruba in the state were about 63.0% (Table 1). On marital status, a total of 87.4% of the respondents were married with the highest cases recorded in Ogun (93.1%) and Osun (91.4%) states. Modal average family size (56.1%) was between 1 and 5 while respondents with family size of 16-20 were the lowest (0.2 %) in the study area (Table 1). The total percentage of respondents with formal education in the study area was 73.3%. Those with no formal education were 26.7%. Osun State had the highest percentage of respondents (32.2%) with no formal education.

**Table 1: Demographic Data of Respondents**

Demographic Variables	Osun (N=232)		Ondo(116)		Ogun(87)		Lagos(41)		Total(476)		Mode
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	
<b>Sex</b>											
Male	172	74.1	97	83.6	81	93.1	33	80.5	383	80.5	Male
Female	60	25.9	19	16.4	6	6.9	6	19.5	93	19.5	
<b>Marital Status</b>											
Single	18	7.8	27	23.3	6	6.9	3	7.3	54	11.3	
Married	212	9.14	89	76.7	81	93.1	34	82.9	416	87.5	
Divorced	-	-	-	-	-	-	2	4.9	2	0.4	Married
Widowed	2	-	-	-	-	-	2	4.9	4	0.8	
<b>Educational background</b>											
Illiterate	75	32.2	20	17.2	21	24.1	11	26.8	127	26.7	
Primary	54	23.3	18	15.5	9	10.3	14	34.1	95	20.0	
Secondary	68	29.3	21	18.1	27	31.0	9	22.0	125	26.3	Illiterate
Tertiary	33	14.2	44	37.9	30	34.5	6	14.6	113	23.7	
Postgraduate	2	0.9	13	11.2	-	-	1	2.4	16	3.3	
<b>Household size</b>											
1 - 5	132	56.9	64	55.2	54	62.1	17	41.5	267	56.1	
6 - 10	81	34.9	31	26.7	15	17.2	11	26.8	138	29	
11 - 15	8	3.4	3	2.6	-	-	8	19.5	19	4	1 - 5
16 - 20	1	0.4	-	-	-	-	-	-	1	0.2	
>20	3	1.3	-	-	-	-	2	4.9	5	1.1	
No Response	7	3.0	18	15.5	18	20.7	3	7.3	46	9.7	
<b>Ethnic Background</b>											
Yoruba	221	95.3	111	95.7	84	96.6	26	63.4	442	92.9	
Hausa/Fulani	5	2.2	2	1.8	-	-	3	7.1	10	2.1	
Igbo	5	2.2	3	2.6	3	3.4	6	14.6	17	3.6	Yoruba
Others	1	0.4	-	0.9	-	-	6	14.6	7	1.4	

### Socio-economic Background of Respondents

Occupation distribution among respondents (Table 2) vary; with the highest preponderance being farming (47.7%) and the lowest being the artisans (3.4 %). The highest frequency of farmers (60.8%) was recorded in Osun State although from Focus Group Discussion (FGD) almost all the respondents practise agriculture either as primary or secondary occupation. The percentage of respondents that practice farming as primary occupation was found to be 47.7 % while those who took agriculture as secondary occupation was

16.9%. Income distribution (Table 2) among respondents revealed that 23.3 % of them made less than ₦5000 monthly while 10.7% earned over ₦20, 000 a month. In Osun State the highest proportion of the respondents (41.8%) earned between ₦10, 000 - ₦15, 000 a month. But in Ondo and Lagos States, the highest proportion made between ₦5, 000 and ₦10, 000 (Table 2).

Examining existing groups /Associations in the study area (Table 2), the study identified various forms of participatory groups within the communities sampled. The prominent group was



the Cooperative Society with an average of 45.0%, while Non-Governmental Organizations occurred more in Lagos State probably as a result of the megalopolis nature of the state. Probing the importance of forests on the quality of life among respondents (Table 2), it was found that an average of 70.8% affirmed that forest reserves are critical to their survival. This was in line with Ruiz-

Perez and Arnold (1996) submission that forests and forest products are important to the quality of life and survival of very large numbers of rural poor in tropical developing countries. Thus, consent of respondents to the use of forest resources was averagely very high (84.5%) in the study area with the modal distribution (90.1%) in Osun State and lowest in Ondo State (78.4%).

**Table 2: Socio-economic background of respondents**

Socio-Economic Variables	Osun (N=232)		Ondo(116)		Ogun(87)		Lagos(41)		Total(476)		Mode
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	
<b>Occupation</b>											
Farming	141	60.8	37	31.9	39	44.8	11	26.8	228	47.9	Farming
Civil Service	28	12.1	58	50.0	21	24.1	5	12.2	112	23.5	
Artisan	9	3.9	2	1.7	3	3.4	2	4.9	16	3.4	
Trading	46	19.8	9	7.8	3	3.4	5	12.2	63	13.2	
Wood business	8	3.4	10	8.6	21	24.1	18	43.9	57	11.9	
<b>Monthly Income</b>											
< ₦ 5000	34	14.7	34	29.3	36	36	7	17.1	111	23.3	₦ 10000-15000
₦ 5000-10000	54	23.3	27	23.3	18	18	12	29.3	111	23.3	
₦ 10000-15000	97	41.8	10	8.6	12	12	11	26.8	130	27.3	
₦ 15000-20000	26	11.2	22	19.0	12	12	6	14.6	66	13.9	
>₦ 20000	20	8.6	21	18.1	9	9	1	2.4	51	10.7	
No response	1	0.4	2	1.7	-	-	4	9.8	7	1.5	
<b>Groups</b>											
Elders'Forum	20	8.6	26	22.4	9	10.3	7	17.1	62	13.0	Cooperative
NGO	-	-	8	6.9	3	3.4	3	7.3	14	3.0	
CBO	4	1.7	13	11.2	18	20.7	9	22.0	44	9.2	
Cooperative	157	67.7	28	24.1	18	20.7	11	26.8	214	45.0	
No response	51	22.0	41	35.3	39	44.8	11	26.8	142	29.8	
<b>Depends on forest resources?</b>											
Yes	194	83.6	63	54.3	51	58.6	29	70.7	337	70.8	Yes
No	37	15.9	50	43.1	36	41.4	10	24.4	133	27.9	
No Response	1	0.4	3	2.6	-	-	2	4.9	6	1.3	
<b>Utilize forest Resources?</b>											
Yes	209	90.1	91	78.4	69	79.3	33	80.5	402	84.5	Yes
No	23	9.9	22	19.0	18	20.7	6	14.6	69	14.5	
No Response	-	-	3	2.6	-	-	2	4.9	5	1.0	

**Awareness of community based forest management in the study area**

Generally, awareness about Community Based Forest Management (CBFM) among the respondents (Table 3) was very low (23.8%) indicating lack of awareness by majority (74.2%) despite their dependent on forest resources (Table 2). Awareness of new initiative is a strong indicator of empowerment, which is the basis of effective participatory forest management strategies. At state level, awareness among respondents about CBFM varies (Table 3) with Osun (6.5%) and Ondo (44.4%) states having the lowest and highest awareness respectively. The level of education (Table 2) and exposure among the respondents may explain their awareness level. For example, while 55.5% of the respondents from Osun state

have no western education at all or at best had primary school certificate, only 32.7% belong to this category in Ondo state. Also, only 0.9% of those from Osun had postgraduate qualification while 11.2% had it among the Ondo State respondents'. This may inform the discrepancy in awareness level between the two states.

Despite the lack of awareness, majority of the respondents (85.6%) were willing to participate in CBFM with the highest (90.4%) and lowest (76.5%) interest coming from Ogun and Lagos States, respectively. This may also not be unconnected with the fact that while 65.5% of the respondents from Ogun state had at least secondary education, only 36.6% had the same opportunity in Lagos state.

**Table 3: Distribution of respondents' awareness of and willingness to participate in community-based forest management**

Awareness	Osun (N=232)		Ondo(116)		Ogun(87)		Lagos(41)		Total(476)	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
No	217	93.5	60	51.7	48	55.2	28	68.3	353	74.2
Yes	15	6.5	51	44.0	36	41.4	11	26.8	113	23.8
No response	-	-	5	4.3	3	3.4	2	4.9	10	2.1
Total	232	100.0	116	100.0	87	100.0	41	100.0	476	100.0
<b>Willingness to Participate in CBFM</b>										
No	9	12.2	5	9.6	8	16.3	8	23.5	30	14.4
Yes	65	87.8	47	90.4	41	83.7	26	76.5	179	85.6
Total	74	100.0	52	100.0	49	100.0	34	100.0	209	100.0

The study further revealed that democratic decentralization of natural resources management is rarely practiced in the study area and that substantial decision-making power, and benefits from forests are still centralized. Thus, the currently implemented policies (Table 4) are sometimes harmful to poor local people. This non-democratization of forest resources management may have significantly contributed to the non popularity of CBFM in the study area (Table 4). This scenario from southwestern Nigeria deviates from the trend observed from 60 countries across the globe by Agrawal and Ostrom (1999) where

one aspect or the other of natural resource management had been decentralized.

Other perceived reasons responsible for lack of awareness about CBFM among respondents include: lack of policy, land tenure issues, heterogeneity of land ownership, lack of institutional framework, lack of fund, conflict within and between communities; gender prejudice, heterogeneity of the local people in term of castes, class, ethnicity, disparity in wealth and social status, long gestation of forestry business, political interference, selfish interest of government on benefits derivable from forest resources and lack of legislation (Table 4).

**Table 4: Perceived reasons for non-existence of community forestry and community based forest management**

Reasons	Osun (N=232)		Ondo(116)		Ogun(87)		Lagos(41)		Total(476)		Mode
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	
Lack of policy	17	34.0	20	47.6	18	48.6	10	76.9	65	45.8	Lack of policy
Lack of awareness	22	44.0	14	33.3	11	29.7	5	38.5	52	36.6	
Land tenure system	8	16.0	9	21.4	3	8.1	8	61.5	28	19.7	
Heterogeneity of land ownership	8	16.0	5	11.9	5	13.5	1	7.7	19	13.4	
Lack of legislation	7	14.0	11	26.2	7	18.9	6	46.2	31	21.8	
Lack of institutional framework	2	4.0	10	23.8	4	10.8	6	46.2	22	15.5	
Lack of fund	11	22.0	2	4.8	3	8.1	-	-	16	11.3	
Conflict	5	10.0	2	4.8	1	2.7	-	-	8	5.6	
Gender prejudice	4	8.0	-	-	2	5.4	-	-	6	4.2	
Heterogeneity of local residents	5	10.0	4	9.5	4	10.8	1	7.7	14	9.9	
Long gestation	5	10.0	1	2.3	1	2.7	-	-	7	4.9	
Political interference	9	18.0	6	14.3	-	-	6	46.2	21	14.8	
Insecurity	-	-	6	14.3	6	16.2	3	23.1	15	10.6	
Government monopoly of benefits	1	2.0	1	2.3	7	18.9	-	-	9	6.3	
No response	14	28.0	13	31.0	11	29.7	1	7.7	39	27.5	

#### Peoples' Participation Index

People's Participation Index varied from one individual to the other and by extension from one community to the other (Fayenuwo, 2007) and from one State to the other (Table 5) in the study area. Based on Singh (1991) and Bhattacharya

and Basnyat (2003) ranking, PPI in Osun (56.8) and Ondo (57.1) States was Moderate, while it was low in Ogun and Lagos States. These indicated that the level of participation of individuals in the sampled community as well as the community as a whole.

**Table 5: Participation index of communities in the study states**

State	Community 1	Community 2	Community 3	Community 4	Total	Mean PPI
Osun	43	72.6	59.2	52.3	227.1	56.8
Ondo	53.1	60.1	61.1	54.1	228.4	57.1
Ogun	55.45	41.7	42.1	46.3	185.55	46.4
Lagos	37.85	44.85	46.3	45.3	174.3	43.6

**Awareness:** One key indicator of public participation is knowledge, which is a function of awareness: it is impossible to expect people to participate in what they know nothing about or are unaware of. From index 1 (Table 6), awareness about forestry project in the sampled community was found to be averagely high throughout southwest Nigeria. It was 80 (very high) in Lagos (Table 6) and Ogun (Table 6) States while it was 90 (very high) in Osun (Table 6) and Ondo (Table 6) States. This may positively impact on general cooperation among residents in the study area, but does not necessarily guarantee participation in community based forest management as a very large deviation exist between the mean participation index (Table 5) and awareness of community project (Table 6). There is more to participation than awareness about such project.

**Project planning:** Local participation in community project planning was lowest in Lagos (14) and Ogun (24) States, while it was low in Osun (40) and Ondo (48.5) States. This is a setback for effective participation and explains why adoption of recommendations from such exclusive planning was low throughout the study area. It had been well documented that the livelihood of most rural dwellers are dependent upon forest resources. Planning for someone without involving the person is a great limitation to the sustainability of such plan. Thus, no matter how well intended, planning without involving the major stakeholder who are the custodian of the resources whose management is being planned will not receive their blessing. Non-involvement of the locals would limit the quality of output from community based forest management planning.

**Learning Environment:** Effectiveness of community based forest management lies in its planning. Such planning should involve creation of a **learning** environment through which new knowledge, behaviours, skills, values, preferences or understanding are acquired via the synthesis of different ideas and information among stakeholders. This is what indices 7 to 11 is expected to achieve. However, such environment was not well created in the study area as far as

community initiatives are concerned because interactions through sharing of information and consultations within and between locals and project personnel were low (Table 6).

**Local Empowerment:** This is another important issue in participation, which if well looked into could positively impact local participation in community forest management. Forestry is a very technical vocation which require specific skill if tangible result is expected. Thus, the locals will need to be trained for community forestry management to yield the desired output. Attendance at the training was however very low in southwest, Nigeria (lowest in Ogun – 23.6 and highest in Osun – 35.0) and this may partly explain participation of respondents in forestry project. No matter the interest, if the knowledge and skill is lacking, participation could even result in negative output. It is expected that any attempt at CBFM must critically address its learning for it to succeed.

**Local Contribution:** For effective participation, individual contribution is important. The local residents would not readily feel belong if they are not contributing to forestry project. It should however be stated that their contribution should be a function of what they can afford – after all the essence of community forestry is to achieve community empowerment within the whim of residents. Although this was low, it should be pointed out that the will was there. Consent of residents to contribute money towards project execution was found to be low compared to their consent to contribute human resource (labour). This could be because that is what they have to offer. It would be observed that the mean monthly income of respondents was between ₦10,000:00 and ₦15,000:00 (Table 2), which is far from adequate to cater for their domestic needs. Also worthy of note is their consent to contribute labour towards project execution which was higher when compared with that for project maintenance. This may not be unconnected with the low labour requirement for forest project maintenance, which may not be lost on the local populace who mostly dislike idleness.

**Table 6: Summary of indices of participation in community based forest management project**

S/No.	Indices of Participation	Osun	Ondo	Ogun	Lagos	Mode	Mean
1.	Awareness of project	90.0	90.0	80.0	80.0	Osun and Ondo	85.00
2.	Participation in planning	40.0	48.5	24.0	14.0	Ondo	31.625
3.	Adoption of most recommended project practices	34.0	36.0	30.0	34.0	Ondo	33.5
4.	Part adoption of recommended project practices	26.0	38.0	28.0	30.0	Ondo	30.5
5.	Adoption of few recommended project practices	9.0	9.0	10.75	13.5	Lagos	10.5625
6.	Participation in project meeting	48.0	55.0	40.0	36.0	Ondo	44.74
7.	Consultation with community project personnel	31.25	26.875	23.75	21.25	Osun	25.78125
8.	Sharing of information with fellow	39.5	37.5	32.25	28.5	Osun	36.3125
9.	Sharing of information with project personnel	42.75	38.25	32.25	36.0	Osun	37.3125
10.	Consultation of fellows on problems	38.25	36.75	34.5	31.5	Osun	35.25
11.	Attendance of project training	35.0	33.25	23.625	25.375	Osun	29.3125
12.	Contribution of money towards execution of conservation project	35.625	36.25	21.875	23.75	Ondo	29.375
13.	Contribution of money towards maintenance of conservation project	28.125	31.25	23.75	23.125	Ondo	26.5625
14.	Contribution of labour towards execution of conservation project	37.5	28.25	26.25	27.0	Osun	28.90625
15.	Contribution of labour towards maintenance of conservation project	33.0	29.25	21.0	27.0	Osun	27.5625

Source: Fayenuwo, 2007.

## CONCLUSION

The role of people in sustainable forest management has been of global concern with the demographic, socioeconomic and socio cultural climates having consequential effect on the status of the forests and its sustainable management. Forestry development in southwest Nigeria must focus on a participatory approach given that the time for a one-sided welfare approach to development is past. Awareness of this initiative will be a strong indicator of empowerment, which is the basis of effective participatory forest management strategies. Community participation in forest management would help build confidence and rapport among stakeholders. It will also help in strengthening the forestry institution towards the attainment of sustainable forest management in the region. Efforts must however be made to create the enabling learning environment and empower the locals on CBFM.

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