

# Evaluation of Institutional Arrangements for Sustainable Forest Resources Management in Edo State, Nigeria

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**Abstract:** The unending decrease of the world's forest resources has become a great global debate. Ineffective forest resources management strategies have often be blamed for the uncontrolled rate of forest resources harvests. Institutions, the fourth factor of production in the economy, matters so much, because of cost – benefit effects. Forestry in developing countries often suffer from poor supply of institutions and so not only becomes less competitive than that of developed countries, but also less well managed than other sectors in the same countries. These underscore this research; evaluation of institutional arrangements for sustainable forest resources management in Edo State. The research aims to evaluate the performance of the state's legal framework and give recommendations for ensuring sustainable forest resources management. The data for the study were captured through questionnaire administration, Focus group discussions, interview schedules, oral testimony field observation and institutional decomposition. A total of 50 senior staff of the ministry of Agriculture and the department of Forestry were interviewed. Results from the studies shows that there are 48 governments forest reserves totaling 439,139.02 hectares. The government manages forests through legal frameworks. It was discovered that the richness in terms of biodiversity of the forests was on the decline, trees spacing becoming wider, timber harvests were continuous and the whole essence of government management, is revenue driven. The paper recommends that both the government and the local people should diversify their sources of income to reduce dependence on forest resources, establishment of forests management committees embracing all the forest stakeholders, sharing the proceeds from forests among the stakeholders, as these will ensure sustainable forest resources management in the state.

**Keywords:** Sustainable, forest resource management, institution.

## I. INTRODUCTION

Human development from antiquity has been tied to forest resource use. For instance, wood construction found at the Kalamo Falls in Tanzania, was dated 60,000 years old (Enabor, 1981). So far human development has been associated with the destruction of forest for settlement, farming, hunting, exploitation of forest products and other pursuits.

Forestry and sustainability are inseparable programmes. In principle, sustainability seeks after continuity while forestry is practically a non-use, if it is a short term activity. To the extent that the forestry purpose is to provide a variety of

goods and services for one generation to another, it means that the critical factor is that of relevance from one age to another (Adeyoju, 1999)

On the other hand, the long term fortune of forestry depends largely on the institutions in place as well as the performance of the managers. It means that irrespective of the sustainability strategy and the enabling environment, the human role is indispensable. Indeed, an institution is worthy of its name and purpose to the extent of its craft and operational performance (Adeyoju, 2001).

Forest resources are natural endowments that serve as life support system; which include Timber and Non-Timber forest products. In Edo state, forest, resources include economic trees such as Iroko, African Walnut, Obeche, Ebony, Cedar, White Afara, Mahogany, Oil Palm, Raphia Palms etc, and Non-Timber products- fruits: such as Bush Mango (*irvingiagabonensis*), Ogbollo (*irvingiawombulu*), African Apple (*chrysophyhumalbichum*), Native Pear (*dacryodes edulis*), Bitter Kola (*garcinia kola*), Ehuru-Igbo, (*Manodora Myristica*), Oil Been Seed (Ugbe-Esan) (*Peutaclethra macrophylla*), Edible leafy vegetable: Okazi-Igbo, Afang-Ibibio, Ikposo-Esan (*gnetumafricanum*), Ikpaghudo-Esan, Atama-Ibibio, (*Hensiacrinata*), Guinea grain (*Asiendo-Esan*) (*Piper guineescs*), Gongrorfema *latifolia* (Utazi-Esan & Igbo). Others include honey (beeswax), mushroom, bush meat, medicinal product: herbs, roots, back, neem (*dogoyaro*) for the treatment of diseases such as malaria, dysentery, convulsion etc (Ticktin, 2004).

From creation, man derived his livelihood mainly from the forest, be it for food, water, clothing, shelter, recreation, religious worship or medicals. Human development from antiquity has been tied to forest resource use. Forests are resources of capital, which can be used for economic growth and development.

## II. CONCEPTS

### a. Sustainability

The word sustainability is derived from the Latin 'sustinere (tanere, to hold, maintain, support, endure etc). However, since 1980s, sustainability has been used more in the sense of human sustainability on planet earth and this has resulted in the most widely quoted definition of sustainability and

sustainable development, that of the Brundthland Commission of the United Nation on March 20, 1987. “Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs (World Commission on Environment and Development, 1987).

At the 2005 World Summit, it was noted that this requires the reconciliation of environmental, social and economic demands as illustrated with the three pillars of sustainability. This view has been expressed using three overlapping ellipses indicating that the three pillars of sustainability are not mutually exclusive but can be mutually reinforcing.

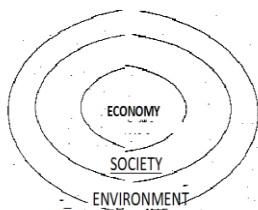


Figure 1: A diagram indicating that both economy and society are constrained by environment

Source: Gibson, 2007

The UN definition is not universally accepted and has undergone various interpretations. What sustainability is, what its goals should be, and how these goals are to be achieved are all open to interpretation.

For many environmentalists the idea of sustainable development is both pleasant and unpleasant as development also entails environmental degradation.

Ecological economist Herman Daly asked, “what use is a sawmill without a forest.” As sawmill without forest establishment, means accelerated deforestation. From this perspective, the economy is a subsystem of human society, which is itself a subsystem of the biosphere. And gain in one sector is a loss from another. This can be illustrated as three concentric circles.

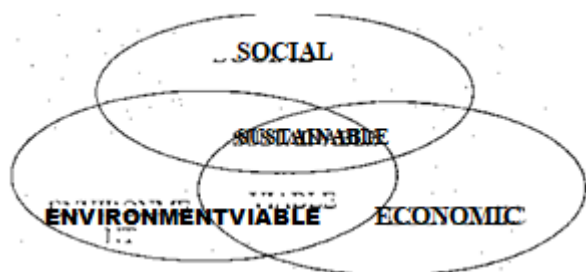


Figure 2: Scheme of sustainable development: at the confluence of the constituent parts.

Source: (Gibson, 2007)

A universally accepted definition of sustainability remains elusive as it is expected to achieve many things. Therefore, sustainability is improving the quality of human life while living within the carrying capacity of supporting eco-system.

## 2.2 Sustainable Forest Resources Management

According to Evans, Alexander and Effa (2010), principles of sustainable development include; peoples’ right to the resources at their domain, respect to the carrying capacity of ecological systems, balancing consumption with regeneration rates, local people to benefit from the proceeds of their resources, involvement of all the stakeholders in the management of resources as well as equitable distribution of proceeds from resources among stakeholders.

Food and Agricultural Organization (FAO, 2001) defined sustainable forest management as: The stewardship and use of forest and forest lands in a way, and at a rate, that maintains their biodiversity, production, regeneration capacity, vitality and their potential to fulfill, now and in the future, relevant ecological, economic and social functions at local, national, and global levels and that does not cause damage to other ecosystems.

In similar terms, Froylan (2009) described the concept as the attainment of balance — balance between society’s increasing demands for forest products and benefits, and the preservation of forest health and diversity, and that this balance is critical to the survival of forests, and to the prosperity of forest-dependent communities. Therefore, foresters must consider forests not, just as a growing stock, but also as a complex ecological system which should be sustainably managed.

## 2.3 Institution

Institutions are the rules of the game in society; more formally, they are humanly derived constraints that shape human interactions. Institutions can be formal constraints such as laws, constitutions, written contracts, property rights organized by-laws, code of conducts; and informal constraints, such as norm, customs, conventions and ethics (North, 1999).

Institutions help the co-ordination of the other production factors or economize the coordination. Institutions always need to be specific regards to whom, when and where they apply. Otherwise, they are meaningless.

## 2.4 Aim of the Research

The aim of this research is to evaluate institutional arrangements for sustainable forest resources management in Edo State and offer solution that can enhance the performance of the institutions, to enable them deliver on their statutory mandate.

## III. STUDY AREA

### 3.1 Location and Size

Edo State, Nigeria occupies land area of 19,707km<sup>2</sup> and a medium diversity of 163% per km<sup>2</sup> (Collins, 2010). It lies approximately between latitudes 5°45<sup>1</sup> and 7°W<sup>1</sup> and 6°52<sup>1</sup> East of the Greenwich Meridian. The state hah neighboring states as Delta to the South, Kogi and Ekiti to the North, and

Ondo to the West. The eastern boarder runs along the River Niger.

### 3.2 People and Population

Politically, there are 18 local government areas in Edo State. There are five major ethnic groups in the state, which include the Benins, Esan, Ora, Afemai and the Akoko-Edo. The Benins occupy the southern part of the state, Esan and Ora occupy the central part and Afemai and Akoko-Edo occupy the northern part of the state. The state has a population of 3,218,332 (1,640.46 males and 1,577,87.1 females) (NPC, 2006).

### 3.3 Climate

The climate is tropical with distinctive wet and dry seasons, classified under the Koppen (1918), as tropical rainforest climate. The mean annual temperature is about 30°C with annual range of 5°C as the annual range of temperature. Mean annual rainfall ranges from 1900mm and 4035mm, while the rain days range from 116 to 170mm annually..

### 3.4 Relief

Edo State has a fairly gentle topography. The relief is generally low with some pockets of highlands in the northern parts of the state, where elevations are as high as 30 meters above sea level.

### 3.5 Soils and Geology

In Edo State, Savanna, rainforest and wetland soils are closely parallel to the underlying geology (Beak, 1995). Savanna soils are found in the northern part, the area is underlain by undifferentiated gneisses and magmatic basement complex rocks. The soils are deep, well-drained and sandy loam. On the hills and ridges however, the soils are shallow, sandy, sometimes gravelly and over bedrock.

Some of the soils also overlay sedimentary units, sandstone scarp and sedimentary rocks. The soils are deep to moderately deep and shallow in places; well or imperfectly drained loam, sandy loam and sandy clay warm (Break and Geometries, 1997).

### 3.6 Vegetation

The vegetation is tropical rainforest as described by Keay (1959) and Hopkins (1974). The vegetation zones of Edo State more or less coincide with the political zones in the state; Edo South is in the moist rainforest; Edo Central in the dry rainforest/derived savanna while parts of Edo North is in the derived savanna/southern guinea savanna vegetation (Beak, 1998). Popular economic trees found in the state include Iroko, African Walnut, Obeche, Ebony, Cedar, White Afara, Mahogany, Oil Palm, Raphia Palms etc. The bulk of the raw materials that sustain the state's wood based industries (formal and informal) is sourced from the high forest zones.

## IV. LITERATURE REVIEW

### a. Introduction

There is considerable amount of knowledge available about the techniques to achieve various dimensions of sustainable forest resources management.

It is generally believed that enough is known to manage forests on a more sustainable basis. However, it is also believed that a significant portion of the world's forest is not managed in a way that could be described as sustainable.

### b. Forest Reserves and Sustainable Forest Resources Management

Forest reserve is the most popular approach to sustainable forest resources management, world-wide.

Forest reserves as a legal tool, of sustainable forest management in Nigeria was inherited from the British Colonial Administration. In 1890, the colonial administration in Nigeria had established forestry department for Southern Nigeria. Its primary role was to constitute forest reserves, provide for protection and control of the removal of forest products.. Ever since, reserves have become first choice management technique in forest resources management.

Adeyoju (2011) argued that global standard against deforestation was the establishment of reserves with a ratio of forest to land of 30%. World Bank (2002), recommended forest-land ratio of 30-40% as sustainable method of conserving forests. Forest Resources Management and Evaluation Unit of the Federal Republic of Nigeria (FORMECU, 2012) as a matter of policy recommended to the thirty-six states of the federation to adopt forest-land ratio of 30% through reservation.

World Bank (2005) carried out forestry survey in Nigeria; and observed that Nigeria's remaining foresti comprising reserves (788,053ha) and off-reserve -tree (1,854,360ha), have been degrade. In the 1960s, forest cover was estimated at close to 10 million hectares. By 1978, it diminished to 4 million hectares (ha).

The latest landsat imagery analysis of data (1955) showed that forest cover had further decreased to 3.1 million which is grossly below 10% of its land area.

Land Use Study (1995), revealed that forest reserves in Edo State declined from 310,800ha in 1978 to 21,900ha in 1995. Edo State Department of Forestry (EDF, 2004), declared that the forest reserves in Edo State stood at 23% of its land area. Aimufia (2003), evaluating Edo State forest estate and biodiversity, stated that forest land ratio in Edo State stood at 21% in 2003 .

According to EDF (2004), forest reserves in Edo State in 2004, stood at 439,139.02ha. And since forests continued to decline, as harvests continued, since forestry constitute a reasonable percentage about 12% of the state's GDP and employed about 20% of the state's population (Okro, 2013)

and also being a major source of livelihood to the indigenous people of the state.

The decline continued to about 15% in 2015, due to poor afforestation programme, uncontrolled timber harvest, illegal logging, and the states aggressive revenue drive policy(EDF, 2015).

#### *Forest Resources Policies and Indigenous Peoples knowledge in Forest Resources Management*

Nkruwa (200) argued in his analysis of adopted sustainable forest policies in return for bilateral and multilateral donor grants, for forest resource management in Ghana; stated that deforestation was still high. The analysis reveals that the actual forest policy of Ghana has historically been exploitative in response to international pressures, then a new Forest policy with sustainable and participatory goals, was formulated in 1994. However, this has been poorly implemented, due to complex interdependencies and informal networks between state officials and forest exploitative groups. While local communities are marginalized, small-scale chainsaw operators as well as some farmers contribute to poor implementation of forest protection policies in Ghana. The study recommended strengthening of forestry department, a change driven by civil society and strong local media, to help improve governance and forest management in Ghana and elsewhere in Africa.

A research carried out in 2004 in Mekong countries of Cambodia, Vietnam and Myanmar, on the contributions of indigenous peoples in sustainable forest management; revealed that indigenous peoples attached prime importance to forests resources. They depend daily on the forest to supply the needs of their families for food, water, livelihood, firewood, shelter and health care.

They deeply value their forest and care for them through their spirituality and rich indigenous knowledge on forest protection, development and use. Indigenous knowledge such as rules, customary laws and practices, cultivation of land, identification of forest zones, proper use and collection of forest products, have transmitted into their living values and cultures, which have resulted in improvement of forests for food, health care and sustainable livelihoods; protection of biodiversity and genetic resources as well as advocacy to protect their forests from degradation.

#### V. METHODOLOGY

Several approaches that helped to capture the required data for the study were employed. They include structured questionnaire, focus group discussions, interview schedule, oral testimony, field observation, institutional decomposition and analysis.

Data on forest resources management were collected from selected 20 rural communities across the forest areas of the state. Five research assistants were employed. One hundred persons formed the sample population for this study, derived

from 20 communities within the forested areas of the state. However, at least a community was selected from 14 out of the . 18 local government areas of the state, with preference given to the communities with large population.

Table 1: Sampled Communities

Communities	L.G.A	Population	Sample Size
Ehor *	Uhunmwode	120813	5
Ekiadolo *	Ovia North East	153849	5
Ekosodin	Ovia North East	153849	5
Idogbo	IkpobaOkha	371106	5
Iguobazuwa *	Ovia South West	135356	5'
Irrua *	Esan Central	105310	5
Iyelen *	Esan South-East	167721	5
Ogba *	Oredo	374671	5
Ogwa *	Esan West	125842	5
Okhuesan	Esan South East	167721	5
Opoji	Esan Central	105310	5
Sabogida Ora *	Owan West	97388	5
Otuo	OwanEast	97388	.5 .
Oza	Orhionmwon	182717	5
Siluko	Ovea South West	135346	5
Udo *	Igueben	69639	5
Ugboha *	Esan South East	167721	5
Urhonigbe *	Orhionmwon	182717	5
Usse	Egor	339899	5 .
Uzea	Esan North.East	119346	5
Total		3218332	100

Source: National Population Commission (2006) \*Communities with Government Forest Reserves

#### VI. SELECTION OF RESPONDENTS

Having selected the communities as well as determine the sample size for the study, in order to get appropriate responses, household heads were interviewed. Random sampling was employed to select household heads for questionnaire administration.

##### *a. Oral Testimony/Focus Group*

Structured interviews and focus group discussions were used to collect information from forest stakeholders; environmental NGOs, free-range loggers, government forest guards, community opinion leaders, youth groups on the general management of forest resources in their communities.



### b. Use of Structured Questionnaire

The questionnaire was used to elicit information from operators of Sawmills and the aforementioned stakeholders in order to gain understanding of the existing realities and experiences and their expectations especially with respect to sustainable forest resources management.

## VII. USE OF CAMERA/FIELD OBSERVATION

Cameras were also used to capture in photograph, the true position and nature of the forests. The researcher also carried out field observation and assessment of the study area.

## VIII. DISCUSSION OF RESULTS AND FINDINGS

### a. Introduction

The role of forests as life, support system and ready source of income generation to the people and the government has long been recognized as significant. Plethora economic activities exist in the rural areas of Edo State. This can be traceable to the diverse cultural practices of the tribes that constitute Edo State.

### b. Forest Reserves as a legal tool of Sustainable Forest Resources Management in Edo State

Forest reserve is one of the most effective methods of managing forest all over the world. It is one of the seven thematic areas, as consensus on the key elements of sustainable forest management of the United Nations Forum on forest and the 16<sup>th</sup> session of the ' committee on forestry (Evans, Alexandar and Effa,2010). This method had long been adopted in the study area as far back as 1927, when the reserves were called "inviolable plots" (EDF, 2001).

Table 2: Forest Reserves in the Study Area

Community	Name of Govt. Forest	Govt. Forest in Hectares	Name of Community Forest	Estimated Community Forest in Hectares
Ehor	Govt. Reserve	24,805	Egbo - Evbohia	248
Ekiador	Govt. Reserve	25,517	Egbo - Evbohia	200
Ekosodin	--	--	Egbo - Evbohia	200
Idogbo	--	-	Egbo - Evbohia	200
Iguobazuwa	Govt. Reserve	15,925	Egbo — Evbohia	150
Irrua	Govt. Reserve	399	Egbo — Orhebhe	30
Iyeten	Govt. Reserve	109	Egbo — Orhebhe	10
Ogba	Govt. Reserve	3,371.24	Egbo — Evbohia	327
Ogwa	Govt. Reserve	693	Egbo-Oghebhoh	60
Okhuesan	Govt. Reserve	2,138.50	Egbo — Ebhohoho	238
Opoji	--	--	Egbo — Orhebhe	45
Sabogi	Govt.	13,376	Egbo-	130

da Ora	Reserve		Orhebhe	
Otuo	--	--	Egbo - Okanyan	.50
Oza	--	--	Egbo — Evbohia	250
Siluko	--	--	Egbo-Evbohia	300
Udo	Govt. Reserve	1,344	Egbo— Ebhohoho	130
Ugboha	--	--	Egbo— Ebhohoho	250
Urhoni gbe	Govt. Reserve	24,432.	*Egbo-Evbohia	400
Usse	--	--	Egbo-Evbohia	250
Uzea	--	--	Ebo-Orhebhe	80
Total	--	118,690.74		3,803

Source: Edo State Department of Forestry (2021) Author's Field, Survey (2021)

There are 48 government forest reserves, totaling 439, 139.02ha, spread across 16 Local Government Areas in Edo State. Additionally, all the communities in the forest region of the state have between 2-3 community forest reserves. Table describes the estimated forest reserves in the sampled communities. These forests are in three categories; those maintained as sacred forests, those set aside as burial grounds and those exploited as community forests.

The rights and privileges of members of the communities to these forests are equal and access to them is based, on needs. For example, access to burial forests only comes when a dead member of the community is to be buried.

The sacred, forests are used for ancestral worships. They are only accessed during festivals. For examples at Udo, Ugboha and Okhuesan, whenever a new king is installed, he must worship and perform rites in such forests to legitimize his stool and reign. The forests are managed by either appointed committees that serve on 3-5 years term basis or by council of elder, whose term is permanent as long as the council members live and in the event of death of any members a new appointment is made to replace such only on age basis.

For example, at Egwiye-Ekosodin, a small community behind University of Benin, the community forest, especially that, at the river bank, is managed and administered by council of elders. The proceeds from the forest (revenue paid by private loggers) are shared among the families that make up the community. Monitoring and protection of the forest is the responsibility of the entire local people. In the case of Okhuesan, a standing committee has been put in place that administers the forest for the community. The proceeds from the sales of timber to private loggers are submitted to the council of elders who share it among families according to laid down byelaws.

Community forests in the study area are managed by traditional byelaws, stipulating monitoring, prevention of harm to the forests, offences and fines, no go areas of the

forests, access and time of access, the portion to be cleared for farming or for other uses. The king or chief or the paramount ruler in each community is the overall head of the management teams and also supported by council of elders or chiefs who are advisers.

It was observed that the richness in terms of biodiversity in community reserved forests, is higher than those of government reserves. This could be due to the strict enforcement and the people's belief in their traditions and bye-laws regarding forests and also the mutual benefits accruing to all the families in the communities from proceeds from the forests.

#### IX. NON-TIMBER FOREST PRODUCTS IN THE STUDY AREA

Non-timber forests products (NTFPs) include fruits, edible leafy vegetables and others which include tropical bush meat, palm nuts, palm kernel, palm wine, ropes, fence and thatch materials, medical products such herbs, roots, bark etc. for the treatment of malaria, dysentery, convulsion, diabetes, high blood pressure, ante-natal and post-natal care etc.

Observation and interviews held with opinion leaders, foresters as well as farmers in the area, revealed some disparity in the availability and distribution of nontimber products in the study area. The non-timber forest products are collected from various sources, such as fallow lands, mature forests and forest reserves. The study also revealed that the forest and its resources together with the benefits they provide, in form of food, income and water shed protection, enable the local people to secure a stable livelihood and raise their productivity.

Specifically, barks, leaves, roots of plants, such as *Allium ascalonicum* (ginger), *Azadirachta indica* (Neem, Dogoyaro-Hausa), *Cucurbita pepo* (pumpkin) etc are used for curing diseases such as malaria, dysentery, convulsion and blood loss.

#### *Forest Regeneration (Tree Planting Policy of the State)*

The department of Forestry in 1992 – 1998 established forest regeneration / seedling scheme, to make up for the trees felled in the reserves. Consequently, seven model plantations totaling 67.2 hectares were to be planted annually and was flagged off in five local government areas. The trees species were (Teak and Gmelina).

This research, through interview schedule, perused the official documents of the department of forestry and field observation confirmed that the exercise was abandoned half way, due to short supply of the seedling and other logistics. It was discovered that ever since, no such a programme has been organized, amidst continued heavy harvest of trees and other forest resources.

#### X. OTHER INSTITUTIONAL ARRANGEMENTS FOR SUSTAINABLE FOREST RESOURCES MANAGEMENT IN EDO STATE

Edo state government parades an array of institutional framework for forest resources management, which cuts across legal, policy and administrative management:

Table 3: Current Institutional Arrangements For Sustainable Forest Resource Management In Edo State

S/N	Institutional Parameter	L.G.A	State Government
1	Legal Framework	Non – Existent	Existent Edo/Forestry – Edict No 33 Vol. 2, Edict No 1 Vol. 1, 1998
2	Relevant Forest Management Policies	Non – Existent State Policies Override	Forest Use/Management Policy, which is weakly enforced Forest Policy of Edo State 2002
3	Relevant Forest Management	Agricultural Development Office	Department of Forestry, Edo State
	Agencies	None	Ministry of Environment Forest Allocation Committee on Forest Protection
4	Forest Management Professionals	1 Professional (Agric Officer) in each L.G.A.	18 Professionals, very insufficient, Minimum required is 58. And the available experts not fully engaged.
5	Coordination/ partnership with related agencies in forest resources management	NGOs – Monitoring and Advocacy	Foreign Donors Agencies (World Bank) Cash and logistics donations and research
6	Use of Information Technology Communication (ICT) tools for forest Resources Management	Non – Existent	Non – Existent
7	Funding attention	No Funding Provisions	No dedicated funding. Funding is highly irregular and insufficient. Occasional partnership funding by donor agencies private forestry funded by private individuals
8	Research and Communication	Non – Existent	Scanty and partial, mainly conferences
9	Inter – governmental responsibilities	Existent at the L.G.A level	Existent at the state level, intra ministry i.e Dept by Dept activities are independent but finally co – ordinated at the ministry level
10	Current Management Approach	Mostly economic incentive driven	Mostly economic incentive driven. Almost all the policies and programmes are geared towards generation and enhancement of revenue. No spirited efforts to conserve and Maintain Biodiversity

Sources: Annual Forestry Report of Edo State Department of Forestry (2020)

Table 3 present a number of issues regarding institutional arrangements presently in place for the management of forest resources in the study area. The legal framework emphasis ownership of forest reserves, prohibits unauthorized persons or organization access to the reserves.

Maintenance of threatened plant and animal species has no priority in the legal framework. The purpose of the legal framework is primarily on forest protection and management which should transcend to economic gains at the expense of the forest.

This overrides all other aspects of institutional arrangements for forest resources management in the state. Other management policies and programmes ever embarked upon by the state in the past had their background from the forestry edict, which however, maintains and protects revenue interest. Funding of forestry has been grossly inadequate leading to abandoned reforestation programmes. Supplies of seedlings to enhance reforestation programmes are skeletal and intermittent. Vehicles for patrols, manpower to ginger development are grossly inadequate and not encouraged.

#### XI. EVALUATION OF INSTITUTIONAL ARRANGEMENTS

Forest stakeholders (forest users, authorized loggers, environmental NGOs and community groups) were interviewed in order to gain understanding of the existing policies, programmes, administration and the institutional framework of the state government; on sustainable forest resources management. Records from department of forestry show that, the department of forestry was ill-equipped and thus suffering from insufficient budgetary allocations, qualified professional and technical manpower, very poor field monitoring and fledgling afforestation and reforestation schemes. At present, the whole forest estate is being exploited and agitation by indigenous people to be part of forest resources management; is high. As the indigenous people view forest as a common wealth of all. The research show that the institutional arrangements are basically revenue driven.

Consequently, the states institutional arrangements for forest resources management are not sustainable. Unless concerted efforts are employed, forest resources in the state would as a matter of few years be exhausted.

#### XII. CONCLUSION

Broadly speaking, the goal of sustainable forest resources management, to ensure maintenance and sustenance of forest biodiversity, has not been met. Various studies indicate that involvement of other forest stakeholders will greatly enhance biodiversity sustenance.

It is necessary to recognize and advocate for better forest governance, especially given the importance of forest in

meeting basic human needs. The government, the communities and other forest stakeholders must collaborate to ensure trust and effectiveness in maintaining and conserving forests.

#### XIII. RECOMMENDATIONS

The United Nations has recognized the central role of environmental education, and levels and contexts of societies, which aims to challenge all, to adopt new behaviour and practices to secure our wholistic future and maintain biodiversity. The government and the local people must deliberately diversify their sources of income, to reduce their dependence on forest resources. The government should establish joint forest management committees with the communities and other forest stakeholders to protect, monitor and maintain and share proceeds from forest resources; as this will ensure biodiversity sustainability

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