

# LINKING PARTICIPATORY RURAL APPRAISAL TO FOREST PROTECTION AND CONSERVATION IN KATSINA STATE OF NIGERIA

*S. Mohammed*

*M.N. Danjuma*

Department of Geography, Bayero University Kano, Nigeria

---

## Abstract

Globally, people and powers have diverse reasons of valuing and protecting forests. While some conserve forests for economic reasons, other for social, aesthetic and ecological benefits. In order to do that, approaches have been developed since time immemorial which were thought to be effective in managing forests but which constantly fail to meet objectives simply because of centralised governance of forest administration which mostly alienate local managers from the regime. In often cases, people who do not value the forest resources more than the local inhabitants implement forest decisions centrally thereby limiting investments and efforts of local actors as opposed to participatory practices. The participatory practices such as PRA unlike the classical approaches are more flexible a reason why they are borrowed into resources management from anthropology domain. They inherently have the propensity of integrating local actors in implementation and decision making. The aim of the study is to examine the linkages between participatory rural appraisal and its applicability in forest conservation in Katsina State. The main objective is to propose a tool for the inclusion of PRA tools in forest conservation of the state which is as at now centrally governed from the office of the governor.

---

**Keywords:** Participatory Rural Appraisal, Forest conservation, Katsina State

## Introduction

Forests have since ancient times played an important role in the lives of people and the environment in general. That is, forests provided and continue to provide numerous benefits to humanity (Sackey, 2007). Forests present a tall list of important resources required for sustainable development. They are essential for human survival and well-being;

harbouring about two-thirds of all terrestrial animal and plant species. They serve as a source of food, oxygen, shelter, recreation, and spiritual sustenance, and they are the source for over five thousand (5,000) commercially-traded products, ranging from pharmaceuticals to timber and clothing (CBD, 2010). Forest performs a wide range of critical environmental and climatic functions and it serves as homes to the majority of the world's plant and animal species. The significance of forest can be classified under environmental, social and economic (Abass, 2007), and based on this humans have historically attached religious, philosophical and aesthetic significance to forest. Forest resources play a key role in protecting the environment and are of tremendous importance to the sustainable development of every society. The importance of Forest resources to the economy of Nigeria is aptly captured in the 1988 Forestry Policy Guidelines (FMANR, 1988).

Forest is reflected as an important source of re-investible capital and a source of income. It serves as a foundation for industrialisation and enhances the stability of the rural population. A report prepared by the Central Bank of Nigeria (1995) shows that Forestry contribution to Nigeria's Gross Domestic Product (GDP) are 1.82% in 1981, 2.04% in 1987, 1.29% in 1992 and 1993 and 1.31% in 1994.

Giving the fact that these resources are of great importance to millions of people, especially those whose livelihoods directly depend on them, Boon et al.(2009) stated that the past two decades have witnessed an increased attention by the world community to the issue of conservation and wise use of forest resources. Many programmes are introduced by governments and institutions to protect forests but with local people involved in participatory forests management, generally protect their forests and access to government managed forests out of self-interest (Shrestha and Paudel, 1996; Kunwar 2002), forest become more secured. Participatory approach is increasingly seen as both a desirable and a feasible option used to manage forest in many parts of the world, but particularly in the developing parts where forest remains an integral part of peoples' livelihood. Thus, strengthening local control and governmental oversight is urgently needed to assure long-term sustainability. There are many reasons for supporting forestry activities by local people, as has been discussed by numerous authors (Gilmour and Fisher, 1991). One argument is the sheer impracticality of ignoring or giving inadequate attention to local people's forest interests and or alienating them from the regime (Leach and Mearns, 1996). This may be seen wherever forests are part of local people's livelihoods, but particularly in areas of high population density and/or in remote areas poorly supplied by government services. Another argument

rests on the moral justification of involving people in the control and management of their traditional lands.

### **The Study Area**

Katsina State is located between longitude  $6^{\circ} 45^{\prime}$  E and  $8^{\circ} 15^{\prime}$  E and latitude  $11^{\circ} 20^{\prime}$  N and  $13^{\circ} 20^{\prime}$  N. It is one of the North West states of Nigeria that shares its Northern border with the Maradi department in Niger Republic and Kaduna and Kano States to the South and South East respectively. It also share border to the East and West with Jigawa and Zamfara States to the respectively.

According to the 2006 population census figures, Katsina State has a population of 5,801,586 persons and an average growth rate of 2.8%. Moreover slight difference occurred between male – female ratio where female figure remained higher. Out of the figure, about 49 percent are males while 51 percent are females (NPC, 2006).

The climate of the study area is the ‘Aw’ type as determined by Koppen in which distinctive wet and dry seasons are caused by the fluctuations of the ITCZ (Inter Tropical Convergence Zone) or the ITD south to north (rainy season), vice versa (dry season) and meeting at a front. The ITCZ separates humid maritime air mass originating from the Atlantic Ocean and dry desert air mass. The ITCZ follows the apparent movement of the sun, (northwards in April – July and southwards in September – October). Temperature is generally cool in the morning, hot in the afternoon, and very cool in the evening. Maximum temperature range in Katsina is between  $29^{\circ}\text{C}$  and  $38^{\circ}\text{C}$  but harmattan season (November to February) lowers temperature to about  $18^{\circ}\text{C}$  and  $27^{\circ}\text{C}$  in the noon.

With the exception of some exotic species planted as ex-situ conservation trees, the vegetation in Katsina is composed of indigenous species which grow spontaneously. The trees found include *Parkia biglobosa*, *Adansonia digitata*, *Khayasenegalensis*, *Fadherbia albida*, *Tamarindus indica*, and *Borassus aethiopicum*, and exotic species *Azadirachta indica*, *Eucalyptus camaldulensis*. Few fruit trees are grown on farms such as *Magnifera indica* and *Anacardium occidentale*. Man and his animals play a great role in modifying the vegetation cover in the area and as a result continuous cover of shrubs overtakes the once woody landscape.

### **Forest Governance in Countries operating Federal System of Administration**

The success or failure of anything governed is determined by the variables that bind the process among which is the means of governance. Governance is a notion as old as human civilization, and is traditionally held very close to that of “government” more or less “what

governments do” (Monditoka, 2011). Over the last decade, governance as a term has gained wide currency in a range of contexts and within societies and individual organizations. Most significantly however, World Bank (2006) in simple term defines governance as “the art of steering societies and organizations”. Minogue et al. (1998) defines governance as the array of ways in which the relationship between the state, society, and the market is ordered. The notion of governance is more than the government who is one of the actors in the process and how the structure is, but entails the rule under which power is exercised in the management of a country’s resources and the relationships between the state and its citizens, civil society and the private sector (Brown, Schreckenberg, Shepherd and Wells, 2002). Recognizing this, the Human Development Report of UNDP (1999) suggests that “governance” means a framework of rules, institutions, individuals, organizations and firms.

In context of governance in this paper, two features emerge; which are centralised and decentralised means of governance. Centralised system is basically practiced in countries that operate the federal system such as Russia, Switzerland, U.S.A. and Nigeria (Contreras-Hermosilla, Gregersen, and White, 2008). Its key feature is that generally ultimate power and responsibility reside with the central government. If a lower level of government misuses its assigned powers, or it is being perceived doing so, the central government can, at will, take back authority and responsibilities.

In the forest sector, governance issues have been actively pursued for many years. Forestry provides a useful entry point for governance programmes due to its focus, linking the global to national and local levels. Moreover, public participation, accountability, transparent government, and pro-poor policy change themes have been central to the forest, which are also crucial dimensions of governance. Recognizing that communities may have the ability to monitor and enforce rules about forest use, policymakers have turned to various ways of devolving authority over forests to local people, usually without privatization. These policy moves indicate that some governments are beginning to realize that the 500 million people who live in and around the world’s forests will greatly determine the success or failure of their forest policies. These movements from government to governance in the forest sector have resulted in the emergence of new opportunities as well as approaches. As a new approach, recently forest policies which have undergone pronounced changes over the last 30 years for example in Nigeria, have been gradually incorporating stakeholders such as individuals and institutions. Notwithstanding, because forest policies vary from country to country, especially between developed and developing countries, such decentralised options will give more benefits than generally technically oriented. And because until and through the 1960s, forest policies worldwide had been technically oriented (Monditoka, 2011), focusing on the

commercial aspects of forest management rights of local people are often relegated to non-commercially valuable forest products (Ribot, 2001), even if they have lived in the forest for generations. In most cases, the power of the forest administration agencies, both at the federal and state level, vis-à-vis other agencies of government is relatively minor. Decentralization of forest governance on the other hand has been defined and implemented in different ways in a variety of contexts around the world. Whereas the ideals of decentralization are increased voice for local communities, greater accountability in local governments and more appropriate policies (Olowu, 2001), the reality is quite different in Africa because it is not practice appropriately. Decentralization is a popular theme in the forest sector but because of their multilevel centres of power and responsibilities, federal structures of forest governance which are complex, involving many institutions and strong cross sector linkages example with agriculture, water, rural development sectors tend to mix up programmes thereby making it insignificant.

### **Structure of Forest Governance in Katsina State**

Forest governance in Katsina State as in many States were federal system operates is centralised. In this system, the central government usually has overall responsibilities and powers to govern the use of resources, activities and events that affect more than one state and that involve the production and administration of national public goods, and in some cases, international public goods associated with the environmental services, including those produced by forests (Contreras-Hermosilla, Gregersen, and White, 2008).

Forest administrations at state level as in Federal System is in form of subsidiary bodies of ministries of environment or agriculture and/or incorporated in small, relatively less powerful agencies. In Katsina State forests are governed centrally from the office of the governor to the Ministries of Agriculture and Environment as well as the agencies under them as shown below. These agencies are Katsina State Afforestation Programmes Unit (KTAPU), Katsina State Agriculture and Rural Development Agency (KTARDA) as well as autonomous Department of Forestry which was curved out and administered directly from the office of the governor.

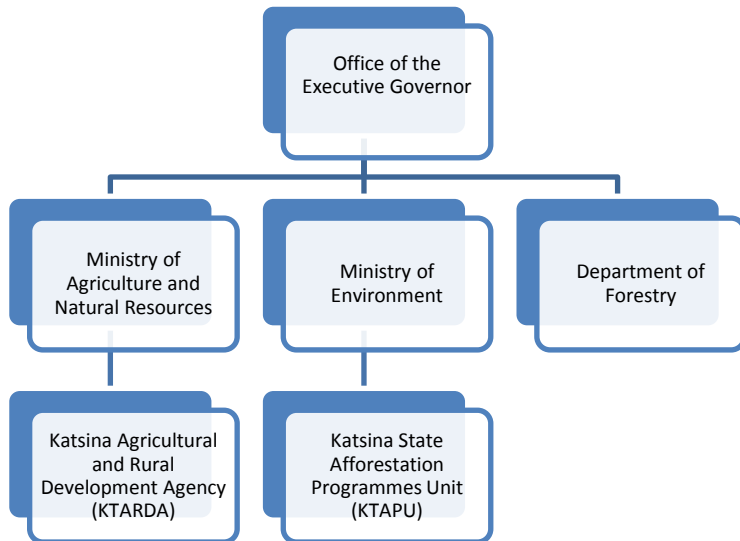


Figure 1: Structure of forest governance in Katsina State

### **Trends and Origin of Forest Management in Nigeria**

Forest management started in Nigeria as early as 1889 with the opening of the ‘office of woods and forests’ in the then colony and protectorate of Lagos (Kio et al., 1992 and Lowe, 1994). In 1901, the first forest ordinance came into effect to regulate the sale of timber concessions, to impose forestry fees and minimum exploitation girths (usually up to 120cm dbh for mahoganies) and to mandate concessionaires to plant 20 tree seedlings at each stump site.

The forestry Sector did not have a separate policy before the commencement of the National Forestry Action Programme. What obtained was an encapsulation of the National Forest Policy within an overall “Agricultural Policy for Nigeria” which was published in 1988 under the aegis of the Federal Ministry of Agriculture (Adeyoju, 1994). Forest reservation was usually done in consonance with the local communities, who were authorised to continue their former uses of the forests, so far as such practices did not contravene the management of the forest for timber production. Forest reservation was almost completed in the high forest areas by 1940 except for Rivers State, where additional areas were constituted between 1960 and 1980. Majority of the forest reserves in the Northern Savanna zone was constituted between 1950 and 1970. In recent times, most forest reserves have been abandoned without annual maintenance and are being threatened by encroachment. The sustained yield principle was neglected while forest reserves were consistently mined. This situation prompted the Federal Government of Nigeria (FGN) to approach the African development Bank (ADB) for assistance to undertake a forest resources study for the country. This project which lasted between 1995 and 1998

succeeded in producing management plans for the different forest formations in the country (FORMECU, 1999). Forest reservation was virtually completed in the high forest areas by 1940. Tropical Shelter wood System was introduced but later abandoned while attempt at artificial regeneration through Taungya system started in 1926.

The recent times have however, witnessed an absolute disregard for forest management. Forest reserve is thus not maintained while management plans are either non-existent or abandoned. The country has made several attempts at putting in place programmes that would ensure the efficient management of her Forest resources. These include the establishment of Industrial Plantations from 1978, Land Use and Vegetation survey between 1975 and 1978, Production of perspective plan for the period 1990 - 2005 and formulation of a Nigerian Forest Action Program in 1997. However, most of these initiatives have had limited impact in turning around the precarious state of the Forest estates.

In the context of Katsina State (formerly native Authority) there was long history of forest ordinance since 1906 (Yusuf, 1995) as well as initiatives in full range of policies, institutions, plans and programmes to manage, utilize, protect and enhance forest resources within its boundaries. Various attempts have been made by successive administrations in Katsina to ensure the efficient management of her forest resources. However, over the years a greater percentage of these programmes have been lost to bad governance. Poor governance in the forest sector is an impediment to achieving optimum development outcomes in the sector. It is against this back drop that the state government assisted by some international organizations initiated agroforestry project to check threat to forests of the state. The following are summarised as the forestry programmes of Katsina state some of which are partly funded by donor agencies.

### **Katsina Agricultural and Rural Development Authority (KTARDA)**

Activities carried out by KTARDA included the establishment of shelterbelts, windbreaks and woodlots and biodiversity conservation using *Acacia nilotica*. This project established a total of 69 shelterbelts in the Sahel and Sudan ecological zones of the study area. The shelterbelts were established in the following locations: Ruma, Riko, Aballawa, Yandaki, Shinkafi, Daddara and Tsagero (Sahel ecological zones). The other locations included Maru, Zakka, Tsauri, Wurma, Dangei, Gingin, Gwarjo, Sayaya, Jino, and Tsamiya (Sudan ecological zone). Shelterbelts are long narrow strip of trees planted at right angle to the prevailing dry season wind direction. The project established a total of 3,470 windbreaks around farmlands and settlements within the study area. It also established a total of 2,229 units of woodlots throughout the study area. They are primarily

designed to provide constant source of firewood and poles which may be used for domestic purposes or for sale.

For the whole project which lasted for five years, the number of seedlings distributed in 1988, 1989, 1990, 1991, and 1992 are 215300, 586600, 609900, 1243, 2654810 respectively (KTARDA, 1992).

### **European Economic Community/Katsina State Government (EEC/KTSG)**

The body was established in 1987 and designed appropriate models of agroforestry practices in the afforestation of Katsina State. A total of 18,674 contact farmers were recruited by this body in the process of carrying out the various agroforestry exercises.

The body in its first model established a total of 9,591 compartments of windbreaks in the Sahel and Sudan Savanna zones of the study area. The windbreaks were located in the following local Government areas: Jibia, Kurfi, Bindawa, Mani, Mashi, Maiduwa, Katsina and Bataragawa. The second model of agroforestry adopted by the body was woodlot establishment. The body established a total of 6,421 compartments of woodlots in the study area. The woodlots were located around the agroforestry farms in Gingiri, Dengana, Sayaya, Ruma and Zakka communities. In 1994, the European Economic Union (EEC) withdrew its funding of the project because of the unhealthy political climate in the country.

### **Katsina Afforestation Project Unit/World Bank (KTAPU/WORLD BANK)**

This organisation was established in 1985. The agroforestry models, introduced to the farmers by this body were shelterbelt, woodlot, windbreak, and farm forestry, border line planting and natural regeneration. Farmers practising agroforestry were allowed the freedom to determine the models to adopt. The project was able to establish a total of 21,768 compartments of shelterbelts, 3,664 compartments of woodlots and 5,535 compartments of windbreaks in different parts of the study area (World Bank, 1989).

### **Afforestation programme funded by International Bank for Rural Development (IBRD)**

The Farm Forestry project was financed by the International Bank for Rural Development and about 3.4 million seedlings were produced and distributed. Old nurseries to be upgraded (Federal Department of Forestry, 2000).



## **Major Challenges of Forest Conservation**

Forest conservation in Nigeria today is mostly limited to government programmes. All the forest reserves, which form the bulk of the nation's productive forest, are under the management of the States or Local Governments. The forest outside forest reserves (free areas), where most of the wood products in the market comes from, are not put under any form of systematic management (FGN, 2002).

Looking at all the programmes discussed above, the focuses are on technically oriented conservation programmes which are more or less tilted towards practices that alienate local managers from conception to implementation. It is worthy to note that all the programmes have terminated as at now in 2014 without recording major successes other than the ones mentioned earlier. And with the large sum of resources (financial and human) investments in the projects, it can be justified that involving would have been more cost effective and sustainable. It has been argued by (Chambers, 1983) and others that a main source of management problems is the top bottom approach or centralised means of governance. And contrary to the decentralised system advocated by Chambers (1997), the centralised form of governance (which is common in most federal systems), has been constantly concentrating powers often negating the rights of local people in decision making even of their resources. Thus local people often ignore or filter rules imposed from outside; under the right circumstances, they are much more likely to respect rules that they had some role in creating (Gibson et al., 2000). To improve outcomes, contemporary forestry policies in developed and developing countries seek to shift some control over forest management to the community level through decentralisation of powers. In this way more participation is achieved and optimum results are expected to be realised. The way forward is to encourage participatory forestry with the local actors who are usually the owners of the stake in this perspective. Forestry administration at the state level is the responsibility of the State Forestry Departments (SFDs). Most SFDs are still placed under the state Ministry of Agriculture and Natural Resources (MANR) as some states are yet to establish their Ministries of Environment, which the Federal Government had advised them to do. Apart from the main technical functions of managing timber and wildlife resources, SFDs equally superintend over revenue generation from the forestry sector in their states. SFDs are also faced with crippling financial resources to perform their functions. This is compounded by shortage of manpower, most of who lack adequate training and exposure to modern forestry techniques (Umeh, 1992).

## **Participatory Rural Appraisal in Context**

Participatory Rural Appraisal (PRA) describes a growing family of approaches and methods to enable local people to share enhance and analyse their knowledge of life and conditions, to plan and to act. Participatory methods include mapping and modelling; transect walks, matrix scoring, seasonal calendars, trend and change analysis, well-being and wealth ranking and grouping, and analytical diagramming. PRA applications include natural resources management, agriculture, poverty and social programs, and health and food security (Chambers, 1994a). Participatory Rural Appraisal (PRA) is a research/planning methodology in which a local community (with or without the assistance of outsiders) studies an issue that concerns the population, prioritizes problems, evaluates options for solving the problem(s) and comes up with a Community Action Plan to address the concerns that have been raised. PRA is particularly concerned that the multiple perspectives that exist in any community are represented in the analysis and that the community itself takes the lead in evaluating its situation and finding solutions. Outsiders may participate as facilitators or in providing technical information but they should not 'take charge' of the process (Chambers, 1994b; Chambers and Guijt, 1995).

In PRA, a number of different tools are used to gather and analyse information. These tools encourage participation, make it easier for people to express their views and help to organize information in a way that makes it more useful and more accessible to the group that is trying to analyse a given situation (Cornwall, 1995). The tools and their applications are given by (Cornwall, 1995) as:

### **Participatory Mapping**

In participatory mapping, community members sketch maps to elicit information and provoke discussion on spatial issues. The maps are not intended to provide accurate cartographic information but rather to generate approximate information that can be used to generate further discussion. Ideally the maps should be drawn on the ground in a large open area so that there is plenty of room to expand the scale of the drawing as the activity progresses. Various markers (leaves, stones, shells, etc.) can be used to indicate landmarks on the map. Maps are most useful when a group of people participates so that everyone contributes to the activity and information can be cross-checked by several sources. It is sometimes useful to do resource maps with different groups of people (one with men, one with women or others with different occupational groups such as farmers or pastoralists) to see how their perceptions of resource issues differ.

### **Transect Walk**

A transect walk is a mobile interview in which the research team walks from the centre of the village to the outer limit of the territory accompanied by several local informants who are especially knowledgeable about natural resource issues. Together the team members and the informants observe what happens in different micro-ecological niches and discuss issues of mutual interest. It is useful to look for signs that resources are being used (cut branches, children or adults collecting fruits) or that there are controls on resources (e.g. fences, thorn pickets around trees, amulets hung on resources). The key is to take the opportunity to ask questions about resources and how they are used while actually observing the situation in question. Transects can be helpful in focusing on such issues as where resources are located, how and by whom they are used, how much pressure exists on various resources, what the rules of access are and whether there are conflicts.

### **Historical Profile**

A historical profile is an interview with several of the people in the village who are most knowledgeable about its history. Because historical information can often be confusing to the outsider, and even at times to local people who are less versed in the details than the elderly village historians, it helps to organize the information on cards or a bit of paper as it is presented. As each event is mentioned it can be noted on the card with at least an approximate date or time period (e.g. late nineteenth century, 1960s, 2014). The historical profile is most useful when it focuses on issues about resource governance such as the settlement history of the community (who came when), periods of abundance and scarcity, landmark events such as the building of roads and bridges and notable conflicts in village history (especially those related to resource use).

### **Venn Diagram**

The Venn diagram, also known as a Chapati diagram, is a map of a community's social structure. A Venn diagram can be done on a large sheet of paper or a chalkboard. It is helpful to have pieces of paper (of different colours, if possible) that are cut into different shapes to represent the various organizations and individuals in a community.

### **Wealth Ranking**

Wealth ranking is a tool that helps to better understand socio-economic differences within a community. It can be used to explore differences in how various populations use resources and their role in governance. The key to wealth ranking is that it does not ask about any

individual's wealth, but rather assigns families (anonymously) to different groups in the village that are then ranked according to their relative wealth. It is then possible to ask about how these groups use resources, participate in governance, etc. While the wealth ranking should avoid discussing personal wealth or individual families in the community, it is useful to follow up a wealth ranking with interviews and discussions with people in different wealth classes to understand the different issues they face.

### **Matrices**

A matrix is a double entry grid that can be used to analyse two sets of variables. There are many ways that matrices can be used to explore institutional issues. However, these three types are essentially vital tools of participatory approaches;

A resource use matrix relating again on beans to indicate rankings can be used to identify the principal users, stakeholders of various resources and to explore how these groups use the resources and their importance.

A conflict matrix permits the exploration of issues related to conflicts and how they are dealt with in a community. One way to set up a conflict matrix is to put the resources that might cause conflicts on the vertical axis. On the horizontal axis place the different groups that might be involved in conflicts. Decide at this point whether the matrix will show the frequency of conflicts or whether the number of beans will reflect the severity of the conflicts.

A historical matrix, in this the horizontal axis is time, usually covering the period from when the oldest residents of the village were young (about 50-60 years ago) until the present. It is best to choose three or four time periods that will be illustrative of how things have changed in the community. Each time period should be represented by a landmark date that people can use to focus their memories on the period.

### **Purposes and Limitations of using PRA**

The following were summarised by Mercado (2006) as purposes of using Participatory Rural Appraisal;

- a. To avoid problems of long and costly formal surveys including the:
  - Collection of too many as well as irrelevant data
  - Production of late and inappropriate results
  - Lack of participation and ownership by the people concerned
- b. To avoid the risks of hurried and unstructured “development” surveys, including
  - Obtaining only snapshots of the area or topic
  - Relying on previous assumptions and working without a framework which guides the collection and analysis of information

- c. To help overcome the biases created inform of:
  - Meeting only more accessible and well-to-do individuals or groups
  - Looking only for the quantitative, apparent data, and missing the more qualitative, in-depth information and insights
- d. To encourage participation of local people in the process of development by:
  - Studying local insights and thereby collecting more relevant data
  - Involving local people in the study and design thus increasing commitment and empowerment

While some limitations of using PRA are:

- a. PRA techniques do not replace but complement other research methodologies
- b. PRA techniques may be rapid, but the process of development it is not
- c. PRA approaches to research may raise local expectations, hence follow-up is necessary
- d. PRA techniques may not be cross-culturally transferable, they need to be adapted to local situations
- e. Appropriate use of PRA techniques requires the training of facilitators and support staff

### Prospects of PRA in Forest Conservation and Protection

In this work, a number of PRA tools that might be useful in the aspects of a participatory forestry are reviewed. These are by no means the major tools that would be useful in such forest intervention programmes in the State. It is hoped that this will help stimulate stakeholders and boost their awareness about how to gather the kinds of information recommended for the integration of people with appropriate PRA toolkit which might be applied to conservation of their forests resources.

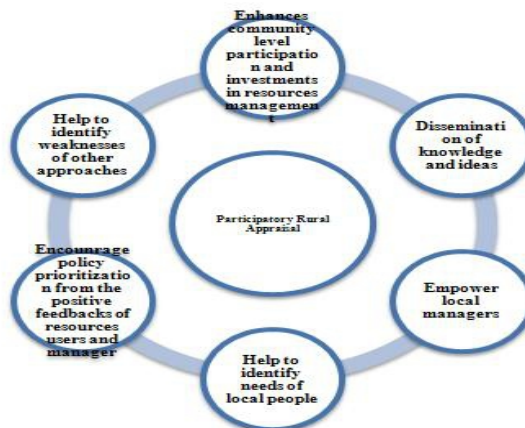


Figure 2: Participatory Rural Appraisal in conservation of resources

Thus, summarising the prospects of PRA in forest conservation in figure 2, it shows that the participatory practice could be the best panacea (opposed to earlier practices) to forest conservation and reversal of degradation of forest species in Katsina State. If properly harnessed, the participatory tools are cost effective and reduce huge burden on budget as well as help prioritization of programmes that will be best for the forestry sector.

### The PRA Action Proposal

This proposal serves as a tool that will propel the inclusion of PRA in Forest Conservation programmes of Katsina State. The proposal is made simpler because it is action oriented and apparently designed for its usage in forests conservation in Katsina State. It has seven steps as shown in table 1:

Table 1: Proposal for the Utilisation of PRA in Forest Conservation in Katsina State

Steps in Sequence	Activity	PRA tool (s)	Remarks
Identification of the Problem	Satellite images and surveys to be conducted to classify areas based on level of forest degradation.	Nil	LANDSAT, SPOT or NOAA-AVHRR satellite data are available for this operation. Resource persons are also available in the two universities in the State.
Identification of communities and local vegetation user groups and managers	*Communities and **key informants can be identified using the result of classification in step 1 above and thematic and political maps of the areas.	*Reconnaissance and observation **Resource matrix	Once the communities are identified, a reconnaissance survey will help identify the key informants who will in turn provide key information on the villagers (user groups and managers) This will involve sessions between the facilitators and different stakeholders such as local managers and user groups.
Identification of key issues	Determine and prioritize local management practices and stratify local managers according to wealth.	*Focus discussions **Wealth ranking	This will involve the facilitator (s), the village head (s) as well as the local user groups.
Take probes/Night halts	Re-examine key issues such as resources conflicts, tenure, and histories of forests resources in the area/ digest information and make summary	Semi-structured interviews/historical matrix	This will involve the villagers with a view to produce base maps for report writing and for future possible.
Do-it-yourself	Allow the villagers to make diagrams of forests based on their perception of location, histories of tenure and their knowledge of ecology.	Participatory diagramming	

Synthesize and analyse information	Re- organise information that was summarised during night halts and make analysis were necessary.		The facilitators to do these in order to get prepared for report writing.
Write a report/Hand over	Report writing in logical sequence to show each activity, how data is generated and the strength and weaknesses of the data collected as well as the result orientation. Also key recommendations for action have to be provided.		The will involve the facilitators. Once the report is ready, it has to be handed over to the government through appropriate channel (s).
Action	Implementation of the report.		This must involve the villagers and must restrict to its recommendations only. Government, appropriate agencies as well as the villagers must join hands together and provide each other with support and feedbacks when due. This will involve all stakeholders but most essentially the villagers and officers in charge of the implementation.
Feedbacks	To prepare future possible	Focus Groups Discussions	
Monitoring and evaluation	To evaluate level of implementation of the recommendations as well the of inclusion of local managers and resource users.		Government agencies and funders (if any).
Sustain linkage	Make frequent visits to the communities and maintain social linkages especially using technology.		Government through its officer in charge of implementation of the report can introduce adult literacy classes as well as provide mobile handsets for easy communication.

Source: Author (2014)

## Conclusion

It has been 27 years since Katsina became a state in 1987 and about 108 years since the first forest ordinance of Katsina Native Authority, yet all forest rules remain dormant, without major modifications. From 1906 to now 2014 no single forest law was made to allocate powers even if minute to the forest dwellers and local people to govern their life wire (Forests) or even incorporate them into the system. Today even though part of a federal entity, Katsina has patches of agencies that govern its forests and manage it divergently with each body working its way. For instance forest management coordination is lacking among sectors such as KTARDA, KTAPU, Department of Forestry, Ministry of Environment and Agriculture as well as Local Governments’ natural resources sectors which create high load on the budget and substantially meagre results. The problem of forest conservation and protection in Katsina State all roses from the system of governance which promote central prioritisation of approaches as well as technical programmes that has no business knowing the benefactor. This has totally relegates the local people and has streamline their interest to the benefit of the ‘top’ who are mostly given powers to operate with or without having technical requisite and have led to major failures.

In consonance with the reality and what Chambers, Saxena, and Shah (1991) said ‘to the hands of the poor’, Mortimore (2006) and Shepherd (2008) have advocated for, forest should be governed with local people inclusive. The study has provided a working proposal (see table 1) for the inclusion of PRA into forest protection of Katsina. It is simple for comprehensive enough to accommodate all adjustments subject to its trial.

## Appendix



Appendix I: Map of Katsina State



## References:

- Abbas, D. (2007). *Harvesting forest biomass for energy in Minnesota: An assessment of guidelines, costs and logistics*. Ph.D. dissertation, University of Minnesota, Minnesota, U.S.A.
- Adeyoju, S.K. (1994). Nigerian Forestry Legislation- A Review. Invited paper submitted to the Federal Department of Forestry. 15pp.
- Boon, E., Ahenkan, A., Baduon, B.N. (2009). *An Assessment of Forest Resources Policy and Management in Ghana*, a conference paper presented at the IAIA09 Conference Proceedings', Impact Assessment and Human Well-Being 29th Annual Conference of the International Association for Impact Assessment, 16-22 May 2009, Accra International Conference Centre, Accra, Ghana.
- Brown, D., Schreckenber, K.; Shepherd, G. and Wells, A. (2002). *Forestry as an entry point for governance reform*. ODI Forestry Briefing, No. 1, April 2002.
- CBD (2009). *A Good Practice Guide for Sustainable Forest Management, Biodiversity and Livelihoods*.
- Central Bank of Nigeria (1995): *Annual Report and statement of Account for the year ended 31<sup>st</sup> December 1995*, Central Bank of Nigeria, Abuja
- Chambers, R. (1983). *Rural Development, Putting the Last First*. New York: John Wiley and Sons.
- Chambers, R.; Saxena, N. and Shah, T. (1991). *To the hands of the poor. Water and trees*. Intermediate Technology Publications.
- Chambers, R. (1994a). The Origins and Practice of Participatory Rural Appraisal, *World Development* 22(7): 953-69.
- Chambers, R. (1994b). Participatory Rural Appraisal (PRA): Analysis of Experience, *World Development* 22(9): 1253-68.
- Chambers, R. and Guijt, I. (1995). PRA - five years later. Where are we now?, *Forests, Trees and People Newsletter*, No. 26/27.
- Chambers, R. (1997). *Whose Reality Counts?, Putting the First Last*. ITDG Publishing, London.
- Collier, P. (2007). *The Bottom Billion: Why the Poorest Countries Are Failing and What Can Be Done About It*. Oxford: Oxford University Press.
- Cornwall, A. (1995). Towards Participatory Practice: PRA and the Participatory Process. In de Koning, K. (ed.) *Participation and Health*, Zed Books, London.
- Contreras-Hermosilla, A.; Gregersen, Hans M. and White, A. (2008). *Forest Governance in Countries with Federal Systems of Government: Lessons and Implications for Decentralization*. Centre for International Forestry Research (CIFOR)

- Federal Ministry of Agriculture and Natural Resources, FMANR (1988). *Perspective plan for Agricultural Development (1980 – 2015)*, Federal Republic of Nigeria
- Federal Republic of Nigeria (2002). *Nigeria: Country Profile*. World Summit on Sustainable Development, Johannesburg, August 26 to September 4, 2002
- FORMECU (1999). *Forest Resources Study, Main Report: Volume II*
- Federal Department of Forestry (2000). *Nigeria: Country Report on the Forest Revenue system and financial support for sustainable forest Management*, Federal Republic of Nigeria
- Gibson, C., Margaret McKean, and Elinor, O. (Eds.).(2000). *Forests and People: Communities, Institutions, and the Governance of Forests*. Cambridge,MA: MIT Press.
- Gilmour, D. A. and Fisher, R. J. (1991). *Villagers, Forests and Foresters: The Philosophy, Process and Practice of Community Forestry in Nepal*. Sahayogi Press, Kathmandu.
- Kio, P.R.O; Abu, J.E. and Lowe, R.G. (1992). *High Forest Management in Nigeria*. Invited paper for the IUFRO Centennial Conference, Eberswalde, Germany.
- Kunwar, R.M. (2002). *Participation and benefits to local people in community forestry: A case from Makawanpur district, Nepal* thesis. Indian Institute of Forest Management, Bhopal, India.
- Lowe, R.G. (1994). *Forestry in Nigeria; Past, Present and Future*. Distinguished seminar series, FRIN, Ibadan, Nigeria.
- Leach, M. and Mearns, R. (eds.) (1996). *The Lie of the Land: Challenging Received Wisdom in African Environmental Challenge*. James Currey / International African Institute, London.
- Manor, J. (1999). *The political economy of democratic decentralization*. The World Bank, Washington, DC
- Mercado, D.Z. (2006). *A MANUAL on Processing and Reporting of Participatory Rural Appraisal (PRA) Data for Natural Resource Management*. PACIFIC-GERMAN REGIONAL FORESTRY PROJECT, German Technical Co-operation
- Minogue, M., Polidano, C. and D. Hulme (Eds.). (1988). *Beyond the New Public Management: Changing Ideas and Practices in Governance*. Cheltenham and Northampton: Edward Elgar.
- Monditoka, A.K. (2011). *Decentralized Forest Governance - A Policy Perspective*. Centre For Economic and Social Studies, Begumpet, Hyderabad, India
- Mortimore, M.; Ariyo, J.; Bouzou, I.M.; Mohammed, S. and Yamba, B.I. (2006). *A Dry land Case Study of the Ecosystem Approach. Local Natural Resource Management in the Maradi – Kano Region of Niger – Nigeria*, World Conservation Union (IUCN) Study Report, Gland, Switzerland.

- National Population Census, NPC (2006).<http://le.n.wi.kspedia.org/w.k1/list> of Nigerian States by Population, Federal Republic of Nigeria.
- Olowu, O. (2001). *Decentralization policies and practices under structural adjustment and democratization in Africa*. Democracy, Governance and Human Rights Programme, Paper Number 4, July 2001. United Nations Research Institute for Social Development (UNSRID), Geneva.
- Ribot, J., Larson, A. and Agrawal, A. (2001). Resisting Decentralization of Natural Resource Management: New Institutionalism Meets Political Economy. *World Development*.
- Sackey, N. A. (2007): Assessment of Forest Management Practices in Ghana - A Case Study of Some Forest Districts in Ghana. *The IMRE Journal Volume 1 (2) 2007*. TU Bergakademie Freiberg.
- Shepherd, G. (ed.) (2008). *The Ecosystem Approach: Learning from Experience*. Gland, Switzerland, IUCN
- Shrestha, R.K. and Paudel, K.C. (1996). Oak forest under threat: an urgent concern for the mountain environment. In: Jha, P.K., Ghimire, G.P.S., Karmacharya, S.B., Baral, S.R. and Lacoul, P (eds), *Environment and biodiversity: In the context of South Asia*. Kathmandu: ECOS.
- Umeh, L.I. (1992). Forest Management in Nigeria. Problems and the needed strategies. FORMECU, Ibadan, Nigeria.
- UNDP (1999). *Human Development Report*. New Delhi: Oxford University Press. <http://www.unescap.org/HUSET/gg/governance.htm>
- World Bank (1989). Issue in poverty and Environment. *Environment Bulletin*, 2: 71-72, World Bank, Washington DC.
- World Bank (2006). *Strengthening Forest Law Enforcement and Governance: Assessing a Systemic Constraint to Sustainable Development*. Report No. 36638GLB. World Bank, Washington DC.
- Yusuf, M.D. (1995). *Memo to the Katsina State Government on deforestation and threat to Human life in Katsina State*. CAREFORE Publications.