THEME 2 – Exposé 12 : Bridging communities and technocrats: Guinea's experiences on forest resource governance

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Abstract

This paper presents a range of efforts in terms of horizontal dialogue and harmonization of interests between communities and technocrats in Guinea while also sharing experiences of ICRAF & CIFOR to move beyond conflicting perceptions and control through an approach called Farmers 'Initiative and Vision (FIVA) combined with others such as Co-management, collective action and Group Dynamics. From a participatory action research perspective, a pluristic process based on those approaches was engaged since 2005, taking in account the interests, powers and legitimacy of different stakeholders. Methods used included rapid participatory diagnosis, baseline surveys, stakeholders' analysis, visioning/future scenarios, village group discussions and informal interviews during various multi-stakeholders interactions. Details of key achievements, lessons learnt and challenges are herein presented. Reading through these shared experiences, we believe the provided information could serve to mitigate forest resources based conflicts among stakeholders in West Africa and forests cover may be harnessed as there will be possibilities to quick off the move from customary to formal rights with regards to forest resources in various forested landscapes.

Key words: Forest resources, approaches, livelihoods, perceptions, stakeholders, agroforestry, dialogue, Guinea

Résumé

Cet exposé présente une série d'efforts en termes de dialogue horizontal et d'harmonisation des intérêts entre les communautés et les technocrates en Guinée. Il fait part des expériences de l'ICRAF et du CIFOR en vue d'aller

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au-delà des perceptions apparemment contradictoires et de créer l'action et la dynamique collectives à travers une approche appelée Initiative et Vision des Paysans (FIVA) combinée avec d'autres comme la cogestion.

Dans une perspective de recherche/action participative, un processus pluriel fondé sur ces approches a été engagé depuis 2005 en prenant en compte les intérêts, les compétences et la légitimité des différentes parties prenantes. Les méthodes utilisées incluent le diagnostic participatif rapide, des enquêtes préliminaires, l'analyse des parties prenantes, une vision et des scénarios futurs, les discussions de groupes et des entretiens informels au cours de multiples interactions entre les différents intervenants.

L'exposé présente les principales réalisations, les leçons apprises et les défis. A la lecture de ces expériences partagées, nous espérons que l'information fournie pourra servir à atténuer les conflits liés aux ressources forestières entre les parties prenantes en Afrique Occidentale. La couverture forestière pourra aussi être mieux exploitée au regard des possibilités d'évolution des coutumes vers des droits plus formels en ce qui concerne les ressources forestières dans divers paysages boisés.

Introduction

Differences between communities and forestry authorities in most tropical countries have become self evident and this has resulted in an even pressure on natural ecosystems leading deforestation. Social scientists have established that those differences are exacerbated by both parties' perceptions, existing laws governing forest resources, one another's behavior and practices, hence increasing disagreements among various interest groups in the same forestland and landscapes(Edmunds and Wollenberg, 2003; Colfer, 2005; Minang 2007). In the same line, (Yatich *et al.*, 2008) pointed out the forestry education curricula and recommended a shift in training from policing to technical support and partnership. Though this situation has widely been acknowledged since the past five decades by forests dwellers and involved technocrats, around the world, there are many questions about how to bridge the recurrent gaps between main actors in charge of forest resource governance. Accepting the existence of gaps and understanding the root causes while analyzing critical issues have been of a great concern in Guinea and the sub region. The intent of this paper is to provide emerging lessons learnt at this stage of collaborative work in Fouta Djallon Highlands of Guinea.

Guinea Forests and Biodiversity importance

Guinea is a lay and democratic Republic founded on the 2nd October 1958. It is bounded to the North by Senegal and Guinea Bissau, East by Mali and Cote d'Ivoire, South by Liberia and Sierra Leone and to the West by the Atlantic Ocean. Its land area is 24,572 thousand hectares occupied by 9.6 million inhabitants, of which 75% are rural. Population density is 32 people per sq. Km (http://esa.un.org/unup/).

Administratively, Guinea is divided into Territorial Circumscriptions including; Regions, Prefectures, Sous-Prefectures, Quartiers and Districts, on the one hand, and Local Collectivities including Communes Urbaines and Communautés Rurales de Développement (Fundamental Law; article 88).

The Republic of Guinea is endowed with rich natural resources, valuable habitats and ecosystems of national, regional and global importance. Its highlands are the source area of several of West Africa's most important waterways, including the Niger, Gambia and Senegal rivers. In fact the Fouta Djallon Highlands in the central part of Guinea, which are characterized by a variety of mountain ecosystems landscape mosaics, represents important habitats for several endemic and threatened species of global significance. It is no surprise therefore that the Guinean forest ecosystem which extends as far as Nigeria and Cameroon, is one of the world's 25 biologically richest and most endangered terrestrial ecosystems (Mc Cullough 2004).

Covering the majority of Guinea is a patchwork mosaic of lowland rainforest interspersed with secondary vegetation, grassland and cultivated land. Estimates of the remaining forested areas in Guinea vary from 7,655 km² (Poorter *et al.*, 2004) (or 7% of the total area of the country) to 4,692km² (Robertson 2001) (www.mongabay.com). Important species of biodiversity priority include lions, pigmy Hippopotamus, forest elephant, chimpanzees, baboons, viviparous toads of endemic to Mt. Nimba, as well as multiple and rare bird species.

Threats to biodiversity

Between 1990 and 2000, Guinea lost an average of 50,000 ha of forest each year; an annual deforestation rate of 0.68%. Between 2000 and 2005, the rate of forest change decreased to 0.52% per annum. However, between 1990 and 2005 the net loss of forest cover was 9.2% (www.mongabay.com). The majority of this forest loss is due to extensive shifting agriculture. In relation to this, bush

fires also constitute one of the principal factors in forest degradation. Other threats to forest integrity and biodiversity include: commercial and subsistence hunting, overgrazing, fuel wood harvesting and charcoal production. In essence activities geared towards human survival and provision of income generation options. As a result about 1% of all plant species, 6% of mammals and 9% of birds in Guinea are threatened (World Bank 2004).

Study sites

The Fouta Djallon in the centre of the Republic of Guinea, stretches across a mountainous landscape of 63,608 km² (Kormos *et al.* 2003). Human population in the region is high with the majority of people belonging to the Fulani ethnic group, mainly concentrating on cattle rearing and agriculture (Kormos *et al.* 2003). Located within this landscape are the Classified Forests of Nialama (9,915 ha²), Souti Yanfou (10,214 ha²), Sincery Oursa (12,811 ha² and Balayan Souroumba) (23,132 ha²). Nialama, gazetted as a CF in 1943, was the site where the first model for co-management of State Classified Forests was first introduced in Guinea before the Classified Forests of Balayan Souroumba in 1999, Souti Yanfou and Sincery Oursa in 2000.

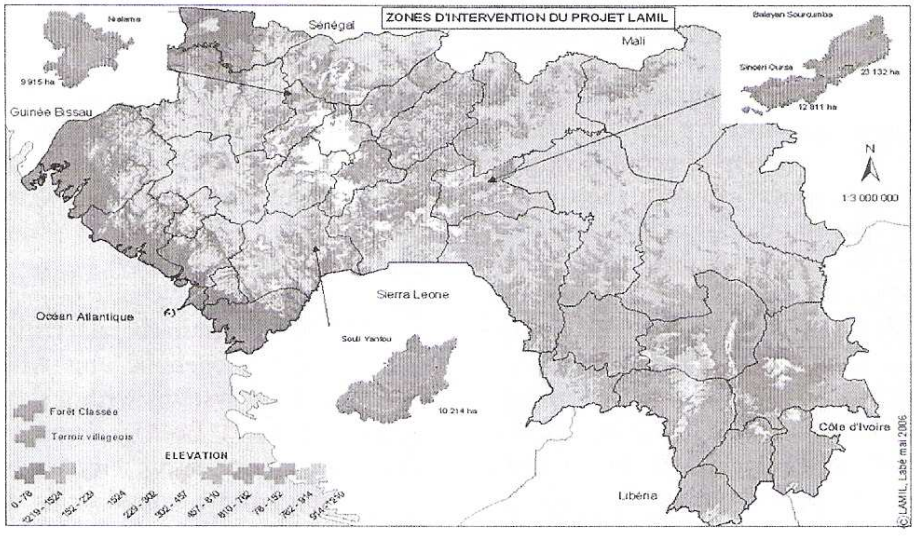

Figure 1: Map showing the 4 forested areas targeted by the study

Guinea forests specific Problem statement

Forestry management practices and policies applied in rural Guinea since the colonial period have had little or mitigated results on natural forest trends as they were mainly repressive and community rights exclusive. At local levels, several projects from various donors and partners have initiated numerous actions since the 80s and most forest management initiatives have usually been through top-down laws and regulations.

Stakeholders' interests and struggles

Who are the technocrats, who are the communities?

The main question in the context of forest governance is do actors have a clear understanding of who other players are, their capacity, responsibility, legitimacy and above all constraining factors or opportunities of collaboration within forest resource management framework. Unlike community, the word technocrat is among the recent adaptation in the forestry vocabulary. The Thesaurus online dictionary defines technocrat as a technical expert, especially one in a managerial or administrative position, who is a member of a highly skilled elite group enjoying superior intellectual or social or economic status. (http://www.thefreedictionary.com/technocrat). In common discussions and various forestry fora, technocrats refer to: (i) Forestry staff with clear mandate and legitimacy to ensure forest resources planning and subsequent use. (ii) Any state agent working to facilitate and catalyze effective forests conservation and protection for sustainability (iii) Non governmental organization cadres who are striving to contribute to natural resource management in landscapes.

In our view, a technocrat has to be able to help develop management strategies and plans in forestry and agroforestry processes. On the other hand, community refers to a group of people living in a particular local area and under the same government. Generally, those people have common interests and usually share origins and participate in the development of the district of locality in which such a group lives (http://www.thefreedictionary.com/community).

We see forest resources based community as a group with certain characteristics including good level of decision making, being a homogenous unit with shared values, traditional norms governing resource use systems with a clear special boundary (Armitage, 2002 cited by Minang, 2007). Both community and technocrat are therefore having a certain management capacity either individually or collectively which may be deriving from acquired skills or traditional knowledge. As illustrated in Figure 2, mainstreaming and synergizing

those capacities could lead to better strategies to govern forests resources for the benefits of forest dwellers and related ecosystems.

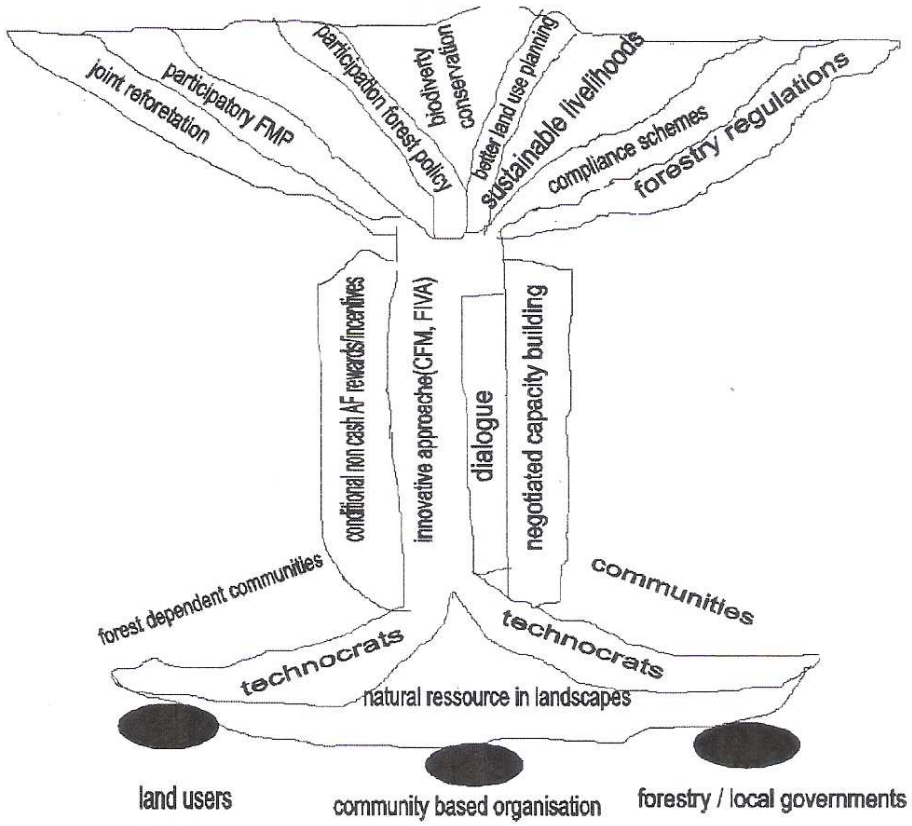

Figure 2: Conceptual tree model of communities and technocrats interaction Dynamics.

Keys: FMP: Forest Management Plan, CFM: Collaborative Forest Management; FIVA: Farmers' Initiative and Vision based Approach

Technocrats and communities: both sides colored tags

Mandatory forestry staff and partners whom we called in this context "technocrats" viewed forests as the preserve of the state and criminalized communities holding them responsible for degradation of forest resources . In this era of no devolution of power over natural resources, Communities on their part considered technocrats as external force which prevents them to

use forest resources, developing in local households the belief that forests are government's own properties. The community non concerned behavior with regards to forests conservation has also enlarged in the same way the existing gaps between communities and technocrats. This paradigm is exacerbated by the state of poverty in the country. In fact, it is reported that over 40% of the rural population in Guinea lives in extreme poverty with less than 1 USD per day (FAO, 2007) and again with high population growth leading hence to high competition as consequence of struggle for survival even on the detriment of surrounding forests resources and conflicts amongst populations and mandatory technocrats. Little has been said so far about the linkages between the two and even the increasing tensions elsewhere studied have not however been given much attention so far in the upper Guinea sub region.

Forest governance challenges in Guinea: past and current issues

The concept of forest governance could be defined as the way or form by which forests resources and other related units in the landscape are managed and regulated by the existing policies and bodies and also the manner how dependent interest groups are governed or involved in decision making processes. (adapted from Oxford Dictionary). Cronkleton P. *et al.;* (2008) specify that governance refers to governmental regulation and law enforcement for conservation and involves the political, organizational and cultural frameworks through which diverse interests in natural resources are coordinated and controlled to combat deforestation and biodiversity loss. This form of governance as well as others implies therefore resource mobilization, coordination, control over resources for the public interest, continuous learning and partnership (Vanclay J. *et al.*, 2006). In Guinea forests arena, several governance challenges are commonly faced both at the state and local communities' levels with regards to sustainable forest management. These included the non mastery of legal texts though nicely made since the 70s, lack of means to implement government forestry strategies throughout the years, non regular policy review to fit in the international changing context, not enough involvement of communities and reconciling diverse interest of various forests resources users. Areas of critical importance then were staff capacity building and communities' empowerment through incentive schemes while fostering multi partnership collaboration especially with community based organizations (see Fig 2).

Recently tentative efforts rooted in the Rio summit recommendations (Agenda 21, 1992) started to reverse the situation through co-management but the options for bridging the felt gaps and how many of them influence forest management in Guinea are unclear. Results obtained from studies carried out between 2005 and 2007 by the World Agroforestry Centre (ICRAF) and CIFOR, in classified

forests in Guinea, confirmed the important positive effect of co-management (Balinga *et al.*, forthcoming)and of agroforestry practices in improving natural resource management and livelihoods of forest communities (Ngendakumana *et al.*, 2008). Therefore, it is hypothesized that innovative forest management approaches combined with agroforestry and market based livelihoods incentives could contribute to oiling the historical conflicting context between foresters and forest dependent communities while reducing pressure on forests resources in target landscapes.

This study presents a range of efforts in terms of horizontal dialogue and harmonization of interests and it also shares experiences of ICRAF-CIFOR in Guinea to move beyond conflicting perceptions and control through an approach called Farmers 'Initiative and Vision (FIVA) combined with others such as Co-management, collective action and Group Dynamics. From a participatory action research perspective, a pluristic process based on those approaches was engaged since 2005, taking in account the interests, powers and legitimacy of different stakeholders.

Research Methodology

This piece of work is the result of an empirical and descriptive research derived from a just completed three years project which had the aim of adapting and or testing various approaches and options to improve landscape management and community livelihoods. During the study, a rapid participatory diagnosis involving 35 village communities was conducted in order to identify community priorities, conservation challenges and potential agroforestry options, which could be tested to improve both livelihoods and biodiversity conservation. Other methods used included, stakeholders' analysis, visioning/future scenarios, village group discussions and informal interviews during various multi-stakeholders interactions. Predefined sites selection criteria included existence of controversial views around forest issues, opposition to the concept co-management by communities and relative importance of biodiversity found in the forests like chimpanzees. Ground findings were completed by literature review including policy documents and other publications.

Main findings and lessons learnt

The case of Guinea demonstrates that bridging the gaps between technocrats and communities is possible though it implies integrating several approaches and tools to amend divergent views and perceptions. Through this paper, we aimed to argue how disconnects between communities and technocrats manifest themselves in forested landscapes as well as how forests resource users' rights evolves according to contexts and policy environments.

Disconnect between communities and technocrats: Real or imagined?

At the early stage of this research, keys gaps observed were as follow: weak collaboration, no coherent and concerted legal frameworks, power struggle at local levels, identity tags and colored perceptions between communities and technocrats, top-down intervention approach for forestry protection, non valuation of local knowledge, exclusion rights and gender bias.

Same as Edmunds and Wollenberg (2004) noted in India, China and Philippines, we detected in Guinea two major raisons which seemed to be the roots of the observed gaps. The first one was that policy makers and technocrats considered forests management to be a state business solely. The few areas of the existing forestry act and policy were not known by local communities, giving a room for severe misinterpretations on the detriment of local groups and near exclusion of forests dependent populations from forest resources benefits.

The second reason found in this study arose from a strong commercial forestry kind of thinking embedded in a kind of economic welfare developed and entertained by forestry staff, hence maximizing primarily timber and non timber trading for their own interests. As in most cases, there complete absence of power devolution and as such local forest users end up in frustration with almost a rebellious attitude towards forests management strategies. On the other hand, communities are aware of environmental benefits from forests but militate for short term livelihoods alternatives that technocrats failed to provide in the past.

Discussions during diagnosis and stakeholders meeting showed divergent visions with regards to forests resources uses and control as causative factors/ influences which entertain disconnects on the ground(in line with Yatich *et al.*, 2008). We additionally noted that "Conservationist or protectionist" approach factored by the deliberate non-consideration of local knowledge have been very detrimental to the current forests decline in Guinea. Suggestions were to have a more adapted participatory model and integrate community champions in Forests management plans where they exist.

Moving from customary to formal rights with regards to forest resources

The other uneven question always met at times is how forests resource users' rights evolve according to contexts and policy environments. In Guinea, forestry texts and regulations are very well designed but their implementation remained problematic because of poor governance at all levels. On the other hand, it is recognized throughout generations that every piece of land especially

in Fouta Djallon belong to somebody including what is planted on it. As discussed summarily above, forest dependent populations found themselves between dual uncertainty due to the state strict control of forests resources and the customary rights which theoretically give access to property and use of the same resources.

Using groups' bylaws, collaborative management agreements and environmental contract, technocrats and communities could find ways of table striking issues especially with regards to rights and access to forests products using participatory management plans and non cash rewards options such as *conditional Agroforestry based technologies (in accordance with Yatich et al., 2008) and n*egotiated capacity building for stewardship in the buffer zones and around watersheds. Both stakeholders now can follow written documents to apply agreed principles for better forests governance and livelihoods enhancement in a sustainable way.

Solutions for linking communities and technocrats

Agroforestry based Schemes to benefit local communities

While villagers stood as secular stewards through local practices and knowledge, there was a concern that they may end up in frustration and become very recalcitrant towards forests conservation if no alternative options to their livelihoods are provided as appropriate.

Participatory rapid diagnosis and baseline studies carried out in 2005 and early 2006 led to the understanding of forests management and livelihoods constraints and identified related solutions. In fact, communities were led to talk about their issues with respect to livelihoods as well as to environment and biodiversity conservation. The final objectives are to obtain an understanding of the context, the key players within the community, their problems, and how they think these can be solved. As a matter of facts and based on expressed priorities, the support consisted in testing agricultural and agroforestry options that serve as non cash incentives for community buy in with respect to lessons learnt and legal directives for natural resource management activities. The incentives included improved seed varieties, farming techniques, manure management techniques, tree-crop associations, market access and information facilitation, and training in group dynamics. The objectives at this stage was to eliminate barriers to increased income generation from natural capital, build an atmosphere of trust between the project and the communities, and provide an enabling environment for community involvement in subsequent research, education and forests management activities.

Hence, after two years of project implementation, improved income of small-holder communities living within forests and on forest margins has proven to iron out communities grievances against technocrats. This had led to joint efforts in tree planting for land reclamation and watershed protection and critical habitats enrichments alongside reducing pressure on forest resources in classified forests and protected areas in Guinea. For example, about 300 000 assorted agroforestry and forestry species have been planted in the 4 target landscapes by communities in collaboration with technocrats.

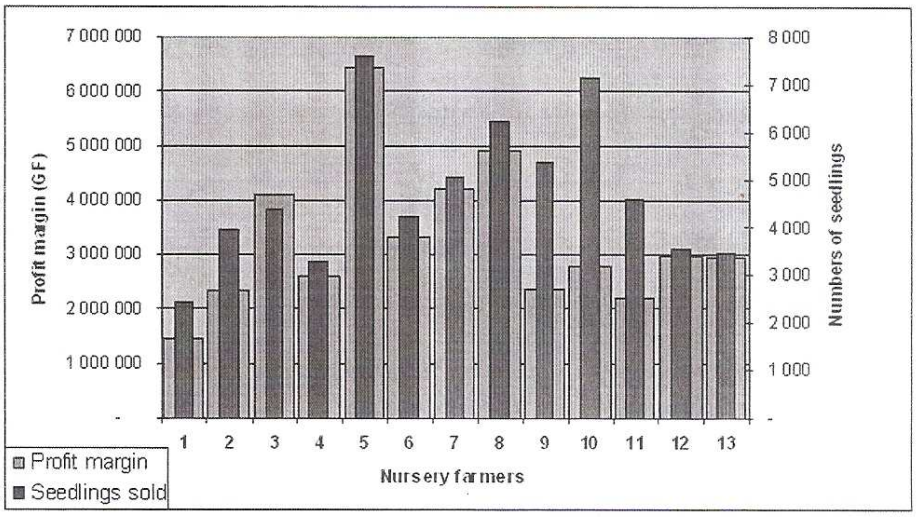

Figure 2: Private nursery famers could generate more that 2000USD each per year.

Figure 3: Communities and technocrats joint effort to claim degraded forest areas through collective actions

Box 1: Disseminating agroforestry innovations to enhance local livelihoods and NRM

As stated above FIVA and Co-management have been in the loop of a range of methodological processes applied over a three year period from 2006-2008 in Guinea under a USAID funded initiative implemented by the World Agroforestry Centre (ICRAF) in collaboration with the Centre for International Forestry Research (CIFOR), United State Forestry Service (USFS) and national Forestry Department (DNEF) and National Extension Service (SNPRV).

The Farmers' Initiative and Vision based Approach (FIVA) is an integrated approach to disseminate agroforestry and agricultural innovations in communities living in and around classified forests in the Fouta Djallon Highlands of Guinea. This approach was developed by ICRAF in collaboration with CIFOR and the Guinean government, through the implementation of a USAID funded Landscape Management for Improved Livelihoods project between 2005 and 2008.

Steps in FIVA

FIVA reposes on the use of agroforestry and agricultural tradeoffs and best practices, based on farmers' knowledge on threats and challenges in maintaining their livelihoods and sustaining their natural resource base. It combines scientific rigor with technical training, and fosters the use of appropriate and incentive creating innovations derived from research and indigenous knowledge, within a multi-stakeholder context. FIVA could be implemented through the following seven steps.

1. *Bringing together individuals, community groups and local authorities, taking into consideration gender issues, to carry out a simplified and rapid participatory diagnosis and assessment of their surrounding landscapes. Classic diagnosis exercise in a community takes about two weeks whilst this simplified and rapid participatory diagnosis tool allows reaching the same results in 3 to 4 days. The process allows community groups and local authorities to understand local challenges related to the socio-economic and biophysical nature of their landscapes, past and on-going initiatives in the area of integrated natural resources management with particular emphasis on agriculture, agroforestry and forestry management, and farmers priorities with regards to appropriate technological needs for sustainably managing these landscapes.*
2. *Setting up community based groups to define farmers' dream, visions and segmented objectives on future livelihoods and surrounding landscapes, based on their realities and natural resources challenges, and to identify the necessary means to pursue this through group or collective actions. The employment of group dynamics in this context has been shown to be a rapid empowering process, which eventually ensures better governance in natural resources management initiatives in landscapes with diverse actors and stakeholders.*
3. *Selection of pilot communities and/or innovative farmers or farmer organizations, national agricultural research systems, government staff and non-governmental organizations as champions that would serve as entry points for guaranteeing the high adoption of identified appropriate agroforestry and agricultural technologies for improving landscape management.*
4. *Building capacity of relevant partners and main actors in the areas of technical and managerial skills, group dynamics, organizational development and mainstreaming natural resources management into operational plans, in order to help them become effective drivers of change in landscapes. Support is also provided to community groups to develop their governance skills, which will lead to the emergence of responsible leadership behavior and conduction of successful meetings to set up democratic organs and statutory texts. The setting up of specific capacity building schemes is based on rapid appraisal of training needs.*
5. *Sensitizing community based farmer organizations on the socio-economic opportunities of agroforestry for the simultaneous improvement of livelihoods and natural resources management. This based on rapid socio-economic assessment of the role of trees in landscape management. This will contribute to stimulating farmers' efforts to invest in quick yielding agroforestry options.*
6. *Organizing farmer-group exchange visits, study trips, and assisted auto-evaluation involving farmer to farmer communication. These processes aim at enhancing their interest in the use of trees in agricultural landscapes, sharing knowledge on available innovation packages and viable supple systems of tree-based innovations and also sharing experiences on unsuccessful as well as successful and sustainable innovations. This process will encourage the establishment of quick yielding and diversified tree-based innovations in their communities.*
7. *Periodic follow-up/ backstopping of field teams and on-farm activities to ensure impact. Gaps are regularly identified by support scientists in collaboration with farmers, communities and local authorities. Data collected is analyzed and findings are reported to grassroots actors for refining and planning over subsequent seasons.*

Facilitating a stronger connection between stakeholders through co-management

Community openness and involvement are dependent amongst other things on their capacity to assess the importance of forests for their environment and livelihoods. If trained, they may use available knowledge in planning and implementing management strategies and collaborate with other players including the state agents and cadres (technocrats). In Guinea, capacity building events have served as real platforms for frank discussions on forests related faced challenges by both parties and co-management approach brought in added value to enhance dialogue and interest conciliation. Local communities now are able to organize and manage themselves, elaborate and implement action plans, monitor biodiversity indicators, design and implement projects, manage finances, negotiate with other stakeholders, and integrate national legislation and global biodiversity concerns into their management processes. They have become so cooperative with the district forestry and agricultural extension officers who are involved in the training events facilitation though exchanges of ideas, views and strategies. (Box 2)

Conditionality's/prerequisites

- Legal and institutional issues
- Gaps Typology and implications on Forest trends
- Forest governance challenges in Guinea: past and current issues and stakes (Stakeholders interests and struggles)

Conclusion and policy recommendations

After three years facilitation using livelihoods strengthening platform, we could note a real shift in communities and technocrats' behaviors towards collaborative forest management, a new arena for dialogue and land use planning, gender sensitive joint efforts in policy development and forests conservation. Those milestones are being sustained by introduced agroforestry base non cash reward options to improve community livelihoods and negotiated capacity building schemes for both technocrats and community based organizations(CBOs), harnessing community' enthusiasm and active participation in forests protection initiatives as per management plans; leading hence to increased forests cover, more regular water flows and biodiversity habitats. Finally, though the road to success in the struggle for forest governance remains rough and long, the following critical issues must be factored in for every such process to be successfully: adaptation capacity and willingness of stakeholders, clear future scenario and appropriate options for socio-economic resilience, concerted bylaws and clear contracts, knowledge and information

Box 2: Co-management of State Classified forests in Guinea

For over 15 years, Guinea, with support from USAID, has been engaged in the search for appropriate participatory forest management approaches. From various experiences of actors working in different forest types in Guinea, the co-management model was identified as being the most appropriate participatory forest management approach for State Classified Forests in Guinea (SCF). This model is based on provisions of the forestry, wildlife, and cooperative laws. The introduction of the initial model in 1996, by Chemonix International, through the Natural Resources Management Activity Project (NRMA), was tested by the first Forest Management Committee created in Nialama in Guinea. Priority collaborative activities identified included fire management, boundary demarcation, sensitisation and extension, development of local rules for protection of biodiversity, cartography, agroforestry practices, lowland cultivation and management of forest resources (Williams, 1999a).

Adding value to the co-management model through LAMIL

From 2005 to 2008, the Landscape Management for Improved Livelihoods (LAMIL) Project reviewed the co-management process in Guinea (Diallo, 2007). This resulted in a reformed process introducing Integrated Landscape Management and Adaptive Management approaches. Using Participatory action research tools, state agents and community members were trained in natural resource and biodiversity management, increasing community incomes through market oriented production activities; strengthening local governance by developing incentive and control mechanisms, and intensifying agriculture through innovative Agroforestry practices. This resulted in reduced pressure on forests, increased local commitment to the co-management process, and increased technical capacity of state and communities to implement co-management in four SCF. In 2006, the United States Forestry Services (USFS) facilitated the design of a National Strategy for Participatory forest management (Diallo et al., 2006). Based on previous Winrock and Chemonix experiences, and the on-going CIFOR and ICRAF co-management review process, the strategy established co-management as one of several forms of participatory forest management authorised in Guinea

Co-management guidelines

Guidelines for co-management of classified forests were elaborated in 2007, and a new contract template was designed and adopted with technical support provided by CIFOR and ICRAF. Setting up the co-management process in Guinea was articulated around the following major steps, implemented sequentially (LAMIL, 2007):

- *Identification of the forest;*
- *Baseline socio economic surveys, inventory and mapping to determine the potential and related constraints to use and management of the forest resources;*
- *participatory stakeholder meetings to establish a legal entity;*
- *Elaboration of a management plan;*
- *Presentation, amendment and adoption of the management plan;*
- *Elaboration, negotiation and signature of the management contract;*
- *Implementation of the management plan;*
- *Monitoring, follow up and evaluation of the management plan implementation.*

Advantages of co-management

For local communities:

- *Legal access rights to natural resources*
- *Revenue for local development schemes*
- *Capacity building and improved management practices*
- *Environmental benefits related to scenery, water and soil quality, etc.*

For the State:

- *Better management of forest and natural resources*
- *Reduction of transaction costs involved*
- *Better governance of proceeds and consequently directly available revenue for reinvestment into tree planting or restoration schemes*

sharing. Outstanding challenges to maintain efficient collaboration and promote sustainable use of forests products in accordance with participatory management plans are : enhancing research activities to generate information for policy makers and shapers, invigorate training schemes for technocrats appropriate community level facilitation, scale out co-management experiences nationwide, engaging public and private sectors in forests management through Agroforestry especially high level technocrats, strategizing entry points for policy review to suit the current changes. As such, it will be possible to quick off the move from customary to formal rights and shared benefits with regards to forest resources in target landscapes.

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THEME 2 - Exposé 13 : des aspects scientifiques dans la formation des populations des zones forestières sahéliennes

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Résumé

Aujourd'hui, le monde est confronté à des situations nouvelles comme les conflits de toutes sortes, l'insécurité, la dégradation de l'environnement et les changements climatiques qui n'épargnent pas le cadre forestier. A cause de multiples facteurs, les valeurs humaines relatives à la préservation de la forêt se dissipent au profit de l'urbanisation. En conséquence, les relations entre les populations et l'administration en général et les services forestiers en particulier se détériorent et aboutissent à un sous-développement local puis national et régional. Les lois forestières des pays en développement sont en général très anciennes si elles ne datent pas de l'époque coloniale. Aussi, elles deviennent caduques très vite et difficilement applicables à cause de l'écart qui sépare l'époque de leur élaboration et la pratique actuelle. L'intégration des aspects scientifiques dans les lois et règlements forestiers permettra de disposer d'un outil plus fiable qui préparera les générations futures à une meilleure gestion de leur environnement. En plus, les populations rurales méconnaissent la finalité de ces lois et ont besoin d'une formation durable qui renforce leurs connaissances sur l'intérêt qu'elles ont à respecter le cadre de gestion des espèces forestières. Cette formation doit partir de la base c'est-à-dire de l'école. Elle doit ensuite se poursuivre avec une formation professionnelle et continuer sur les concepts actuels tels que les changements climatiques, les gaz à effet de serre, le développement durable, les arbres génétiquement modifiés, la séquestration du carbone, la biosécurité, la biodiversité et la biotechnologie. Cette présentation est particulièrement axée sur les avantages que la science et la technique procurent aux populations rurales et dont l'application contribue à mieux comprendre les dispositions des lois forestières. Celles-ci jouent un rôle très important dans la propagation des arbres, leur amélioration, leur protection, leur durabilité et dans l'augmentation de la fertilité des sols forestiers. Les lois forestières doivent ainsi intégrer de plus en plus les nouveaux produits issus de la biotechnologie et dont les populations peuvent être elles mêmes productrices. Ces populations se sentiront alors plus proches de l'administration et se considéreront plus comme des partenaires stratégiques dans la gestion des forêts.

Mots-clés : aspects scientifiques, formation, lois forestières, Sahel,