

Decentralization and sustainable management of natural resources in the Koro Circle, Mopti Region, Mali

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Introduction

Soon after independence in 1960, traditional authority, which until then had looked after the natural resources of village land, lost all authority to modern law. The essentially repressive state management in the end dissuaded a large number of users who were never convinced of the pertinence of a rational management of natural resources. In our time, the weakening of the authority of the state, given the events of March 1991, as well as democracy in Mali have exacerbated the pressure exerted by the various users on the resources of Segue Natural Forest.

Today, the sociopolitical context in Mali (decentralization, review of land and forest laws) has promoted the participation of the local people in the management of the natural resources of their land. Given that context, the Cooperative for Assistance and Relief Everywhere (CARE) was asked by the Government of Mali in 1995 to play a role in the 83 200 ha Segue Natural Forest, Koro Circle area, against the backdrop of a sustainable and rational use of natural resources under the responsibility of village communities.

The methodological approach used was the participatory approach (involving government, local and regional technical services and CARE) in:

- identifying resident and non-resident user groups and other actors;
- informing, communicating and training local actors, including local bodies for management of natural resources (LBMNR), the elected representatives, the local chamber of agriculture, technical services, the general administration and CARE;
- drawing the institutional map of the area on the basis of village consultations, during which users agreed on the organizational form;
- forming officially recognized management bodies;

- taking an inventory of agrosylvipastoral resources accompanying the development and management plan;
- creating a local consultation framework based on local expertise for the prevention of conflicts;
- negotiating with the government for authority by the local bodies to manage the natural resources.

This has made it possible to have at present in the area 19 village bodies and three supra-village bodies endowed with private law status and legal documents.

Regarding the management of the natural forest, each promoter has very clear roles and responsibilities. The main roles and responsibilities can be described as follows:

- Through local institutions, communities ensure that there is effective representation of all the users (farmers, keepers, women, wood dealers) in decision-making.
- Through their organizations, users have the responsibility to adopt principles and conduct favourable to a rational and sustainable use of natural resources by adopting and enacting rules reached by consensus of all the users.
- The state has the role of managing, informing, sensitizing and training communities and elected representatives; it monitors the legality of management acts and provides the technical assistance required for development of the resources.
- Through the intermediaries, that is, the elected representatives, the decentralized communities have established relations of partnership with other actors by improving communication.
- Non-governmental organizations (NGOs) and, more specifically, CARE play the role of interface among state bodies (general administration, technical services), elected representatives, the community council and users. CARE plays a role of

advising, facilitating, training and coordinating activities between decision-makers (state, commune) and users.

At present, all those actions have found expression in the following plans:

- an institutional plan calling for holding monthly meetings and a general assembly, with minutes in vernacular languages and documents relative to the management of the properties of village organizations;
- a technical plan calling for an annual harvest of 5 769 000 steres of deadwood, 63 793 000 building poles and 60 000 carts of grass, and the development of 4 686 ha by technical means (making firebreaks, reforestation, scarification and tree-felling);
- a social plan calling for the decrease of conflicts over the use of the natural resources, reconciliation of farmers and livestock keepers, regular village consultations and the satisfaction of community needs;
- an economic plan calling for the mobilization of more than 500 million CFAF from the sale of wood and grass and the emergence of wood and grass networks run by the new, private operators.

The Segue forest management experiment

The subject of this study, the project for the management of Segue Natural Forest, which was carried out by CARE, is located in the southern part of the Koro rural commune, Koro Circle, on the border with Burkina Faso, in the Mopti administrative region of the Republic of Mali.

Mali, with a population of 9.8 million people, covers an area of 1.24 million km² divided into eight administrative regions, most of which are in the Sahel. The Mopti Region, located at the centre of the country, is the fifth administrative region of Mali. It covers an area of 79 017 km² and is one of the most densely populated regions of the country, with an estimated population of 1 452 905 people as of April 1995, according to the National Directory of Statistics and Informatics (NDSI), or 18.4 people per square kilometre, much more than the national average of 6.1 people/km². Despite that density, the support

capacity of the natural environment is limited because of the agroclimatic conditions and the high rate of demographic growth, which is 2.2 percent.

The main ethnic groups in the region are the Peulh, Dogon, Songhai, Bambara, Bozo and Somono. According to the NDSI statistics (Profile of Poverty, 1993), poverty and hunger are common in Mali. The area under study is located in the plains of Seno (Gondo and Ma) and Gourma, one of the three large agro-ecological areas¹ that comprise the Mopti Region and represent 43 percent of the area of the region, with sandy, silty soils, flattened dunes and alluvial soils.

On the other hand, the Mopti Region, with nearly 17 percent of the population of Mali, has the highest percentage of population living below the poverty line, with nearly 63 percent of the households living below the "very poor" line, compared with the average of 36 percent for the whole country.

The Segue Natural Forest, subject of this case study, is the last major natural forest in the Koro Circle. Users are residents, farmers and agrokeepers spread out over 19 villages, keepers from Burkina Faso and from other circles of the Mopti Region, and wood dealers from the town of Koro. In the past, the resources were managed according to traditional rules by native bodies called *ogokanas*.² The promulgation of a modern forest law largely inspired by that of the metropole dampened the efforts of communities to play a role in the management of the natural resources of their land. The new law removed all power to manage natural resources from the local bodies, which, nevertheless, continued to coexist with the state law in a parallel manner. Despite the existence of that law, people continued to turn to their *ogokanas*.

As rural people are very much attached to natural resources, if not exclusively dependent on them, any legislation or reform for the rational use of those resources must necessarily take into account the local management bodies.

In Mali, this concern has been taken into account through decentralization, i.e. the strengthening of democracy and the promotion of sustainable local development.

Thus, the experiment developed in the Koro area by CARE Mali has included institutional changes in the fields of administration and management of natural resources in Mali.

1. Pilot survey on the fight against hunger and poverty in the Mopti Region. (World Bank, 1995).

2. J. T. Thomson and C. Coulibaly 94, unit dealing with social and GRNR issues.

The Segue Natural Forest

The Koro Circle (Segue Natural Forest) is located between 2°5' and 3°10' west longitude and 13°4' and 14° north latitude in a Sahelo-Sudanian zone characterized by a deficient rainfall system, an average precipitation of 549.1 mm and by hot and dry harmattan winds and rain-bearing monsoons. The Segue Natural Forest covers an area of 83 200 ha, of which 23 759.35 ha consist of shrubby savannah, with 2.4 percent being clearings, 9 047.15 ha farms and fallows, and 169.11 ha sites for villages and hamlets.

In terms of wood, the Segue domain has the very sizeable potential of 1 422 378 m³, consisting of:

- timber wood (29 410 m³, i.e. 100 455 logs from nearly 60 percent of the forest);
- poles (3 408 m³, i.e. 92 110 units from 83 percent of the forest);
- smaller poles (5 603 m³, i.e. 127 350 units from 61 percent of the forest);
- fuelwood (323 330 m³, i.e. 718 512 steres from 61 percent of the forest);
- deadwood (323 330 m³, i.e. 718 512 steres from 73 percent of the forest);
- non-fuelwood (47 281.104 m³).

As a forest containing major, exploitable natural resources, Segue Natural Forest was characterized during the past decade by a high rate of deforestation. This is explained by several factors related to agriculture and livestock breeding and demographic growth. Together with these problems are those of the poor adjustment of the forestry legislation, insufficient interplay among the actors involved in the management of natural resources, and the weight of tradition.

As in other countries of the Sahel, the State of Mali has developed a programme to fight desertification. CARE has subscribed to that programme through the Koro village agroforestry project, which has centred its efforts on reforestation and agroforestry. Awareness campaigns for a green Mali are conducted every year, and publications regarding reforestation are produced by the state department of forestry.

In addition to their value for agricultural and pastoral use, forest resources are also valuable sources of fuelwood, building wood, timber, medicines and food for humans, and they are also valuable for commercialization. Commercialization exists in two forms: direct sale, and a system of rural markets for wood introduced by the project.

The approach used for the development of participatory forestry

The centralized management of natural resources by the state soon after independence, using forestry laws copied on the metropole model, resulted in the progressive deterioration of the former and the introduction of strained relations between the communities and the Department of Forestry.

As early as 1988, the communities adjacent to the forest took a categorical stand against the Water and Forestry Department of Koro when the latter wanted to gazette a portion of the forest.

With the events of March 1991 in Mali, when the state lost its authority, the people living in the vicinity of the forest, and those from afar, developed, wrongly or rightly, an unprecedented aggressiveness towards the forest's resources. Later, the same people became aware of the deterioration of their forest and tried to place the blame on the one hand with the keepers who practised the cutting of fodder species, and on the other hand with the climatic rigours of past years, which led to the death of many trees. That awareness was strengthened by the free administration of people advocated by the state (decentralization) and the new National Forestry Policy (sustainable management of natural resources). In 1997, CARE Mali pledged to work with the government Department of Water and Forestry to promote local management so that users of the Segue Natural Forest, one of the most important of the Mopti Region, could acquire organizational capacities enabling them to supervise, to promote and to plan the use of resources indispensable for their lives.

Community participation in the Segue Natural Forest presupposes the real involvement of communities in decision-making regarding all the activities that contribute to the success of their work. This has been made possible by including the interests of the communities to a sufficient extent and by creating the conditions or framework for discussion that enable them to express positions and to influence decisions.

Thus, starting from the existing traditional organizations and many consultations among the actors, the communities have formed 19 local bodies for management of the natural resources at the village level, and three supra-village bodies at the supra-village level. The most important consultation authority used by the local bodies for management of the Segue natural resources is the general assembly. The general assembly is the prerogative of the supra-village bodies, and it meets every six months. It is a

real forum for discussions and decisions. It enables all the bodies to participate in decision-making on the future of the resources and on the principal actions to be undertaken. In this experiment, the assembly has enabled the bodies to:

- agree on conditions and times for the training of members;
- fight illegal use of wood;
- implement in a concerted and complementary manner the actions agreed in the management plans.

Community participation has been effective in identifying the problems and in the establishment of local bodies.

Identification of user problems and of uses of the natural resources

In this matter, a joint investigation by farmers, resident and non-resident keepers, forest operators and women was conducted by the project team. By combining several tools, the investigation made it possible to understand the balance between consumption and/or use and the reproduction capacity of the potential availed by forest inventories and maps. This led to the definition of:

- limits of the resources;
- centre of interest of users;
- potentialities of the resources;
- rural markets for wood.

Institutional establishment of local organizations

This was based particularly on existing traditional institutions, i.e. the *ogokanas*. The different local actors involved in the management of natural resources negotiated among themselves aspects of legitimacy, legality and functional capacity. This resulted in the establishment of local bodies for the management of natural resources (LBMNR) that were in conformity with the provisions of Ordinance No. 41 PCG of 28 March 1959 governing private law associations, with their acknowledgements of receipt, in the Republic of Mali. The taking into account of legitimacy and legality in the framework of participatory management of the Segue resources, greatly influenced the approach, which was based on the following actions:

- Informing and sensitizing communities in the same domain regarding the deterioration of the area and opportunities offered by the new institutional framework in Mali (democracy, decentralization, reform of forestry law, etc.). By pursuing, with the people, an in-depth analysis of the actors/beneficiaries, and their duties

and relations, a framework favourable to true participation of all the users of the resources can be identified. The means of communication commonly used are radio transmissions, meetings for sharing of experience (project visits) and shows (talk shows and videos).

- Forming LBMNR that are entrusted with local development and democratic governance in the field of management of natural resources.
- Strengthening institutional and technical capacities of the bodies thus created in order to enable them to assume their new functions (drawing up management rules and simple management plans; energizing democratic governance, etc.).
- Supporting the implementation of simple management plans. Such plans specify the responsibilities of the communities and those of the project through programme appraisal meetings.

Results and impacts

In the framework of the experiment for management of the Segue Natural Forest, which was formerly effected on the basis of a far-reaching centralism, sometimes by traditional institutions, sometimes by the state, it is easy to note the present involvement of all the actors with very clear and well-applied roles and responsibilities. The most outstanding actors are the communities and their organizations, the CARE project, the elected representatives of the Koro rural commune, the technical services for environment and rural development, the Chamber of Agriculture and the administration in general. Each actor understands the present stakes related to natural resources in terms of the balance among consumption/use, reproduction capacity and institutional framework.

Strategies adopted for LBMNR

On the basis of lessons learned during recent decades, the actors in the management of the resources of the Segue Natural Forest have adopted the strategies outlined in the following.

Local bodies

For the management of natural resources by local bodies, the following practices have been adopted:

- holding general assemblies of all the users every month to discuss problems related to the forest, taking into account the minutes, programming, emergencies, conflicts and their resolution;
- drawing up and applying internal rules and regulations inspired by traditional practices;

- training members on the basis of an agreed process for the identification of beneficiaries and forming a training follow-up committee;
- holding sustained consultation on the management of public affairs.

Supra-village bodies

For supra-village bodies involved in the management of resources, the people in charge have, in addition to the above-mentioned roles, a mandate to define the management principles and to manage conflicts among different member bodies.

Technical services support body

For CARE, the technical services support body, the state, which was formerly the only manager and inspector of the entire resource management process, found itself obliged to associate all actors. Thus, in the management of the Segue Natural Forest the state assigned to itself the role of advisor along with the development partners (training and information), the role of inspector of legality (application of forestry and Mali cooperative movement legislation) and the role of alternative management of conflicts, in the sense that it first sought arbitration. CARE, the first body to be really interested in that area, has in the process played a key role of facilitator to involve the different actors. In addition, its omnipresence on the field has enabled it to act as the overseer of the entire experiment. Thus CARE has had an alliance with an NGO-decentralized management of natural resources in the fifth region network, and has provided for the basic studies, the identification and establishment of all the LBMNR and the strengthening of their organizational and technical capacities.

Local institutions

According to legislation, the communal council has responsibility for the development of natural resources. Along with other actors, the council takes part in discussions with the state and users, and stands as the ultimate authority for the management of conflicts. The fact that the council does not act as the first concerned in management matters is a result of the non-transferability of the domains to the communities, even if the law provides for it.

Central institutions

The general administration, i.e. the central authority, has accompanied the management of the forest from the beginning to the present through information meetings and discussions with the communities, technical services, communal authorities, the authorities of neighbouring Burkina Faso and the

project team. To show its support, the central authority has participated in the restitution of studies, ratification of all development plans and the issuing of official documents proving the existence of LBMNR. In the framework of support for participatory management, the general administration has put emphasis on reconciliation each time a management of natural resources (MNR) conflict concerning the forest is submitted to it.

With the confidence gained by that synergy and those regular consultations among the different actors, the bodies have succeeded in establishing the framework of the development and management of 83 200 ha of natural forest.

At the institutional level, they have achieved:

- respect for the internal rules and regulations;
- the regular keeping of minutes (office meetings, general assembly);
- democratic decision-making (e.g. following the Derou Na Ogoudourou conflict, members of the supra-office decided in a concerted and democratic manner to postpone the use of the disputed area until further notice).

The taking into account of gender aspects is now a reality in the offices and general assemblies, as is evident from the presence of women at all of the bodies' meetings.

At the technical level, local bodies have favoured development by dividing the forest into areas for agriculture, grazing and woodcutting. For the time being, the woodcutting area has drawn the most attention from the local bodies, which explains why

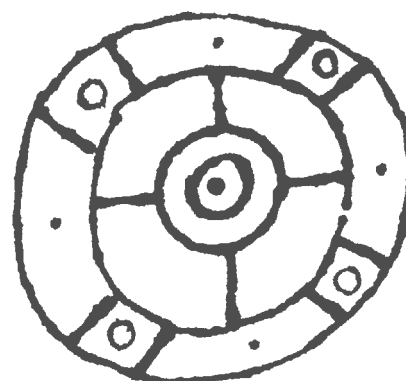


TABLE 1 • The wood harvest in seven villages in Segue Natural Forest, Mali

VILLAGES	AREA ha	TOTAL QUANTITY OF WOOD IN STERES	ANNUAL QUOTA TO HARVEST IN STERES	QUANTITY HARVESTED IN STERES	PERCENTAGE OF ESTIMATES %
Derou	280	4 666	400	150	38
Ogoudourou	946	23 028	1 000	100	10
Bargou	466	1 849	500	300	60
Lemde	751	12 900	750	100	13
Bih	349	6 187	600	200	33
Pongono	622	8 949	700	150	21
Total	3 414	57 579	3 950	1 000	25

area estimates exist for parts where woodcutting is intense. For the seven villages, the area used covers 3 414 ha (see Table 1). In addition to woodcutting, reforestation actions also are undertaken and have resulted in the planting of more than 2 000 plants.

At the organizational level, organization of the commercialization of wood through Strategy for Domestic Energy (SDE)-type rural markets has concerned the seven villages that own the portion of the forest that was least endowed during the year 2001.

Returns from forest use on the development of the people are residual and precarious. Yet, according to the law in force (Law 95-004, Decree 402), people must claim part of the revenue from the sale of wood and some fees from forest licences. However, these provisions are not always applied.

Difficulties encountered

The main difficulties encountered have revolved around:

- the equipping of woodcutters with carts for transportation of wood;
- the incompatibility between the local practices and the legislation concerning management of natural resources, as related to the non-effectiveness of decentralization;
- the low level of local technical capacity to develop the resources and re-establish the ecological balance, which is already threatened;
- the lack of involvement of non-permanent users, women and keepers.

Lessons learned

Generally speaking, the lessons learned from this experiment in decentralized management of natural resources and the conditions for its success are outlined below.

The lessons learned are that:

- establishment of management bodies needs to be guided by considerations of the problem of management of the common good;
- authorities for management of the common resources need to be sufficiently endowed with power to compel recognition;
- authorities, as well as users, need to have access to means of appeal in case of dispute;
- representation of users considered foreign to the bodies is difficult.

Success largely depends on:

- the participation of all the users;
- a high degree of transparency;
- an adequate follow-up;
- capacity to mobilize financial resources;
- a transparent mechanism for conflict resolution;
- sufficient knowledge;
- a mechanism of subsidiarity.

In any case, management of the Segue Natural Forest is a benchmark of participatory management of natural resources involving local communities, the state and civil society organizations in a synergy of action.