

Annex

Lessons 1-2-3 synthesis exercise

The construction of the problem statement based on the study:

Peltier R, Kokou K, Mary F, Sibelet N, Smektala G, 1999. *Gestion locale et décentralisée des ressources forestières pour l'approvisionnement en bois : Le cas de deux villages du bassin d'approvisionnement de Bamako, Banko et Kassaro. Etude effectuée du 8 février au 8 mars 1999 au Mali, promotion FRT 1999. Montpellier: ENGREF [Montpellier], 137 p.*

Context of the study and the commission:

The Domestic Wood Energy sector represents a very important economic activity sector in Mali. The sector creates numerous jobs, is a primary or secondary source of income for an important section of the population and requires relatively little investment. It is characterized by an unequal distribution of revenues between the different links in the marketing chain, principally to the detriment of rural actors, and by widespread fraud. In the early 1990s, the government of Mali chose a more coordinated and comprehensive approach, notably linking energy related projects with forestry projects. It was with this in mind that the Domestic Energy Strategy (SED) project was implemented and this was the context in which the present study was carried out.

The commission of the SED fell under the framework of setting up Controlled Rural Markets (MRC) by Rural Management Structures (SRG). These SRBs are charged with organizing the markets and the "rational" management of forest resources. The conditions for obtaining a controlled market status raise numerous questions regarding both the sustainable management of forests by local rural structures and the socio-economic functioning of these markets (size, practical organization of the market, etc.). In its commission, SED asks three questions:

- * How do the marketing chains of energy wood harvested in the Banko forest function?
- * What organizational form and what size are advisable for the future Rural Management Structures?
- * What could be the impact of paving the Kita-Kati road running beside the railroad on these marketing chains and on the future SRGs?

In the study area, the commercial exploitation of wood began with the arrival of the railroad in the beginning of the 20th century. The exploited wood was used to fuel steam locomotives and supply Bamako with energy wood for industry and for the consumption of the population. The arrival of electricity and spark ignition engines led to a drop in demand from industry. However, this drop was accompanied by an increased demand for wood for domestic energy uses due to the growth of the population in Bamako, which became the main destination of wood from villages situated along the railroad line. The demand for energy wood was high until the 1980s. During the rainy season, the poor state of the roads deterred trucks from

circulating and thus hindered a constant supply by road to Bamako, which was not a problem for the railroad. About ten wagons of energy wood left the Négala station per month.

Starting in the 1980s, the trade of energy wood coming from the village began to diminish and the number of wagons departing from Négala in 1998 had dropped to 10 per year. This reduction in the number of wagons was partly due to a local shortage of wagons which had been requisitioned for the flourishing Dakar-Bamako railroad link. Today, the number of freight wagons dedicated to the transport of wood remains too low and a non-negligible quantity of wood leaves on merchandise wagons or on platforms transporting products other than wood. With the coming paving of the Kita-Kati road, the characteristics of the wood trade are likely to be changed profoundly.

In this context, it appears urgent to set up a SRG type of organization capable of supervising the stakeholders, the sales points, and the flow of wood.

Example: the choice of Banko village

Located sixty kilometres outside of Bamako, the Négala station is one of the principle supply points of wood and charcoal for the capital. Négala is the administrative centre of the commune of Bossofala which includes eighteen villages, one of which is Banko, located 8 km from Négala.

In the village of Banko, no forestry resource management structure exists. The management of the forest is limited to a requirement to buy a cutting permit from the forestry service. The village, with a population of 635 inhabitants, includes the main forest stands in the area. The Banko basin effectively is surrounded by three wildlife reserves and several reserved forests. Pressure on the basin is even stronger given that it is the only place, outside of reserved forests, where forests that never have been intensively exploited continue to exist. The forests of neighboring villages, which are smaller, already have been developed and the exploitation there seems, according to the accounts given, less profitable. This is why the people exploiting wood today principally are located in Banko. The Banko basin is highly coveted due to the proximity to the station and the wealth of forestry resources in the area.

Geographic, social and historical scope of the study:

Given that the villagers of Banko harvest domestic firewood not only in the "Banko forest" but also in nearby reserved forests (close to but outside of the communal territory), the **geographic scope** of the study, in its ecological and economic dimensions, goes beyond simply the Banko forest mentioned in the commission. Likewise, in so far as in the Banko forest, wood is cut by people coming from neighboring villages and other regions, the **social scope** of the study goes beyond the population of Banko alone.

For the study to be feasible with the resources available, in its economic dimension, the social scope is limited to stakeholders involved in the first marketing of wood, which takes place at Négala station. However, the study includes the stakeholders involved in the home consumption of energy wood who were not explicitly mentioned in the commission. These last two decisions were part of **calibrating** the study.

To respond to the demand, from a temporal point of view, the study covers the 1999-2001 period for the prospective aspect (effects of the paving the road planned for 2001). The evolution of the number of train wagons available to transport wood to Bamako led the study period to be extended, starting in the 1960s (extensive exploitation of wood and availability of wagons in this period up to the end of the 1980s). The 1980-1999 period is representative of current activities. Thus the 1960-2001 period represents the **historical scope**.

Differentiation criteria of stakeholders to be met

1. Ethnic group (3 ethnic groups)
2. Date of arrival in the village
3. Location of residence (centre of the village/outlying hamlets)
4. Professions: wood cutters, merchants, transporters, farmers/agro-pastoralists
5. Gender: men/women
6. Age: young, adult, elderly
7. Prominent persons, leaders: forestry chief, station chief, village chief

As these groups were limited to the local area, one also must examine the outside stakeholders who intervene in the study area such as the private operators in Bamako, the middlemen, the people working on development projects in the area (for example, the Natural Resource Management project (PGRN)).

Development of the problem statement into research questions matched with response hypotheses.

To respond to the commission, and after the theoretical framing of the concept of a marketing chain, two complementary approaches were selected, matched with principal research questions and response hypotheses.

Spatial approach: expected output = map	Response hypotheses:
Where is wood harvested according to the different intended uses?	The harvest areas are different according to the uses: firewood, poles, timber, and depend on the species (see the map of vegetation available)
What are the boundaries of the supply basin(s) via Banko?	The supply basins go beyond the administrative limits of the village to include all or part of the Banko forest and nearby reserved forests.
Where are the areas that are still exploitable?	?
What are the impacts of the paving of the road?	The harvests intensify near to the road. This modifies the species harvested.

Socio-economic approach: expected output = schema and evaluation of chains (stakeholders, flows, profits, controls...)	Response hypotheses:
What products are involved and in which flows?	The products involved are firewood, charcoal, poles, and timber. There are unrecorded illegal flows.
Who are the stakeholders in wood marketing chains?	Men and women, wood professionals and amateurs, charcoal producers, merchants, controllers, service providers, ...
What are the technical actions?	Cutting, drying, stocking, bundling, transport, charcoal making, sacking...
How are profits distributed down the chain?	Lower profits higher up the chain than lower down, capturing profits at control points;
Where are harvested products headed and what is the relative importance of destinations per type of product?	Mixed commercial-home consumption chain (firewood) Purely commercial chain (other products)
What structure for the SRGs? (skills, action areas, material and human resources, relationships with other institutions)	The future structures should be based on the most effective existing structures (study the existing structures and assess how well they fit the objectives and resources of future SRGs).
What are the impacts of the paving of the road?	Improvement for some stakeholders blocked by the shortage of wagons, arrival of new stakeholders, growth of flows, change in the distribution of profits.