

SUB-HUMID ZONE CASE STUDY 5

Community Efforts at Rehabilitating Degraded Lands in the Upper East Region of Ghana¹

BACKGROUND

The communities of Wulungu, Naabari, Namoranteng, and Degare lie at longitude. 1° 30' -1° 45' W and latitude 10° 30' – 10° 45' N and have a total population of about 2,000. These communities are very close to Bolgatanga, the capital of the Upper East savanna region of Ghana.

The average annual rainfall is about 900 -1,200 mm. and the topography is generally flat, or with a few gentle slopes.

The soils are of the ochrosol type belonging to the family of Latosols and are generally coarse-textured and of high to medium fertility, being derived predominantly from igneous rocks.

The vegetation is Guinea Savanna woodland made up of widely-spaced deciduous trees, characteristically Shea (*Vitellaria paradoxa*), Dawadawa (*Parkia biglobosa*) and Baobab (*Adansonia digitata*) as the main natural economic species. Other dominant trees are *Azadirachta indica*, *Combretum spp.*, *Acacia spp.*, *Azelia Africana*, *Pterocarpus erinaceus*, *Detarium microcarpum* and *Terminalia avicennoides*.

Crop farming together with livestock production constitute the principal economically viable occupation of the majority of the adult population. The collection and selling of firewood, as well as the production of charcoal represent the second major economic activity in these communities. About 35% of the charcoal and firewood supplied to Bolgatanga come from these areas. The women are particularly dependent on these activities as sources of revenue. The remaining 65% of the charcoal and firewood supplied to the city of Bolgatanga come from the forest reserves and off reserve areas in the region. Consequently, these forests in the area are highly degraded due to a high incidence of annual bush fires, overexploitation of tree resources, unsustainable farming practices and overgrazing.

The degradation therefore makes the supply of the wood-energy unsustainable and negatively affects the livelihoods of the local people. Thus the Ghana Government, with financial support from the Danish Development Agency (DANIDA), established the Traditional Energy Unit (TEU) under the Savanna Resources Management Project of the Ministry of Lands and Forestry in order to ensure an adequate supply of wood-energy through the sustainable management of the savanna woodlands.

OBJECTIVES

Developmental Objective

The development objective of the project was to ensure the conservation and community-based integrated management of the savanna woodlands for the supply of fuelwood, through efficient marketing fair pricing, equitable distribution of revenues, and efficient utilization of fuelwood.

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Specific Objectives

The specific objectives of the project were:

- To develop the capacity of the traditional energy sub-sector in sustainable management techniques;
- To enhance the sustainable management of the resource base; and
- To improve wood fuel marketing, revenue generation and equitable sharing.

APPROACH

The partners of the project were the Danish Development Agency (DANIDA), which provided funding through the Ministries of Mines and Energy (MME) and Lands and Forestry (MLF); the Forest Services Division (FSD), which provided technical services and manpower; the local Communities, which implemented field activities, and the Bolgatanga District Assembly, which assisted with facilitation.

The approach was entirely participatory. Members of the community were involved in problem identification, needs assessment and the designing of appropriate interventions.

A working group from MME and the FSD held discussions with the whole community. This working group together with some youth and elders of the community undertook a walk through the farms, degraded farmlands, forest areas, and charcoal producing areas and water sources around the community. Proposed sites for the community reserve and woodlots were selected with the involvement of chiefs, *Tendanas*, elders, farmers, *Magazias*, women opinion leaders, traders, unit committee members, assemblymen, wood-fuel producers and youth leaders.

An open forum was then held at which the objective and strategies of the traditional energy project was explained and clarification sought by community members. Several environmental, economic and social problems were identified, which helped refine project objectives.

The community then agreed to release part of its relic forest for conservation and management. A committee was formed to assist in the implementation of the project. The TEU then identified eight woodland reserves to be piloted for harvesting of wood-fuels and prepared management plans to guide harvesting.

The project started in 2000 and ended in 2003.

RESULTS

General Results Include the Following:

- A good number of people in the communities were trained and organized into 11 Natural Resources Management Committees (CONARs) to represent the communities in all matters related

to traditional energy planning, natural forest management (on and off-reserve) and wood-lot establishment and maintenance. The CONARs acted as the mouthpiece for the pilot community and a link between the TEU, FSD, District Assembly and the entire community. The CONARs mobilized the rest of the communities to plant trees, patrol the forest reserves, enact and enforce bye-laws and to guide natural resource management and utilization in the respective communities. However, the CONARs were often challenged by some community members who did not recognize the legality of the authority of these committees.

- Up to 11 fire prevention squads were formed, trained and equipped to educate the general communities in simple fire management techniques and in understanding the negative effects of repeated bush fires.
- Specific results with regard to off-reserve management activities, woodlot establishment, and the implementation of management plans, are presented below.

Off-reserve Management

About 3,600 ha of woodlands outside the reserves were surveyed, mapped, inventoried and reserved by the pilot communities for future production of wood-fuels.

The communities formulated local rules and regulations based on traditional norms and values to manage the demarcated areas. The rules and regulations encompassed access to land, rights and responsibilities, bushfire management, harvesting of trees, species protection and unauthorized encroachment and as a result the vegetation in the forest has increased. (compare Pictures 1 and 2)



Picture 1 A Degraded Community Woodland Before the Project



Picture 2: Community Woodland Reserve – 2 Years After Reservation

Establishment of Community Woodlots

A total of 70 ha of woodlots was established under the project, using indigenous species to rehabilitate degraded woodlands and provide alternative sources of fuelwood and income for the communities. These community woodlots were planted on communal lands donated by the *Tindana*, the spiritual landowner, whose powers are being challenged in recent years; some of them leading to conflicts. Many in the communities were reluctant to work on the communal woodlots because the boots and cutlasses promised to them by the project were never delivered.

As a result of the above two difficulties, the concept of private woodlots emerged strongly during the second year of the project. Many privately owned woodlots were established by individuals and groups of individuals.

Implementation of Management Plans

The implementation of the harvesting schedules, detailed in the management plans, were fraught with difficulties, as the local communities did not understand them.

REASONS FOR SUCCESS

The project was however quite successful, as many of the objectives pursued were largely achieved. Reasons for the success include the following:

- A participatory planning process involving all stakeholders was followed;
- Enactment of community by-laws;
- Formation of implementation and surveillance committees by the local community.

SHORTCOMINGS

The success of the project was however less spectacular due to the following obstacles:

- The issue of land ownership was not explicitly addressed. This limited private initiatives in woodlot establishment and management;
- Multi-purpose use of the reserve was not fully explored during the participatory planning phase. This contributed in part to the difficulties in implementing the harvesting schedules drawn up within the management plans.
- The management plan was more on the technical aspects and ignored the economic and social perspectives. This also contributed to the difficulties in implementation.
- Unfulfilled promises on incentives (boots and cutlasses) coupled with a lack of clear policy and legal backing at the national level to community institutional initiatives also added to the difficulties and conflicts with local law enforcement committees.

LESSONS LEARNT

A number of interesting lessons derive from this case study, including the following:

- A natural process of recovery can be an effective option for rehabilitation of degraded lands
- Land and tree ownership issues need to be resolved beforehand to avoid conflicts.
- Without policy and legal backing at either the district or national level, community-based initiatives are not easy to be implemented.
- Without delivering on promises to local communities, the motivation to work on community projects by local communities is reduced.
- Participatory planning is essential to successful project implementation. However such planning should consider all issues, technical, socio-economic and cultural, which have some bearing on the project and should involve all stakeholders.

RECOMMENDATIONS

Policy

- A clear-cut policy on community forest reservation and management must be put in place to give legal backing to community initiatives.
- The issue of land ownership should also be resolved through an open forum.

Management

- Planning for rehabilitation of degraded lands should be holistic and should involve all stakeholders and address major issues which could limit successful implementation of project activities.
- A multi-purpose land use approach should be used in managing degraded forests.

Research

Studies should be conducted on natural processes of recovery to determine recruitment of species, composition and structure of the vegetation at different stages of recovery, the impacts of these on the soil and the phenology of the different plant species.