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From" Sacrilege" to Sustainability: Reforestation and Organic Farming in Forikrom, Ghana

orikrom, a community of 6,000 people in the Techiman District (Brong Ahafo region) of Ghana, is located in an area of open grassland that its inhabitants claim was once thick forest. Farming, the main occupation, concentrates on maize, yam, plantain, and cassava for own-consumption and sale at the Techiman market, and for eash crops on tobacco, palm nut and, more recently, cashew. The area once produced cocoa, but this practice ended in 1983 after fires destroyed most of the cocoa plantations. Further deforestation resulted from inappropriate farming methods, especially highly mechanized cultivation practiced during the 1960s but now abandoned, which undermined soil fertility, the people of Forikrom maintain, and dried up rivers and streams.

Forikrom has now turned the corner to reforestation of its environment, but the initiative did not succeed without significant cultural conflict and could not have reached the level it has without the impetus for new solutions that the conflict produced.

A religious dispute over water

The problem began with disputes about access to "Asukantia," the stream that had always supplied the town with water, but was beginning to dry up. It was designated a sacred area by long tradition, and local taboo forbade visiting the stream on Tuesdays. The restriction was religiously observed until 1989, a particularly dry year in that region of

Ghana. During the summer, a new religious sect in the community declared the practice anachronistic and advised its members to disobey the rule. This "sacrilege" immediately led to conflict between the new sect and the community's traditional authorities who were responsible for enforcing regulations enshrined in local tradition. The authorities charged the sect with offending the gods and provoking the drying-up of the water source; the latter in turn denounced the heathen practices of the village hierarchy.

Matters had reached a flashpoint when a group of young men came forward. They wanted to restore peace; and they were also more knowledgeable than their elders about environmental relationships, like those between deforestation, drought, and declining soil fertility.

Led by the Organizing Secretary (OS) of the local "Mobisquad" — a young people's association formed under the National Mobilization Program

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in 1983 to help communities carry out local improvement programs and respond to natural disasters — the group proposed to the community that it try growing trees around the stream's source as one way of restoring its health. However, this idea did not find favor with the Chief and elders, who continued to feel slighted by the sect and resolved to seek redress in the courts.

Still convinced that the solution lay in planting trees at the source, the group decided to try to follow up on its own idea. Fortunately, they enjoyed the advantage of some dynamic leadership. The OS's mix of schooling and practical experience gave him a critical and innovative perspective on local problems. He had been through primary, middle and vocational training and had served in positions as varied as teacher, government paymaster around Ghana and salesman in Nigeria. In addition, he himself had evangelical "credentials" as literature specialist for a missionary society. It soon became apparent, however, that neither he nor the other group members had enough knowledge about the specific

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Editor: IK Notes Knowledge and Learning Center Africa Region, World Bank 1818 H Street, N.W., Room J5-171 Washington, D.C. 20433 E-mail: pmohan@worldbank.org challenges of tree farming to succeed in their effort. Their inexperience also made it difficult to win over the traditional authorities.

Gaining the knowledge to make a new start

Conscious of this handicap, the OS persuaded his colleagues to seek out the knowledge and skills that they lacked. They turned first to a senior staff member at the Institute of Adult Education's regional office at Sunyani responsible for extension work in the Brong Ahafo region. He visited the village and subsequently helped the group to make several visits to the Forestry School and the Department of Forestry at Sunyani, about 100 km from Forikrom. Each time they returned home, they discussed what they had learned with the community, especially with the Chief and elders. By the end of 1989, the group had convinced the traditional authorities that litigation was not a solution to the community's difficulties. It had also secured support from the Forestry School and the Department of Forestry to start an afforestation project.

The project was formally launched in 1990, at a community forum organized by the group in collaboration with the Sunyani office of the Institute of Adult Education. At this meeting, experts from the Forestry School at Sunyani and from Department of Forestry offices at Sunyani and Kumasi with whom the group had been working took turns explaining the importance of afforestation. They especially emphasized its utility as a means to create a shelter belt around water sources, protect against the vagaries of climate, serve as wind breaks and fire belts around the community, help protect the fertility of the soil, and provide fuelwood resources.

Convinced by this presentation, the community's adults endorsed the idea of launching an afforestation project, and thereafter took part in initial lessons on nursery practices given by two forestry officers from Sunyani who served as resource persons. During a series of regular, 6-hour field training visits that the officers provided over a period of six months, groups of 30 individuals were taken through the essentials of how to: prepare land and raise beds; nurse seedlings; transplant; and tend young plants. A total of about 2,000 people, the bulk of Forikrom's adult population, participated in this training.

With technical support from the resource people and a modicum of outside funding from organizations like the United Nations Development Program (UNDP) and the Adventist Development and Relief Agency, the group next created a nursery to grow new trees, initially for reforestation purposes but increasingly for commercial farming as well. Cashew, palm, and teak were offered for community members to plant on their own farms. By October 1993, the project had distributed 15,000 seedlings free of charge to many groups that came from other areas to visit the farm. In the process, the OS and ten others acquired sufficient knowledge to become valued resource persons in their own right. The project progressively became a major center of forestry extension for the immediate region.

In late 1995, having successfully created a market for teak, palm, and cashew trees, species with very good sales prospects, the project decided to make production and distribution of seedlings a commercial activity - and in early 1996 saw its first sales of palm trees. Demand for teak seemed likely to expand as farmers in the area continued to plant stands to serve as firebreaks and, looking ahead, as general demand for telegraph and electricity poles expanded. As for cashew, its cultivation has generated very considerable interest in and around Forikrom. Within the community, farmers have in recent years planted more than 100 acres, with cashew sales beginning to pick up as the trees reach maturity.

Broadening the impact: environmental protection and organic farming

The initiative that sprang from conflict over water sources has had other positive consequences as well. The Forikrom Environmental Protection Association (EPA), an off-shoot of the afforestation project, gained a measure of celebrity when the Environmental Protection Agency of Ghana used the Forikrom branch as a base from which to extend its message of sound environmental practices to communities lying between Techiman and Nkoranza. Starting in 1994, the Forikrom branch of the EPA was invited to a series of workshops on nursery practices and tree maintenance organized by the agency in Kumasi. They then reproduced these for lo-

cal clientele, and Forikrom gradually became the site for a whole series of natural resource management and forestry training events sponsored by varied donors.

A second offshoot of the conflict over water rights has been creation of the Abrono Organic Farming Project (ABOFAP). Conceived in 1992 by the OS and his colleagues, the project was designed to deal with the concerns about declining fertility that underlay the "Asukantia" conflict. Its specific objectives were to train young farmers in organic crop production, to promote the use of composite manure to improve soil quality (and discourage use of chemicals), dry-season methods of vegetable gardening, and mushroom production.

During the latter part of 1990, the OS, accompanied by an unemployed woman — a middle school leaver — from Forikrom, attended a five-day training session in Kumasi organized by the Africa 2000 Program. Combining 12 hours of classroom study with 18 hours of practical work and observation on demonstration fields, their learning covered nursery practices, agro-forestry, and composite manure making. This experience was followed by participation in a number of other workshops and site visits that added to their advance knowledge of organic farming methods.

The OS concurrently started demonstration farms on his land at Forikrom in order to stimulate interest in organic farming among young people. He began with 20 trainees, 10 male and 10 female, all unemployed school leavers between the ages of 17 and 25. He divided them into groups of four and set each group working plots near the Asukantia stream

By 1996, ABOFAP had trained 130 young people (75 men and 55 women), for the most part unemployed middle school leavers living with their parents, in organic and dry-season vegetable gardening. The three months of training that these individuals received opened an important door to self-employment for them. During the first three-month cycle, for example, the initial cohort of 20 trainees produced a gross income of \$200,000, or \$355, from the sale of vegetables, sharing equally a net income of \$160,000, or \$308 (the exchange rate in December 1992 was \$519=\$1.00).

Except for about 10 percent of the trainees who found farming too difficult and gave up, all participants are now on their own and are doing well. The initial trainees have branched into eashew farming and are very hopeful about the

future. Nearly 200 of them have organized themselves into cooperatives of 6 to 10 persons each to engage in block farming of 1-2 acre plots along the stream.

Interestingly, the OS has not assumed a leading position in any of the organizations that he formed and nurtured. Rather, he has encouraged others to participate in their leadership. For example, an elderly non-literate farmer is President of the 2000-member Forikrom Afforestation Project while the OS serves as Secretary and, with three others, as member of the Executive Committee. Likewise, a 60 year-old farmer who holds a Middle School Leaving Certificate, is President of the 90-member Forikrom Environmental Protection Association. And a 23 year-old secondary school graduate, serves as Secretary of the 20-member ABOFAP.

Making peace with the community and the environment

Major progress has been made in Forikrom in less than a decade. New sources of wealth have been developed. But the most important consequences of the Forikrom initiative have in fact been qualitative in nature. The first of these is social comity. Community divisions sown by the dispute between the sect and traditional authorities subsided after the whole community joined hands to develop a shelter belt around the Asukantia stream. The excitement generated in the community over tree growing, new cash crops, improved implements, and the recognition of their hard work by outside institutions has helped everyone to forget about the initial divisive episode that started it all.

No less important has been the emergence of an environmentally-conscious community that serves as a model for other towns in the region. During the past six years an effective shelter belt, with 4 acres of teak and 3 acres of leucenea, has developed around the Asukantia source and stream. There is now abundant water in the stream, so much so that in recent years people have felt confident enough to use it for dry season gardening as well. In addition, local authorities report that people no longer burn the bush carelessly and, as a result, there have been no bush fires since 1990.

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