

**SUMMARY REPORTS ON FIELDS TRIPS TO ANIMAL TRACTION PROJECTS
IN THE KARA REGION, TOGO**

GROUP 1: KANTE

SITE DESCRIPTION

60 kilometers north of Kara
increasingly arid region of poor sandy and rocky soils

PROJECTS VISITED

Projet Kanté Ferme (Kanté Farm Project), Projet Nord/Togo (North Togo Project), and Animal Traction Project/Kara/Savanes.

The above projects are all working on various extension efforts in this region, focusing particularly on animal raising and draft animal farming. At Adjaite there is a center of demonstration, training and animal raising (small as well as large ruminants). A neighboring village of Souté is the site of cooperative animal production efforts (bovine) done by a collective of male farmers in the area who in turn practice animal traction individually. Female farmers are associated in small ruminant production efforts.

Group 1 made their first stop at the village of Kanté about 50 km north of Kara. The agro-climatic zone is not quite savanna with natural vegetation still appearing green late into the dry season. Farmers in the area had been cattle owners, but had always given their herds to Fulani (Peul) to manage in the past. This was apparently an uneasy arrangement and with the introduction of the animal traction project the farmers took over management of the herd. There are several animal traction projects in this area and we received conflicting and confusing stories about project goals, monitoring and inputs. One of a pair of oxen had died with no attempt to replace it by either the farmer or any project. The physical facilities were excellent (paddocks, manure pits and barrages). The farmers could recite project goals and objectives but did not seem to have adopted the entire "package". The animals looked to be in good health. The women had formed a cooperative and were raising sheep. They had received 12 ewes and a ram, had purchased 24 additional ewes, and had a current herd of 63. The ram was extremely overworked and exhibited signs of a pulmonary-respiratory ailment.

Group 1 then visited the animal traction training center at Adjaite. Again, we were impressed with the physical facilities but as there were no farmers or oxen currently in training we only spoke about the training program with the personnel there.

The last visit of Group 1 was to UPRONA, the implement factory outside Kara. The factory's responsiveness, willingness and ability to respond to requests for equipment manufacture and changes will greatly assist in the supply of equipment for future of animal traction projects in Togo.

GROUP 2: BROUKOU**SITE DESCRIPTION**

Located 50 kilometers northwest of Kara in the Kara River Valley.

PROJECTS VISITED

Savanes Agriculture Intensification Project, FED (EEC)

This area of more fertile sandy soils is inhabited by displaced mountain peoples under the direction of Project FED Kara. All infrastructures are provided including draft animals and equipment. Visits included animal and farmer training programs as well as with farmers practicing various improved techniques such as improved pasture, one-person draft work and traction by cattle.

The group visited an area 50 km northwest of Kara where farmers from the hills were being resettled through Project FED Kara, on reasonably flat and fertile land, recently made free of river-blindness. Farmers have been allocated approximately six ha of land, provided a small house, and allocated pairs of draft animals and equipment, including plows, triangular cultivators and ox carts. Repayment schedules were established with nominal interest rates. To date, about 300 pairs of draft animals have been installed. The main crops in the farming systems are sorghum, maize, cotton and groundnuts.

The first farmer visited was thoroughly convinced of the value of animal traction, and he and his wife demonstrated the use of a cultivator to break old ridges. They had recently bought a second pair of animals; both pairs had their rough grazing supplemented with groundnut hay, and seemed in good condition. Being among the more innovative farmers, they had been provided with *Stylosanthes* seeds and had a good 1/2 ha stand to graze animals on immediately prior to the plowing season. They used a plow, ridger, harrow, triangular cultivator, seeder and cart. They were enthusiastic about all items of equipment, including the seeder, although they only used it for half a day a year, for sowing 1/2 ha of rainfed rice. On the day of the visit an important bolt had broken on his cultivator, but he was confident of obtaining repairs and spare parts with the help of the project.

The second farmer used cows for plowing. His animals were very small and seemed to be in dangerously poor condition. Subsequent veterinary investigations failed to demonstrate the presence of blood or gastrointestinal parasites. Thus, the poor condition was probably attributable to malnutrition. However, the 13- to 15-month calves of these cows were in excellent condition, although apparently maintained under the same management system. Draft oxen on neighboring farms were also in good condition, although they too were only grazing rough natural pasture and crop residues. Despite their apparently poor condition, the farmer intended to use his cows for plowing in the near future. He appeared convinced of the benefits of animal traction, and his successful raising of

calves from his draft cows may have been his most profitable farm enterprise.

A farmer training center was visited, where farmers train their animals and learn the techniques for using various implements during a three-to-four week training session at the start of their participation in the program. Detailed discussions were held with project extension workers, who were enthusiastic about the benefits of animal traction in the area. However, they were concerned about the continuation of farmer services when the present phase of FED funding ends.

GROUP 3: LANDA POZENDA**SITE DESCRIPTION**

20 kilometers southeast of Kara
1,100 to 1,400 mm/year rainfall

PROJECT VISITED

Projet Nord-Togo (North Togo Project)

The zone of Landa is interesting for its integrated efforts at farming, animal raising, and draft animal extension work. To date they have worked with pure Zebu oxen and have had to develop an efficient health system in order to ensure the health of the less trypanoresistant variety. Within the health program is a system for extension of cotton seed and salt blocks for the draft animals. On this visit the zone was having its annual cotton sale, which exemplifies the effects of cash cropping in a traditional farming system.

The group visited five farmers, one a Fulani, another a second-year farmer and three "model" farmers who were trained as animal traction extension workers. Their farms were a few kilometers southeast of Lama Kara in the Togo Animal Traction Project area. The farms were relatively flat, soils reasonably fertile and land seemed to be no constraint, with much of it personally owned. Rainfall averaged 1,100 mm over a six month period. Crops consisted of sorghum, millet, yams, groundnuts and cowpeas. Families were small and labor had to be hired. Farm sizes ranged from 6 to 13 ha.

Examining the pre-conditions for project success, we found the exogenous factors to include available mechanized equipment for farm clearing; suitable soil texture and fertility; suitable conditions for animal traction (except oxen were imported under the project and did not seem as suitable as locally available cattle); a well-organized extension service, using "model" farmers who after two years as extension workers became full-time farmers and relied on project resources for their operations. Access to roads and markets seemed good, custom hiring of ox carts was practiced and a good potential existed for cash crops. Credit was available for inputs, land preparation and equipment but not as one package. Veterinary services were developed and suitable equipment and spare parts were available at project headquarters. The animal traction packages consisted of a moldboard plow, tine harrow, weeder and ox cart. The rural development center provided some maintenance and there was a blacksmith in the area. Water and pastures did not appear to be major constraints. The high cost of the animal traction package, largely due to the price of imported cattle, was identified as a problem. Of 20 farmers identified as interested in animal traction only three entered the program because of the initial cost. The three "model" farmers shared their labor. The farmers seemed motivated and animals were culturally accepted in the area. Of the five farmers participating in the project, four relied mostly on the project for their resources.

Feed resources seemed adequate, except the supply of groundnut hay was exhausted. We did not see the oxen to confirm the question of adequate feed but from the obvious crop residues, grass and weeds, feed was not likely a problem this year. Cotton seed and mineral mix were available and one farmer was growing Stylosanthes but had a disease problem. Others wanted to develop an improved forage program.

With respect to management of technology, we saw that animal health care was extremely important and was provided by the extension agents but paid for by the farmer. The farms were well kept and the animal holding facilities adequate and in good repair.

It appeared that the technology was being adopted slowly but not fully. For example, two of the farmers were not using oxen for weeding. We questioned whether training had been sufficient to enable farmers to adopt the whole package or whether the whole package itself was limiting wider use. There appeared to be opportunities to increase use of oxen for transport to increase the crop mix, to perhaps intercrop and to make better use of manure.

GROUP 4: ATCHANGBADE**SITE DESCRIPTION**

12 kilometers southwest of Kara
Moderate rainfall of 1,100 to 1,400 mm/year
Hilly, rocky region southwest of Kara covers 60,000 ha
Crops: yams, cotton, sorghum, corn and groundnuts
Arable land in short supply because of terrain

PROJECT VISITED

Projet Vivrier (Home Food Consumption Project)

The extension work in this area of soils with diminishing fertility has been organized by Projet Vivrier through the use of Councils of Development (CDs) which are farmer organizations formed to put development decisions and initiatives in the hands of the people. The visit included a meeting with one of these Councils followed by visits to members farms, some of which are practicing integrated techniques of animal feeding and farm waste recuperation. The training and demonstration center was also visited, where model field waste, crop residue storage and pigeon pea experiments are taking place.

ANIMAL TRADITIONS

Previous attempts to introduce animal traction failed. There are no livestock traditions. Farmers are often afraid of the oxen.

PROJECT INFLUENCE

A focus on food crops and community development has the objective of providing a catalyst for self-development. From 1980 to 1985, 82 animal traction units were placed. The project provides credit at 2.56 percent, animal health care, farmer and oxen training and blacksmith training.

SOCIO-ECONOMIC FACTORS

Resource levels vary. Land is a serious constraint. Access to land is very important.

UPROMA

UPROMA is a recently established factory producing animal traction and other appropriate technology equipment. Until it was established, projects imported animal traction equipment from various sources. Orders were small, expensive, often delayed and stocking spare parts was a problem since they often were not interchangeable. Producing equipment locally allowed equipment to be standardized, to be available on a timely basis and made spare parts and repairs easier to provide. UPROMA-manufactured equipment included: plow and multipurpose tool bar (triangular), two types

of harrows, carts of three different sizes, a hand push seeder, a manual cornsheller and a handpump. The factory's main problem at present is an inadequate sales and distribution system.

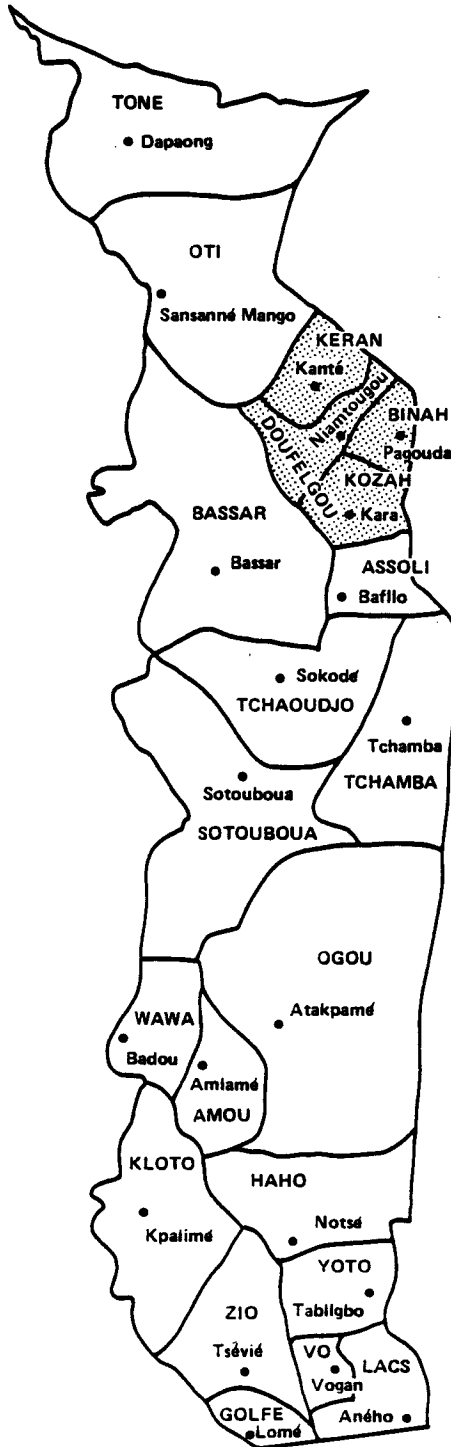
FARM VISITS

Farmers were not available to talk with the group until mid-afternoon because of a communal fishing activity. The project director made a general presentation on the project, followed by a visit to the oxen training center and the blacksmith training center. Problems raised by project staff included: farmers' fear of cattle, availability of animal health services, a change in the credit system requiring a substantial down payment and the availability of land.

The first farmer encountered was a partial adopter, who wanted a cart and seeder but found them very expensive. He had problems feeding his animals in the dry season and paid a cattle merchant to immunize and help care for his animals since the government-provided veterinary services were not regularly available. The second farmer would only be getting an animal traction unit this Spring, but expected the down payment and animal feeding to be major problems. The third farmer was a very good animal traction user even though he had adopted only four years ago. His major problem was the availability of land. He plants two or three successive crops on each field during the rainy season.

We also met part of the village Development Council which makes decisions about and coordinates village development activities, including requests for credit.

Figure 1. Map of Togo



Administrative Divisions in Togo, including the Project Zone

Figure 2. Map showing routes of four field visits.



ROUTES

- 1. Kanté
- 2. Broukou
- 3. Atchangbadé
- 4. Landa-Pozenda

SUMMARY OF FIELD TRIP REPORTS

Although each field trip site differed from the others in a number of ways, it is possible to identify 11 common points or problems which were raised in all four reports.

1. Adaptation of equipment.

Generally, equipment is found to be fairly well-adapted to farmer needs. There is a need, however, for appropriate peanut lifting equipment.

2. Supply of spare parts.

This does not appear to be a significant problem. UPRONA is doing a good job of producing spare parts and local blacksmiths are also engaged in the repair business for local animal traction farmers.

3. Cost of animal traction package.

Most reports noted the high cost of the unsubsidized animal traction package. There is a need to know whether the cost of the package has now gone beyond the means of the average farmer. There is a high initial cost to the equipment; currently one-sixth of the total price or 240,000 CFA. To afford the initial payment, farmers must have an animal traction cash crop. In this region, cereal prices fluctuate too much to be a dependable cash crop.

4. Animal supply and availability.

Most reports noted that animals are normally imported (Burkina Faso) and therefore have both a high price and considerable health problems. Future emphasis should be placed on using local animals.

5. Collective ownership.

This was not mentioned in all reports but was brought up as a potential introduction strategy. Collective ownership may bring certain benefits, but these may be overshadowed due to management problems collective ownership brings.

6. Animal health.

In all cases the status of animal health is directly related to project intervention rather than to any coordinated national effort. In the Brokou report, it was noted that cows were thin and likely having health problems, but elsewhere, animal health was generally good. The topic raises an important question: should animal health continue to be so related to project presence, or could the national animal health service be improved?

7. Animal feeding.

This topic generated a lot of attention and a number of ideas and problems were raised. Two stand out, however. First, peanut haulms offer a good potential source of feed, particularly beneficial due to its protein quality. However, problems in successful storage and conservation of haulms by farmers were underlined. Second, it was generally agreed that an adapted leguminous cover crop could be a potentially beneficial introduction into local rotation patterns. However, serious problems were raised as to the real potential of such an introduction (such as Stylosanthes sp.) given the difficulty in collecting or obtaining seed for planting. It should be pointed out that to the visitors from more Sahelian environments, the field trip areas seemed to have abundant feed resources by comparison.

8. Animal care.

Lack of a livestock tradition among most of the farmers in the field trip site areas suggests a generally poor understanding of animal care due to inexperience. This points to the need for intensive training in animal care and management as a basic component for any successful project.

9. Soil management/fertility.

While land availability was not noted as a major constraint in the project areas visited, maintaining soil fertility is a continuing problem and has not been adequately resolved. Manure is generally poorly utilized. It should be kept in mind that animal traction without attention to soil fertility maintenance may increase soil degradation.

10. Use of tillage techniques.

Generally, it was found that everyone plows but very few people weed. Yet, weeding technology is where gains to the farmer have greatest potential benefit. The introduction of animal traction is a long, slow process. A project has to have a long time-frame (many estimate ten years before benefits to farmers are seen), and must be able to deal with farmers on at least three different levels at the same time: beginners, partial adopters and advanced adopters.

11. Multiplicity of projects.

It is apparent that Togo in general, and the northern region in particular, has numerous projects dealing with animal traction. The multiplicity of projects and services seems to create confusion for farmers, underscoring both the necessity of the Project for the Promotion of Animal Power (PROPTA), and the difficulty this organization will face as it develops its coordinating role.

PROJECTS INVOLVED IN ANIMAL TRACTION IN TOGO

There are 32 activities in Togo which include animal traction as a major input to increasing agricultural productivity. These activities, the primary sponsors and the specific area of concentration are summarized briefly as follows (the USAID Culture Attelée Project (AIP) is not included):

1. Regional Rural Development Administration (DRDR) Savanes Region. Government agency responsible for integrated rural development in the Savanes region. It oversees the activities of the Draft Animals Project (Projet Culture Attelée) and the FED-Savanes Project as well as providing extension services to the work oxen farmers who participated in the former Agricultural Development Office (BDPA) Project.
2. Togolese Cotton Company (SOTOCO)-Second Rural Development Project in Cotton Areas (IDA). Set up to promote cotton nationwide, SOTOCO promotes the use of draft animals throughout its operations.
3. Savanes Agricultural Intensification Project (FED-Savanes). Farmer training in improved methods of cultivation and adapted inputs is promoted through an outreach program that aims at ameliorating soil fertility to sustain future agricultural production.
4. Draft Animals Project (PCA-USAID). Project set up to put into effect a training program for work oxen, farmers, and technicians and for the provision of oxen teams and equipment to farmers. It is a project that operates in both Kara and Savanes.
5. Namiele Plain Production (UNIFOCO). Originally this project was a private, agro-industrial project to develop the hydrological and rangeland resources of a broad plain for cattle production, primarily for meat. The project, in its third phase, is being integrated into the larger Ministry of Rural Development Program and, in collaboration with PROPTA, will produce oxen, improve village herds, and address environmental issues.
6. Social Affairs Service-Savanes. A multidisciplinary social service agency; draft animals are part of a program to improve Togolese family farming in the Savanes region.
7. "Maisons Familiales" Association. A French social assistance agency; village-to-village, family-level improvement of living standards with an accent on increasing staple food crop production. The use of draft animals (oxen and donkeys) is a major emphasis. Five centers are located in the Savanes region, several more are located in the Central region and one in the Plateau region. Maisons Familiales in Akpare promotes the use of oxen by women.
8. Rural Training Center at Tami. The Center trains young married couples in all aspects of agricultural and rural economy, including animal traction. The program was originated and is supported by the Diocese of Dapaong.

9. Community Organizing Center at Tabimong-Ogaro. Recently opened, this initiative by the Diocese of Dapaong follows a similar program to that of the Rural Training Center at Tami.

10. Catholic Community Organizing for Youth (JARC). Working with young farmers in the seven districts of the Diocese of Dapaong, JARC has been promoting the use of draft animals since 1968.

11. Regional Rural Development Administration (DRDR) Kara Region. Government agency responsible for integrated rural development in the Kara region. This DRDR was one of the innovators of oxen use in Togo and currently oversees the activities of the Draft Animals Project, the FED Kara Project and the North Togo Project.

12. FED Kara Project. A resettlement project initially, the program is being integrated into the Togolese Government Development structure. Animal traction has been a major component of this project from the outset.

13. North Togo Improvement Program (UNDP). Now integrated into the Togolese Development structure, the North Togo Program is a large, integrated rural development project in the Kara region. The use of work oxen is an important element of this program.

14. The Staple Food Crops Project of Atchangbade-Sirka (Entente Fund, USAID, FAC). This is a rural community development project in the Kara region. Village councils are organized to address the felt needs of the village. Assistance is of the self-help form. The use of oxen is part of the technological improvements encouraged by the project to lead to a gradual, sustainable increase in the production of staple crops.

15. The Missionary Brothers of the Countryside at Massedena. A religious order dedicated to helping the community with small projects, one of which is the introduction of animal traction. Farmer Development Councils are encouraged to determine choice of activities to be implemented on a self-help basis.

16. Regional Rural Development Administration (DRDR) Central Region (GTZ). Government agency responsible for the integrated rural development of the Central region. The rural development program, sponsored by the West German government, has a major draft animal emphasis. Farm families receive intensive training (as much as two years) in agricultural and rural technologies at a training center. This program is currently in a two-year evaluation phase.

17. Community Organizing Center (CAR)-Adjengré. Sponsored by the Diocese of Sokode, the project promotes food self-sufficiency and encourages young adults to engage in modern farming and the use of oxen.

18. Regional Rural Development Administration (DRDR) Plateau Region. Government agency responsible for the integrated rural development of the Plateau region. Its work oxen program is small and limited to its centers at Nyamasilla and Notse.

19. Notse Rural Development (IFAD). This project is designed to help develop the region east of Notse through a better infrastructure, improved staple crop production, and through the production of cotton.
20. Community Organizing Center (CAR) at Danyi. Working with 15 villages in the Danyi Plateau, the CAR-Danyi has long promoted the use of oxen in agriculture.
21. The Staple Food Crops Project of Notse-Dayes (PVND); (Entente Fund, USAID, FAC). This project emphasizes the development of corn production on old or marginal coffee and cocoa plantations. The use of tractors and oxen are part of the program. This project inherited the extension service component of PRODEBO, now PROPTA.
22. Rural Youth Center at Kpele-Govie. Sponsored by the Youth and Sports Ministry, this project provides oxen training and technical support to a group of young farmers.
23. Regional Rural Development Administration (DRDR) Maritime Region. Government agency, formerly PRODERMA, responsible for the integrated rural development of the Maritime region. Its technical service oversees the limited draft animal program at the Todome Center.
24. French Association of Voluneers. The French Volunteer program, in collaboration with the DRDR Maritime region, runs an animal traction center at Todome (Badja). The center serves village groups in a ten km zone.
25. Catholic Mission at Togoville. The Catholic Mission in Togoville has been active in promoting the use of oxen in agriculture since 1978. From a cooperative format, the emphasis has shifted to that of an animal traction school for selected farmers.
26. Rural Training Center at Wli. Sponsored by the Catholic Church, this project has broad interests in promoting agricultural and agro-artisanal industries in the region. The use of oxen and the manufacture of oxen-drawn implements are features of the program.
27. The Observation and Rehabilitation Center at Cacaveli. This center for the rehabilitation of juvenile delinquents employs oxen as part of its agricultural training and familiarization program.
28. The Community Development Center at Togodo. Sponsored by the Togolese National Political Party, the project is aimed at young adults who are interested in a career in modern agriculture. The use of oxen in this program has been highlighted on national television.
29. The Future Center at Kamina. A center for training young delinquents in vocational skills; its section on modern agriculture promotes the use of oxen.
30. The Livestock Research Center at Avetonou (CREAT). A German-funded cattle breeding and research center dedicated to improving animals adapted to the southern Togo environment. In addition to the oxen employed at the center for on-farm transportation, CREAT has introduced a research and

production program to help provide improved oxen to the farmers of Togo's southern economic regions.

31. National Agricultural Training Institute at Tove. The agricultural training college provides technical education to Togo's young rural development professionals and modern farmers. Training in work oxen technology is playing an increasingly important role in this program.

32. The Opportunities Industrialization Center Togo (OIC-TOGO). This American-sponsored initiative provides training in a broad spectrum of agricultural and non-agricultural topics, one of which is draft animal technology.

