

ANIMAL TRACTION EXPERIENCES IN THE GAMBIA

SOLOMON OWENS
MIXED FARMING PROJECT, THE GAMBIA

AGRO-CLIMATIC ZONE

The Gambia is located in the Sahelian region of West Africa. Historically, rainfall averaged 1100mm per year, falling from June to October. Recently, however, rainfall has been 68 percent of the norm or 600-700 mm with a small drought occurring in August.

Commercial agricultural crops are groundnuts and cotton, the latter less important in terms of foreign exchange. The government sets the price of the cash crop. Food crops are rice, millet, sorghum and maize. Rice is grown primarily in the swamplands and is entirely the responsibility of women. Traditionally, maize had been grown as a backyard crop and picked "green" (fresh) and eaten roasted. In 1981 about 4,000 ha were planted to maize. The Mixed Farming Project (USAID-CID-GOTG) has promoted maize production and in 1984 more than 16,000 ha of maize were planted.

LIVESTOCK TRADITION

Horses (and presumably donkeys) were introduced into the Senegambian area by the Portuguese in the 15th century. These animals continue to play a crucial role in transport throughout the region. Gambians have kept livestock for centuries, both small ruminants and cattle. Before the 1970s there were approximately 300 to 400 work oxen in the country. In eastern Gambia, horses and donkeys are the important draft animals; in western Gambia, work oxen are more important. Farmers are interested in animal traction and the availability of animals is not a problem. Women can own livestock but their draft animals will be used by men. Most Gambian livestock owners have contractual agreements with Fula herders for cattle management from June to December. These agreements do not include small ruminants.

PROJECT INFLUENCE

During 1962 to 1963, the first draft projects started with an imported plow, an ox cart and implements. Ox-plowing schools were set up around the country at 25 mixed farming centers. The trainers were extension agents who had undergone one year of training. This training included animal health care and the agronomy of cultivated crops. Plows were given out and loans made for equipment. This project continued for a long time until funding ended. Training was transferred from the centers to the villages, but unfortunately the quality of the training being done now is much poorer.

The imported plow is still used in eastern Gambia. SISCOMA (SISMAR) developed a seeder and weeder which some farmers have. The cooperative unions have taken over the responsibility of distribution but costs for equipment are prohibitive.

The Mixed Farming Project (MFP) is a livestock-oriented project (supported by USAID through a bilateral agreement with the Gambian Department of Agriculture/Consortium for International Development/Colorado State University) that initially focused on producing feed for animals (maize and forage). Maize proved so popular a food crop that the project turned to that use. The limiting factor in maize production is labor. MFP developed a two-row cultivator with discs, which was first tested in 1984. It used the basic SISMAR design. Testing will be better organized this year, since the training aspect has undergone improvement. Unfortunately, the price for this plow, even if it proves effective, may turn out to be too high for farmers to purchase.

SOCIO-ECONOMIC FACTORS

Farmers are very interested in animal traction. Animals and trainers are available. The major constraint is cost of equipment and the farmers' willingness to take on those costs.