Testing Times in the Teso

The Teso system in eastern Uganda refers to both a way of farming, and the people who farm the land. The favourable climate in this region supports the production of a range of food crops, including cassava, millet, and groundnuts, as well as cash crops such as sunflowers, cotton and soybeans.

However, the region has faced profound changes and challenges since the mid-1980s: civil strife, cattle rustling, disease, the decline of the cotton marketing system, and the spread of AIDS have all impacted on agricultural production. With the restoration of stability, the rehabilitation of agriculture is a top priority for the Ugandan Government.

A 1998 review organised by SAARI (Serere Agricultural and Animal Production Research Institute, Uganda), funded by DFID and NARO (Natural Agricultural Resource Organisation), identified labour constraints for weeding and planting crops as a major impediment to increasing yields and labour productivity. In this farming system, the ox-drawn plough has been widely adopted, which has led to increases in the cultivated area placing additional burdens on women who are often responsible for weeding (by hand) this extended area.

Improving production in the Teso farming system through the development of sustainable draught animal technologies (R7401)

A joint CPP/Livestock Production Programme project is developing weeders and planters, and testing their effect on labour requirements, yields and the incomes of poor households.

Virus diseases such as groundnut rosette, which can result in total crop failure, were also highlighted by farmers. In the groundnut rosette disease management project (R7445), farmers are evaluating varieties of groundnut developed by the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) and the Natural Resources Institute (NRI) in an earlier phase of the project (R6811). These varieties mature early and are resistant to rosette virus, qualities which are valued by farmers since they reduce the risk of crop losses due to drought or disease. During the 2000 season, a group of Teso farmers were given four improved virus resistant varieties. All of the new varieties gave yields approximately three times greater than the local varieties. The new varieties also had acceptable seed qualities (colour and size) for home consumption and marketing. Eighty farmers in three districts will test the new varieties in 2001–2002.

Farmer showing increased yield of improved groundnut variety ICG 12991 (on left) compared with local variety (R7445)

Promotional pathways for all the research results are being developed through farmer field schools, community seed banks and local manufacturers, who are interested in commercial production of the weeders and planters being developed. Linkages to the DFID-NARO Client-Oriented Agricultural Research and Dissemination Project (COARDP) based at SAARI should also enhance the promotion of improved crop protection technologies throughout the Teso system.

***R7401**: Improving production in the Teso farming system through the development of sustainable draught animal technologies, D. Barton, NRI, and P. Terry, IACR*
***R7445**: Groundnut rosette management, W. Page, NRI, and F. Kimmins, NR Int*