A TOUGH NUT TO GROW

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After the Second World War, hungry Europe was in a hurry to win and develop new sources of food and raw materials. In Britain, for example, the shortage of cooking fat became a political issue in 1946 when homemakers protested the cut of 14 grams of fat a week. According to an official at the time: “The shortage of fat is probably the most serious and intractable part of the food position in Britain, and the authorities in the Ministry of Food can see no solution to it, in this generation at least, unless some great new source of production is developed”.

That great new source was to be groundnuts (Arachis hypogaea), grown in East Africa. Thus the British Groundnut Scheme was launched, aimed at supplying 600 000 tonnes of oil within a whirlwind 10-week study, some 1.3 million hectares of virgin land in Tanzania were deemed suitable for large-scale mechanized production of groundnuts, something never before carried out in tropical Africa.

Farmed by the British Overseas Food Corporation, the lands were at Kwonga in the Central Province, Urambo in the Western Province, and Nachingwea in the Southern Province. Contour cultivation and strip cropping, alternating groundnuts with grass, was practiced on units of 12 000 hectares each. From the outset, clearing the woody vegetation and preserving the soil proved difficult. Because of soil compaction and abrasion, Kongwa was found to be unsuitable for mechanized production of groundnuts, sunflowers... even cereals. In Urambo, unpredictable dry periods and poor fertility resulted in severe soil erosion. Moreover, the varieties of groundnut planted were stricken by rosette virus, a disease that the survey had not considered a problem in the region.

Although Nachingwea was better suited to groundnut production, rosette and leaf spot disease caused serious crop losses. And when rains delayed mechanized cultivation of the crop, the weeds took over the fields.

In the early 1950s, after investments of more than US$80 million, the British Groundnut Scheme was abandoned. Research on the crop in Tanzania also came to a halt.

Although large-scale planting of groundnuts has followed in other parts of the world, they are grown almost solely as a subsistence crop in Tanzania. Some 75 percent of Tanzania's cultivated lands are in dry, low fertility areas. Small farmers produce all important food crops — cereals such as maize, sorghum, and rice; legumes including soybeans, mixed beans, peas, and groundnuts; and cassava, sweet potato, and bananas. They use few inputs and hand tools mainly. Yields are consequently low and the production of soybean and groundnut has been declining in recent years.

The lack of high-yielding varieties adapted to Tanzania's conditions, poor cultural practices, and weak marketing incentives are largely to blame.

To help solve this problem, IDRC is supporting a project carried out by the Faculty of Agriculture, Forestry and Veterinary Science of the University of Dar-es-Salaam. Begun late in 1980, the project aims to develop high-yielding varieties of food legumes adapted to Tanzania's various agro-climatic conditions. And while groundnuts are the main crop studied, soybean and

Groundnuts have great potential as a food and cash crop in East Africa. There are many problems to overcome, however, before that potential is realized.

A collection of Bambara groundnut (Vandzeia subterranea) will also be made and screened. Bambara nuts are some of the most drought-resistant legumes, but very little research has been carried out on their improvement. In addition, agronomic experiments will be undertaken to develop a package of practices for various areas in the country.

In Mozambique, south of Tanzania, groundnut cultivation has experienced similar problems. Some 200 000 hectares — less than four percent of the country's cultivated lands — are planted to groundnut, mainly along the coast. The yield of 600 to 480 kg/ha is low compared to the 1000-1500 kg/ha obtained in other African countries.

Neglected during the colonial era because it was a subsistence crop, the groundnut has great potential in the country, both for local consumption and for export. Researchers estimate that 50 percent of Mozambique's agricultural land is suited to its production.

For intercropping will be selected. A mission sent to East Africa surveyed some 50 000 kilometres of Tanzania (then Tanganyika), Zambia (then Northern Rhodesia), and Kenya. After a whirlwind 10-week study, some 1.3 million hectares of virgin land in Tanzania were deemed suitable...