

UGANDA

1. *History and Production Trends*

Potatoes were probably introduced to Uganda by colonial administrators just after 1900, as a garden vegetable (Ministry of Agriculture and Forestry 1981). Other probable sources were from Kenyan, Rwandan, and Zairian farmers and traders located along the borders. The crop diffused among Uganda farmers living in the cool highlands of the country. By 1945, potatoes were widely grown in the highlands of Kigeri and Bugizu and were even described as a weed as well as a crop (Akimanzi 1975). Production was severely damaged in the late 1940s by infestations of late blight (*Phytophthora infestans*) and to a lesser extent early blight (*Alternaria solani*).

The growing demand for the crop eventually led to rising imports, prompting formation of the Kigeri Potato Development Scheme in 1966, by the Department of Agriculture. In 1968 a breeding program was established at Makerere University in collaboration with the International Potato Center. Throughout most of the 1970s and 1980s Uganda experienced a series of civil conflicts that makes it difficult to obtain reliable data on crop production. Figures 1 and 2 show FAO estimates of potato production and area for 1961-95 (Akimanzi 1975, Anon. 1981, Rufumbaguza 1984).

Figure 1

2. *Zones of Production*

Some potatoes are grown throughout Uganda, but the main production is concentrated in areas with elevations of 1,500-3,000 masl. Highlands form a relatively small portion of Uganda's arable land and are densely populated. Potato production in these areas has not increased relative to demand (Mukubi 1976). Major areas of production include the highlands of Kigezi, Ruwenzori, and Ankole in the southwest, and Bugisu in the southeast, especially on the slopes of Mt. Elgon. Some production also occurs in Sebei in the east and in the West Nile region. The highland areas generally receive 900-1,400 mm of rain annually, distributed bimodally. The main rainy season is from February to May, with a secondary peak between September and January. Temperatures range from 10-30 degrees C depending on altitude. Soils vary considerably, ranging from leached, acid oxisols and ultisols, to fertile volcanic soils in the south (Rufumbaguza 1984; Turyamureeba 1983; Akimanzi 1975).

A map of the major potato production zones in Uganda is found in Figure 3.

Figure 3

3. *Production*

a. *Seasons*

In the Kigeri highlands three crops are grown each year, on hillslopes during the two rainy seasons, and in valley bottoms using residual soil moisture during the dry season. The first rainfed crop is planted in March/April and harvested from June through early August. Dry-season planting occurs in May/June, with harvest in August/September. A third crop is grown during the second rainy season, planted from late September through early November and harvested from December to February (Rufumbaguza 1984).

b. *Seed Sources and Varieties*

Although some certified seed is multiplied and distributed by the national potato program, the vast bulk of seed in Uganda is uncertified and either produced locally or shipped from Kigezi to other parts of the country. Major varieties include Bufumbiva, Muhabuva, Rubega, and Kalengere. Many farmers use varieties known loosely as "Kigeri locals." Details on the present status of the seed multiplication program and the distribution of seed potatoes are unavailable (Rufumbaguza 1984; Turyamureeba 1983).

c. *Production Practices*

Land clearing and preparation are generally done by hand, although occasionally ox-drawn ploughs or tractors, may be used. Sprouted or unsprouted seed tubers are planted at intervals of about 35 cm along ridges spaced 75 cm apart. When available, farmyard manure is applied. Recommended fertilizer application is 45 kg/ha N and 65 kg/ha P. Maneb is recommended for controlling blights. In general, purchased inputs are in short supply and prohibitively expensive for most farmers. Although yields of 20 t/ha were common in the mid-1970s, they have since fallen to an average of 7 t/ha (Kibirige 1982, Turyamureeba 1983, Akimanzi Nd).

d. *Pests and Diseases*

Late blight (*Phytophthora infestans*) and early blight (*Alternaria solani*) are serious problems, particularly at elevations below 1,500 m. Bacterial wilt (*Pseudomonas solanacearum*) causes severe losses, and has forced farmers in some areas to stop growing the crop. Stem canker and *Verticillium* wilt can be damaging. Leafroll virus and PVY have been identified, but rarely cause serious yield reductions.

Tuber moth (*Phthorimaea operculella*) can be a serious pest, both in the field and during storage. Nematodes have been observed, but their damage appears limited (Kibirige 1982, Kasimbazi 1982). Monkeys, baboons, moles, and wild pigs destroy the plants and eat the tubers.



4. *Post-Production*

a. *Storage and Processing*

Due to a shortage of cold storage facilities, farmers store seed tubers in their houses, large baskets or pots, pits, or in granaries with other crops. Some traders have special buildings for storing potatoes, but these are usually simple sheds. Storage losses can exceed 50% (Rufumbaguza 1982; Turyamureeba 1983).

b. *Distribution*

Transport is a major constraint, which limits the distribution of potatoes to urban centers. The price and availability of other crops affects consumer demand for potatoes whose prices often fluctuate widely. When potatoes are in ample supply, white-skinned varieties usually command the best prices (Rufumbaguza 1984; Turyamureeba 1983).

c. *Preparation and Consumption*

Potato is a relatively minor food in Uganda compared with cassava, banana, maize, sorghum, beans, sweet potato and other food crops. However, in some areas, particularly the southwest, they are a major staple. FAO (1986) estimates for 1984 show an average annual consumption of 10 kg per capita. Consumption is probably much higher in major production areas and urban centers (Rufumbaguza 1984; Turyamureeba 1983).

References

- Akimanzi, D. R. 1975. Report on Potato Production in Uganda. International Potato Course: Production, Storage, and Seed Technology. Report of Participants. International Agricultural Center. Wageningen, The Netherlands.
- Akimanzi, D. R. Nd. Potato Development and Transfer in Uganda. Unpublished MS.
- Kasimbazi, J. 1982. Major Factors Affecting Potato Production in Uganda. International Potato Course: Production, Storage, and Seed Technology. Report of Participants. International Agricultural Center. Wageningen, The Netherlands.
- Ministry of Agriculture and Forestry. 1981. The National Potato Programme in Uganda. Planning Division.
- Rufumbaguza, W. R. 1984. Report on Potato Production in Uganda. International Potato Course: Production, Storage, and Seed Technology. Report of Participants. International Agricultural Center. Wageningen, The Netherlands.
- Turyamureeba, G. M. 1983. Report on Potato Production in Uganda. International Potato Course: Production, Storage, and Seed Technology. Report of Participants. International Agricultural Center. Wageningen, The Netherlands.

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