

PRODUCTION OF SUGAR AT SANGO BAY.

Sango Bay Estate extends over more than 200 sq. miles of the south-east of Buddu County in Masaka District. It is a sparsely populated area of grass savanna and swamp grassland near Lake Victoria. The estate is an old-established one, having had unsuccessful plantations of sisal and palms in the last 60 years, but until 1956 the main use made of the estate was the exploitation of timber resources. There is still saw-milling, but this is no longer the main activity.

In 1956 the lease of the estate changed hands, and, in an attempt to increase the return from the land, experimental plots, each of 200 acres had been planted with coffee and sugar-cane by 1960. The coffee failed completely, but the sugar was sufficiently successful to warrant the planting of a further 700 acres in 1962. The acreage was further increased using cuttings from the original cane, and in August, 1965, when there were 4,700 acres altogether, the first cane was crushed. Early prospects of success had encouraged the establishment of a sugar processing factory on the Estate.

By the end of 1967 there were 6,500 acres of sugar, and an estimated yield of 80,000-100,000 tons of cane for the year. It is planned to increase the acreage to 20,000 by 1975 with an annual crushing of 675,000 tons of cane. If this expansion is realised, the production of sugar will be as great as the present production from each of Uganda's chief producers, Uganda Sugar Factory at Lugazi and Madhvani Sugar Works at Kakira. These are ambitious plans, and need to be measured against environmental and economic circumstances.

The soils of the estate area are classified as part of the Sango Series<sup>(1)</sup> of lake alluvium deposited as Lake Victoria retreated. These soils have an extremely heavy grey clay upper horizon, and are both acidic (pH 4.5-5.0) and severely lacking in the major plant nutrients except phosphorous. Although mean annual rainfall is over 45", and is sufficient in some areas to support some swamp forest, aquatic grassland and herb swamp is the dominant vegetation, and peasant farming is apparently excluded from these soils. Only with the application of fish-bones as fertilizer is cultivation possible in fishing villages along the lake shore. Previous attempts to cultivate the soils of the estate (e.g. sisal and coffee) have failed. Since sugar grows best where pH values are above 5.0, heavy applications of fertilizer are necessary at Sango Bay.

The problem of soil acidity is aggravated by the need for drainage. Many ditches have been dug, and the lowering of the water-table leads to an increase in the acidity of the upper horizons. A similar problem has been recognised and investigated at the Lugazi Estate, where it was considered that, if the drainage were carefully controlled, it would be possible to cultivate sugar successfully.<sup>(2)</sup>

The situation of Sango Bay Estate, as well as its site, presents problems. Not only do the Lugazi and Kakira sugar factories lie within the economic heartland of Uganda, but the Kenya-Uganda railway passes through both estates. In terms of installation costs, and recurrent costs on spare machine parts, maintenance, etc., Sango Bay faces a considerable economic disadvantage by being 130 miles from Kampala, the nearest railway station. The additional costs of road haulage of equipment and financial inducements needed to attract qualified staff to a remote area have added to the total cost. Despite its proximity, Lake Victoria was not used for the transport of equipment; nor is it intended that the

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Lake should be used in the future for the transport of sugar to other ports.

The cost of transporting refined sugar to the market is not borne by the Estate, but by the wholesaler. As far as the Estate is concerned, therefore, the problem of situation is less serious. Since December, 1967, the National Trading Corporation has controlled the wholesale distribution of sugar, and its agent in Masaka district takes delivery of all the production at the factory. At present sugar from Sango Bay is sold only in Masaka District. The projected expansion in acreage anticipates the expansion of the market area. It is hoped that Ankole and Kigezi will absorb most of this increase. There appears to be no prospect of extending the market area into the densely populated Bukoba District of Tanzania. Supplies in that area are already adequate. Although cheap water transport could be used to export sugar to Kisumu, the increasing competition within Kenya discourages any attempts to establish a market there.

In 1967 there were six outgrowers supplying cane to Sango Bay factory, and this accounted for 7% of the cane crushed. Although outgrowers are encouraged, the response has been poor. Peasant farmers occupy the higher areas with non-lacustrine soils, and these are more suited to the growing of sugar than the soils of the estate. However, the cost by the outgrower of transporting the cane to the factory is high. Where the main estate is fragmented, as at Lugazi and Kakira, outgrowers can be near the factory, but with a large compact estate such as Sango Bay, the average distance of the outgrower from the factory is greater. Since there are no jaggeries nearby (the nearest is near Masaka town) there is no tradition of a cash-crop production of sugar. The development of the factory has caused any appreciable movement away from coffee, the established cash-crop of the surrounding area. Outgrowers are paid sh. 40 per ton of cane at the factory, a price that has encouraged outgrowers in other parts of Uganda.

The establishment of a sugar factory at Sango Bay has not brought with it a general increase in the prosperity of the area. It has not encouraged immediate changes in the crops grown in the neighbourhood, nor has there been a sharp rise in the income of people nearby. Most of the workers on the estate are immigrants from Rwanda. These developments in sugar production are recent, and, it may take some time before their effect is felt. In addition to the ambitious plans for the expansion of sugar, it is planned to experiment with wheat, maize and rice on the estate. Environmental conditions would appear to give rice the best chance of success on the swampy Sango soils.

## References

- (1) *Memoirs of the Uganda Department of Agriculture, Research Division. Series 1: Soil, No. 1, Entebbe, 1960, p. 81.*
- (2) Sir Alexander Gibb & Partners *Preliminary report on the suitability of the lower Musamya Swamp, Uganda Sugar Factory Ltd., Nairobi, 1958. 38pp.*

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