AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search
http://ageconsearch.umn.edu
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

# REPORT OF WORKSHOP 2

*Subjects:* 1. *Optimum Utilization of Resources in the Sugar Sector - Labour, Land, Physical Resources (Machinery), and Capital*

2. *Labour Participation, Current and Future Farm Structure*

3. *Alternative Uses for Sugar Cane, Future of Sugar as a Product.*

*General Facts*

(i) Owing to the small size of St. Kitts, too much diversification will result in a number of mini agro-industries, which will be uneconomic, especially for export to earn foreign exchange.

(ii) It is necessary, therefore, to have one, or possibly two major agricultural crops, with some smaller ones mainly for local consumption.

(iii) The Government of St. Kitts/Nevis/Anguilla has stated that its policy in this respect is to maintain sugar cane agriculture and the manufacture of sugar as its primary industry for the present and the foreseeable future.

(iv) Given these three facts, it is necessary to consider how the sugar industry may be made more viable and what additional minor agro-inudstries should be developed and/or improved.

(v) To make the *agricultural side* of the industry more profitable, cane growing should be concentrated on the high and medium yielding areas, other areas being used for crops or animal production more suited to the environment in those places.

(vi) To make the *manufacturing part* of the industry more profitable requires maximising the total production of sugar, since a large part of the factory costs are fixed, irrespective of the size of the crop.

*Optimum Utilization of Resources in the Sugar Sector Including Labour, Land, Physical Resources (Machinery) and Capital*

The following suggestions are proposed:

(i) To maintain and increase crop yield, new cane varieties should be selected constantly, tenurial requirements determined, and a check kept on pests and diseases. A strong research agronomy department must be maintained.

(ii) Sugar cane cultivation should be concentrated in the high and medium yielding lands. Only marginal lands with low yields or very difficult transportation should be allowed to go out of sugar and only *after* increased yields make it possible to do this. Sugar total yields should not be allowed to drop below 35,000 to 40,000 tons of sugar.

(iii) For maximum yields on sugar lands it may be necessary to reduce the number of ratoon crops in certain areas.

(iv) The possibility of irrigating certain areas should be examined closely. Possible sources of water include run-off from airport and other flood water, the regular flow of domestic water from Basseterre into the sea wells to recover underground water. One estimate shows that some 47 million gallons of underground water flows into the sea per day.

(v) The land not under sugar cane should be used intensively for food crops, orchard crops, pasture land, etc. and on some dry areas crops such as pineapples, sea island cotton pastures for cattle or sheep and cashew nuts might prove profitable.

(vi) These other lands might well be leased to peasant farmers who would then be usefully employed in the out-of-crop season although they could be engaged to harvest cane during crop.

(vii) All machinery on the sugar estates must be kept in good order and replaced when necessary so as to enable agricultural practices to be carried out at the correct time, otherwise there will be a decrease in yields. The same applies to the railway system and to the sugar factory, as it would be pointless to grow a large crop and fail to convert it into sugar.

(viii) Inter-cropping beans, peas, groundnuts, etc. with cane should be restricted to the wetter areas, where such practice is less likely to reduce the yield of sugar cane.

*Labour, Population, Current and Future Farm Structures*

Various methods to achieve labour participation in the industry were suggested. Most of these were based on the idea of having a centrally-managed agricultural sector, as it was felt that small individually-operated holdings might prove to be inefficient and difficult to coordinate.

The methods suggested for achieving labour participation included:

(i) Profit-sharing in the industry. In this system the bonus paid to staff and to workers would be related to the profits of the enterprise.

(ii) Staff and workers should have shares in NACO, possibly purchased with bonus money, or sold on a hire-purchase arrangement.

(iii) Bonus paid on the 'target basis'. The target for an estate or area would be agreed upon by the Corporation in consultation with the Union each year. In Guyana, for example, reaching the target earns a bonus of eight days' pay. If production falls below the target the bonus is less; if the target is exceeded, the bonus is increased.

(iv) Workers should have some say in how much of the profits go to them and how much to the company reserve and/or general revenue of Government.

(v) There should be regular meetings between top management, intermediate management and workers to discuss problems and general policy in the sugar industry. In this way workers will know the various goals or targets and will help in formulating policy and the ways and means by which they should be carried out.

*Alternative Uses for Sugar Cane and the Future for Sugar*

The St. Kitts Sugar Manufacturing Company should carry out a study covering the technical and economic feasibility of the following projects:

(i) The generation of electricity using surplus bagasse for supplying the National Grid during crop.

(ii) The production of Anhydrous Ethanol for fuel with Neutral Spirit for rum as a by-product.

(iii) The production of structural board and strandboard panels utilising the existing Separation Plant modified for the new technology.

Note: A survey of the sugar factory should be carried out to identify the modifications necessary to make the plant more energy efficient so that the maximum amount of surplus fibre would be available for by-products development.

(iv) With respect to milk and beef production, aid agencies should be approached to assist in providing technical expertise and financial assistance to set up fully vertically-integrated complexes in the Bayfords/Fountain/Milliken Area for producing milk and beef, with the long term view of making the territory self-sufficient in these products.

(v) More use should be made of filter press mud in field manuring.

(vi) For Nevis, sugar cane should be grown for animal feed in the dry season, when there would be little pasture grass. This also has an advantage affecting soil conservation prectices.

The future for sugar as a commodity for export was not discussed, but it is clear from past experience that price fluctuations can be expected in the future as has occurred in the past.

When the population pressure of the world becomes more severe, it may well be that land now growing sugar for export may be forced into other food crops. This will have the effect of raising the price of sugar as soon as it begins to become scarce. Meanwhile, it is hoped that the International Sugar Agreement will be able to maintain a reasonable price level for sugar on the World Market.