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## DISCUSSION REPORT

(Discussion of paper presented by Dr. L.B. Rankine and Mr. K.A. Leslie)

Discussant: C. Bourne

The paper by Leslie and Rankine is a valuable contribution to the Conference. The paper is informative and helps in at least three ways. Firstly, it provides a quantitative sketch of output trends in domestic agriculture and relates those trends to the Jamaican economy's imports of food. Secondly, the paper not only identifies the several sources of supply for nutrients, but by emphasizing the nutritional aspects of food supply focusses attention on the ultimate objective of agricultural production namely: to provide nutrition to people. Thirdly, the paper provides a description of food production schemes in Jamaica.

Notwithstanding the strengths of the Leslie-Rankine study, there are a few limitations which, especially in a Conference of this sort, ought to be kept in the forefront of our minds. A major reservation stems from the authors' treatment of the term *self-sufficiency*. There is a great danger that their usage may mislead us into thinking that considerable progress has been made in the direction of self-sufficiency. Essentially, Leslie and Rankine index self-sufficiency by the ratio of domestic output of food to total domestic availability of food in the economy, where total domestic availability is the sum of local output and imports. The higher the ratio, the more self-sufficient a country is defined to be. The authors on the basis of their Table 1 conclude that apart from cereals, fish and miscellaneous groups "*domestic sources contribute overwhelmingly to the supply of energy and protein*". From their yardstick the authors suggest that the Jamaican economy has become more self-sufficient.

However, it appears to me, that self-sufficiency cannot be measured adequately by the index Leslie and Rankine employ. Self-sufficiency in my view must be measured by reference to consumption levels and nutritional intake not only in terms of targets and ideal situations, but also by reference to previous consumption levels and nutritional mixes. It is quite possible, as the recent economic history of the Caribbean demonstrates, that a country can be made to appear self-sufficient overnight by the simple expedient of prohibiting the export of some commodities. However, unless domestic output increases to offset in what sense can one claim that the country has become self-sufficient? Certainly not in the meaningful sense of guaranteeing out of the countries own resources at least pre-existing levels of food and nutritional intakes. On this criterion, one has to conclude that Leslie and Rankine have overstated the degree to which Jamaica and other Caribbean economies have become self-sufficient in food production.

An important matter which ought to have been more fully developed is that of resource constraints on domestic food production. Leslie and Rankine referred mainly to land in their discussion of the production programmes of the 1950s and 1960s. That constraint was not treated in their description of Operation Grow. Nonetheless, it is important to raise the issues of what is the optimum size of farms and what really is a reasonable land basis for improved farm performance. Apart from standard notions of economies of scale, larger farm units have the advantage of risk minimization through crop diversification and greater flexibility in cropping patterns. Furthermore, larger landed units provide a more adequate basis for credit.

Additionally, it is likely that a shift away from miniscule subsistence type plots to medium-sized commercial enterprises might facilitate the adoption of improved farm practices and technology. Finally, the most importantly, larger units permit higher and more reasonable levels of income thereby not creating as miniscule units do so great a sense of material deprivation that there is a constant pressure on the farmer to seek greater economic rewards outside of agriculture.

The last point I would wish to raise concerns the paper's failure to discuss the role of marketing arrangements and pricing policies as they pertain to the goal of maximizing regional self-sufficiency in food. The ways by which mechanisms for transferring farm produce to final consumers can stimulate or frustrate farmers are well known. So too are the possible effects of pricing policies. Perhaps for this reason, the authors did not dwell on these matters. Nonetheless, some discussion on the specifics of the Caribbean situation in the special context of food production would have been worthwhile.