

VII. (a) AGRICULTURE

Present state of knowledge: Atoll agriculture has two aspects, subsistence and export:

The outlines of the former and existing subsistence agriculture are clear. The native plants and their culture are reasonably well adapted and, supplemented by the sea, have been able to produce an adequate, although somewhat monotonous, diet. These plants, their culture and, in a general way, their desirability and extent of use are known. Knowledge of introduced plant performance is very meager although there are many empirical observations that could be brought together. Some of the obvious factors limiting plant growth are known but there are serious blind spots and there are few actual measures of productivity. A study of the nutritional adequacy of native foods is now under way.

The export agriculture is based entirely on copra and there is scant hope of diversification in the near future. There is little information available on means of increasing production and efficiency under atoll conditions although some such knowledge must have been accumulated by commercial plantations (e.g. Keeling-Cocos).

Suggested future research: Agricultural investigation should not remain the handmaiden of anthropology nor be content with empirical trials of this or that crop or practice. Rather it should aim at anticipating the needs, and providing the policy and leadership for the agricultural development of the area. To do so will require economic studies, crop and soil investigations and educational efforts.

Short term investigations alone are inadequate but can contribute; examples of these are an economic study of copra and the probable future competitive position of the atolls, and a survey of the crops and agricultural practices of the most well developed areas with similarities to the atoll environment. Longer term investigations are necessary for testing new crops, improved varieties and practices, and their utility and acceptance. Such investigations need not be on a large scale but they must be well conceived and carried through for some years.

Shaping of the native agriculture by education and demonstration is a task for extension. The synthesis of economic, biological and anthropological considerations to provide the basic facts and policy for such extension activities, however, is a research task of a high order. In this connection a long term, cooperative "pilot plant" test on a single area should be considered.

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