

IDRC FEATURE

INTERNATIONAL DEVELOPMENT RESEARCH CENTRE
Box 8500, Ottawa, Canada, K1G 3H9 • Telephone (613) 996-2321
• Cable: RECENTRE • Telex: 053-3753

A monthly features service on scientific, technical, and educational subjects pertinent to development.

Words: 780 approx.

CASSAVA FINDS A HOME IN ASIA

by DOUGLAS W. WHOLEY

The words "food" and "rice" are synonymous in most parts of Asia, so at first sight it seems strange that cassava, a root crop, should be commanding attention in the lowland tropical areas of the continent. Even more strange when one considers that Indonesia will this year harvest around 10 million metric tons of a crop that was introduced into the country a little over 100 years ago and is now the world's fourth largest cassava producer.

The interest cassava now commands is due mainly to its high carbohydrate content. The diversity of uses to which this carbohydrate is put almost reflects the diversity of the societies producing it. In India the majority of the national cassava crop is for human consumption, whereas in Thailand most of the crop is exported to Europe for animal feed. In Indonesia, where the crop's value as human food was first fully realized during the rice shortages between 1914 and 1918, low labour costs are enabling the country to enter into the European animal feed market on a rapidly expanding scale.

Malaysia, rather than sell the commodity to feed someone else's animals, intends to feed cassava to her own expanding livestock industry, thereby reducing the imports of most costly feedstuffs such as maize. However, not to be pushed out of the export market, Malaysia has an expanding trade in cassava starch, pearl and flake, which exact higher export prices than animal feed.

In the past little was done to promote the production of cassava in Asia. Rather the opposite is true in some countries. In Malaysia, for example, it was taught in agricultural colleges that cassava depleted the soil to such an extent that no other crop would flourish if planted after cassava. It was also written into tenancy agreements that cassava should not be planted on the land.

.../...

The first serious attempt to set up a continuous national program of cassava research was in India, with the founding of the Central Tuber Crop Research Institute (CTCRI) at Trivandrum, Kerala State, in 1963. In Thailand the only cassava research until recently was carried out by the Ministry of Agriculture and was solely agronomic in nature. Similarly in Malaysia and Indonesia, the little cassava research that was going on was handled by the Department of Agriculture and the Central Research Institute for Agriculture respectively.

However, a change is coming to the cassava-producing countries of Asia. Multidisciplinary national programs are being set up by governments, and universities, with the assistance of Canada's International Development Research Centre (IDRC), are becoming more involved. The Malaysian Agricultural Research and Development Institute set up in 1969, is currently staffing and equipping a team of cassava research workers. The team will breed and select new varieties and develop better production systems among other objectives. Team members will spend time at CIAT, the International Centre for Tropical Agriculture in Colombia which is devoting particular attention to cassava, in order to gain experience with the crop in its home environment.

In Thailand attention is being directed towards the utilization of cassava as well as production. At Khon Kaen University a team of animal scientists is looking into feed-quality aspects of cassava chips. It is hoped that the results of their research will demonstrate the value of producing better quality animal feed from cassava. Along similar lines, the Asian Institute of Technology in Bangkok is looking into inexpensive means to improve the sun-drying techniques used in the manufacture of cassava chips, and better pelleting methods, again aimed at improving product quality.

Innovative research on cassava is also underway. At the University of Malaya, Kuala Lumpur, a team is looking into ways of improving the protein content of cassava and its subsequent use as an animal feedstuff. In Java, Indonesia, Brawijaya University is investigating a novel practice developed by a local farmer 20 or so years ago. A "tree cassava" brought from its native South America as potential latex producer but widely adopted as a shade tree growing on the sides of the roads, is grafted to cassava increasing the yield of the roots by up to 100 percent. This method may indirectly hold a key to the physiological processes leading to high yields in cassava.

.../...

In order to coordinate the activities of these and other cassava projects in the region CIAT will soon be placing a staff member in Asia. This important step in the structuring of a cassava network for Asia is similar to one already initiated by CIAT for Latin America. With this increased attention on cassava research, who knows, maybe Asia will outstrip South America in cassava production by the end of the decade?

END

Douglas Wholey is an IDRC research advisor with the Malaysian Agricultural Research and Development Institute in Selangor, Malaysia.

IDRC-F35, e

1977