about a sweeping technological revolution that would make it possible for today's food-short nations to feed themselves. It may be the only solution to the growing problem of a hungry world.

The problem is one of population and it has been recognized (though usually ignored) since 1798, when Thomas Robert Malthus noted, somewhat erroneously, that "population increases in a geometrical, food in an arithmetical ratio." The most recent and perilous population increase has been the result of a declining death rate rather than geometry. For instance, the male life expectancy in India rose from thirty-five years in the year of independence, 1947, to fifty-seven years in 1970, and India, which had been an exporter of food, became an importer in the late fifties. (The Green Revolution, which increased grain production by 20 per cent, made it briefly self-sufficient, from 1968 to 1971.)

On October 27, 1967, George Woods, President of the World Bank, suggested a "grand assize" to analyze the results of twenty years of

A Random Sample of IDRC Projects

[WITH AN OCCASIONAL WORD OF EXPLANATION]

A Cartographic Inventory of Africa, $449,705: Before one can find the answers to many problems, one must know the pertinent questions. Geography shapes economy. What is the detailed geography of Africa? This project for the UN Economic Commission for Africa will compile a country-by-country inventory and analysis of existing cartographic work in North, Central, East and West Africa. The results, a series of indexed maps, will be published in 1977.

A Sorghum Improvement Project for East Africa, $76,000: Sorghum, a vital part of African food supplies, is much eaten by birds and insects. This project has established an experimental breeding program in Serere, Uganda, to develop sorghum varieties that resist such pests. Trial stations have been set up throughout East Africa. The program ends this year.

Trypanosomiasis Project in East Africa, $399,200: Two diseases, animal trypanosomiasis and East Coast fever, cause anemias and lesions among cattle in Kenya and other East African locales. This project seeks effective controls. It ends in 1976.

Copper T Trial Project in Egypt, $7,717: This project permitted Cairo University to carry out clinical trials of a contraceptive device known as Copper T. It has been completed.

Irrigated Forest Plantations in Mali, $190,000: Land not suitable for agriculture can often grow trees. This project with the government of Mali selects the species of trees best adapted to irrigated land and develops the techniques necessary to make them flourish. It will continue for five years.

Grain Storage in Ghana, $19,700: Crops spoil rapidly in the tropics. The project enables the University of Science and Technology, Kumasi, to test four types of storage bins for maize and cowpeas. It will be completed in 1976.

Hawkers and Vendors Project in Southeast Asia, $63,000: This project, which to some casual observers had comic overtones, was a thoroughly serious one. In Malaysia, Indonesia and the Philippines, food for the poorest people is distributed almost exclusively by independent street salesmen who are themselves very poor. In this project several universities studied the marketing role of these vendors so that it can be improved in terms of community service. The project is completed.

Fertility Declines in the Barbados, $69,790: There has been a significant decline in the birth rates in the Barbados. This project sought to determine why. It is completed.

Cassava/Swine Research in Colombia, $2,500,000: In this project several Canadian universities and the Centro Internacional de Agricultura Tropical, Cali, seek to improve the yield, quality and use of cassava as food for humans and feed for animals. It will be completed in 1976.

Triticale Research in Mexico, $2,500,000: This project for the Centro Internacional de Mejoramiento de Maíz y Trigo, Mexico, is designed to develop a new cereal grain, triticale, to the point where it can be grown and used over wide areas of developing tropical countries. It will be completed in 1976.