

Head of IDRC to Visit ASEAN Research Projects

THE President of the International Development Research Centre (IDRC) Ivan L. Head will visit several IDRC-supported projects in Singapore and Malaysia from November 9–16.

The IDRC is a public corporation established by an Act of the Canadian Parliament in 1970 to support research designed to adapt science and technology to the specific needs of developing countries.

In Singapore Mr. Head will visit the fish culture project that is being conducted by the Primary Production Department to develop new technologies for the cultivation of marine and freshwater food fish. He will also tour the National University of Singapore library for a briefing on the progress that has been made toward achieving full automation of the library's operations using the MINISIS software package developed by IDRC. In total 24 projects have been supported in Singapore over the last 10 years at a cost of \$2.1 million.

IDRC assistance to Malaysia has exceeded \$3 million, spread over 40 projects in agriculture, health, social sciences, and information sciences. Of these, Mr. Head will first visit the MARDI Freshwater Fisheries Research Station in Malacca to be briefed on the IDRC-supported research that is being done on induced breeding of carp and several other fish species of local importance. Later he will go to the Kuala Pilah site of the field testing of the successful PVC handpump developed by the University of Malaya.

Improved Handpump Technology

The selection, development and use of reliable handpumps that can be produced locally and installed and maintained at the village level at a reasonable price is a major step toward providing safe drinking water to rural communities.

One of the worst problems in rural water supply programs is the high failure rate—as much as 80 per cent—of conventional manual pumps. Failures occur mainly because the pumps were not designed for the level of stress and abuse encountered during daily use by large numbers of people. This problem is further aggravated because spare parts for maintenance are not readily available and they are expensive and difficult to obtain.

The IDRC has been supporting research in the development of more effective pumping systems for rural water supplies for the past six years. In view of the wide-spread introduction of plastics technology that has taken place in developing countries in the last decade, particular attention was focussed on PVC piping, which is widely



President of IDRC Ivan L. Head

available. In many respects, plastics technology is to developing countries what cast iron was to industrialized countries a century or so ago.

Design work completed with the co-operation of the Canadian University of Waterloo centred on the development of a simple, low-cost piston and footvalve assembly for a manual pump. The pump that was produced has been designed for local fabrication, installation, and maintenance with existing resources in developing countries. Subsequent research was conducted in Malaysia, the Philippines, Sri Lanka, Thailand, and in Africa to field test the pump under varying conditions. This PVC pump demonstrated during the field trials that it holds considerable potential for use at the village level.

In collaboration with the University of Malaya, IDRC sponsored a seminar in Kuala Lumpur to evaluate the pump in terms of its technical and economic performance, and to review the status of handpump technology.

The next stage in this pump's development will be investigation of the feasibility of mass production. Plans are currently being developed at the University of Malaya to establish a small-scale fabrication unit to provide prototypes to other Asian projects, continue research on new materials and design modifications, provide appropriate technical training, and study the cost-effectiveness of various manufacturing processes.

Rattan Research

The IDRC is also providing financial assistance in Malaysia for a rattan information centre at the Forest Research Institute, Kepong, Selangor.

Rattans, climbing palms that have been utilized for centuries in many Southeast Asian countries, are such an

important component of rural life in the region that they are often rated as the most important forest product after timber. However, in the past, rattans have not received more than passing attention from researchers. The ever-growing demand for rattan in the last decade has created interest because of the potential for further increasing exports, but this is tempered by concern over the almost unchecked exploitation of this important resource.

The rattan information centre will: build up a comprehensive collection of rattan literature; set up a document storage and retrieval system; perform specific literature searches on request; make copies of documents available and disseminate them to interested parties; publish a comprehensive annotated bibliography on rattans; compile a directory of on-going research projects on rattan in the region; issue a quarterly newsletter on rattan; and prepare a rattan thesaurus.

Project Films Win Awards

Two colour films produced by the IDRC—the French version of “Fish By-Catch... Bonus From the Sea” and “Project Impact: the Overview,” both of which depict projects supported by IDRC, won awards at the 9th International Scientific and Technical Film Festival recently held in Brussels.

The by-catch film, which runs for 13 minutes, examines how the wastage of edible marine fish—as much as 21 million tonnes annually—traditionally associated with shrimp trawling can be avoided. It shows how shrimp trawlers handle both shrimp and fish and describes a pilot processing plant built to handle this new fish by-catch. It also illustrates the techniques that have been developed to process and preserve the fish and the beginnings of a distribution system and an export business.

The Impact film, which is 27.5 minutes in length, explains an innovative experiment that attempts to solve the problems of mass primary education in Southeast Asia. The experiment was conducted by the Regional Centre for Educational Innovation and Technology, part of the Southeast Asian Ministers of Education Organization, and was launched in the Philippines and Indonesia. Under this system, students work at their own pace using “instructional modules,” which free the teachers to give help where it is most needed and to supervise a much larger number of students. It also offers flexibility to allow children who have temporarily dropped out of the system to re-enter easily, picking up where they left off. The IMPACT concept is now being adapted and implemented in Malaysia, Jamaica, Liberia, and Bangladesh.