

response only to stress but more a result of a persistent psychophysiological mechanism that can be triggered by almost any stimulus, including foods, alcohol, stress or tension.... The migraine headache may be an extension of this condition, resulting from years of repeated attacks. In this way the sufferer is unwittingly contributing to his or her own condition". The psychologist's techniques should eventually enable the patient to recognize and control his sensations.

IDRC activities (Cont'd. from P. 2)

country's 68 provinces. About 8,000 people were interviewed throughout the country to obtain comparisons between those provinces that are participating in the land reform program and those that are not. Preliminary reports indicate that the evaluation will benefit not only the 600,000 small farmers in the Philippines, but also their counterparts in other countries where the program's progress is being closely observed.

Small-scale industries

Farming is naturally the primary occupation in rural areas, but there is also a need for alternative or supplementary sources of income and employment. Many developing countries are looking to small-scale industry to provide this alternative, but even where traditional industries already exist, they are often inefficient and poorly managed, and would benefit from expert advice. This is the role of TECHNINET Asia, a network of 11 organizations from nine southeast Asian countries that was formed in 1973 with IDRC support, and entered its second phase during the past year.

Through a monthly newsletter, a technical information service and, most important, the training of industrial extension officers who can respond to requests for assistance from small industries, TECHNINET is providing an important service for Asian industries, many of them in rural areas. During the second phase there are plans to expand the training program and "Asianize" the technical information service so that the network will be autonomous by 1980.

Another Centre-supported project in Asia concerned with the promotion of small-scale industries has just begun. Researchers in seven countries will take a

close look at government programs in support of small manufacturing enterprises, including financial and technical assistance, training and extension activities, and co-ordination among different agencies in the field.

In each country a minimum of 100 manufacturers — in sectors such as textiles, leather and wood products — will be asked about their experiences with government programs, as will the agencies concerned. The researchers will also look into the broader question of the place of small enterprises within national development programs. Care is being taken in this project to use common methodologies so that a comparative evaluation can be made at the end of the study.

Another project in the field of science and technology research that could have broad application is now under way in Mexico. Its aim is to pave the way for the rational development of technologies that will be of real benefit to poor rural communities. The problem of relating appropriate technology to rural development is a complex one. The Mexican project is a pilot study that will begin by examining past experience in the field, and defining criteria for measuring the success or failure of a particular innovation.

This Centre-supported project, which is an integral part of a larger study of the rural economy being carried out by Mexican researchers, should help to provide some guidelines for planners, not only in Mexico but also in other countries concerned with linking new forms of technology to the problems of rural development.

Alternative energy sources

Industry and technology, even on a modest scale, usually require some form of energy. There is little likelihood, however, that electricity can be made widely available in the rural areas of developing countries in the foreseeable future. The search for alternatives is complicated by the fact that surprisingly little is known about present or future energy supply and demand in rural areas. The Government of Fiji, for example, plans to introduce rural industry to the islands, but is hampered by an almost total lack of information about rural energy supply.

Now a research team from the University of the South Pacific, supported by an IDRC grant, is surveying rural communities in selected areas to determine the pre-

sent and future energy needs of the islands. As part of their project, the researchers will also study alternative energy sources, with special emphasis on the feasibility of biogas production using waste vegetable matter.

Water research

The question of water supply is a complex one. The installation of a pump or a well in a village does not guarantee that health conditions in the village will improve. Lakes created by large-scale irrigation dams can result in the spread of water-related diseases. And excessive irrigation can lead to the salination and waterlogging of irrigated areas, rendering them unfit for farming.

Water supply involves a whole range of disciplines — environment, health, hygiene, sanitation, appropriate technology, water management and use, education and training, and socio-political questions. It is in these areas that the IDRC is concentrating its research support.

The need for information and education is paramount if health is to be improved in rural areas. It has been observed that parasitic and infectious diseases persist in small rural communities, even where a supply of pure water is available. The problem is poor hygiene — water becomes contaminated when stored in unsanitary containers, and diseases are passed quickly from one family member to another if basic preventive measures are not taken.

In Guatemala a team of researchers supported by the IDRC is studying the domestic routine of families in such villages. They hope, by winning the confidence of the people to be able to isolate the cycle of contamination and infection — a cycle that subjects a staggering 96 per cent of the people in some areas to debilitating disease. If they succeed, their findings will enable other researchers to detect similar health-risk situations, and to develop programs of sanitary education tied to water use in the home that will break the cycle of disease.

Crop protection

Diseases and pests that affect staple crops can drastically reduce the food supply. Sorghum, grown by small farmers throughout the semi-arid tropics, is prey to the parasitic witchweeds of the *striga* family that can reduce the yield from a single sorghum crop by 50 per cent or