

*Food Aid*

to avoid a stoppage of the operations because of a lack of replacement parts, which happens very often with "oversophisticated" tools. Third, this equipment should be produced in small rural plants and repaired by local craftsmen to create employment in the community and ensure a better use of local resources. Fourth, it should reduce the dependency of developing countries by reducing the importation of tools and replacement parts that might represent too heavy a burden on the national budget.

Trying to increase the production of small farms with North American or European equipment would prove too costly and create an unacceptable level of social and economic dependency for developing countries. This is the situation as far as power equipment is concerned particularly since the skyrocketing increase in oil product prices. Animal driven machinery for which the energy is supplied by locally produced feed grains is a better solution. Fifth, that new technology should be accepted by the local people. In fact, it is the acceptance, ownership and management levels of a technology that to a large extent will determine its integration into the activities of the community and its efficiency as a development tool.

Mr. Speaker, it reminds me of a remark I heard while on an African trip to drought stricken areas of Sahel where we had to supply water to people suffering from lack of water. The Government of Canada and other countries wanted to help them by drilling wells and installing pumps. It was a marvelous idea. We drilled several wells and installed several pumps and it was fine as long as the pump was working. In case of a breakdown, they had no trained personnel or skilled labour to repair those engines or pumps. That is why we say it is better to use a technology which is better suited to the level of those developing countries. The small farmer will adopt farming innovations, but only if the three following conditions are met: for instance, if his operation is profitable, the condition applies to the investment required for larger quantities of a same resource as well as to the adoption of a new method. Before investing in a new resource, the farmers of those countries will have to be shown a tangible example of the possible profits they might get from that new production, in easily comparable conditions. Hence the need for an acceptable level of knowledge and the importance of rural counselling and advising services. The farmers must also be able to finance those projects. Even if the project seems profitable, the small farmer must have the means to take the risk and have access to credit to finance those innovations.

Unfortunately, innovations that increase the value of the land, such as irrigation, fertilizers and new seeding methods do have a bearing from the point of view of the size of the business. The majority of poor farmers, to wit, India since the start of the Green Revolution, does not have access to non-usurious credit, and the lack of efficient vulgarization services deprives them of the chance to pass judgment on the profitability of innovations that are clearly financially advantageous. Even when conditions allow it, the inevitable time lags before

farmers can adopt those new methods are extremely long. That is what is known as the progressive nature of innovation. According to a recent survey made in India, the average time that elapses between the moment when a small farmer first hears about a new method and the time when he finally applies it is 7.2 years in the case of new seeding methods, 5.2 in that of the use of new chemical products, and four years in that of the Japanese method of growing rice.

Finally, it must be recognized that appropriate technological changes, even in the best possible circumstances, will not supply jobs to all rural families. Farming as well as non-farming industries will have to be developed in rural areas. We must also be conscious of the fact that there is a price to pay in underdeveloped countries to ensure the application of a technological change in farming, whatever the benefits may be. Indeed, a technological change requires an incentive under the form of public investment. Thus it can be necessary to develop an education or a credit program; the innovations will perhaps have to be made suitable to local conditions and the costs of new inputs will perhaps have to be directly or indirectly subsidized, especially if the proposal is inflexible.

What can Canada as well as its International Development Agency do? The underdeveloped countries insist that industrialized countries should devote .05 per cent of their gross national product, or about 10 per cent of their research budget, to develop technologies which would meet their special needs, that research being preferably carried out by the underdeveloped countries themselves. Without supporting the idea of a set and arbitrary objective, the Canadian International Development Agency recognizes the importance of proper technology as a tool for development and supports this proposal from the developing countries, especially since Canada is making great efforts towards that end, particularly in research programs and research encouragement.

At the meeting of the United Nations Committee on Trade and Development, UNCTAD IV, which was held in May 1976 in Nairobi, CIDA, through the Canadian delegation at the conference, proposed the pairing formula between, on the one hand, Canadian government and provincial research institutes as well as universities, and, on the other, scientific institutes from developing countries so that Canadian researchers might become aware of technological problems in developing countries, that these—

● (1652)

[English]

**The Acting Speaker (Mr. Turner):** Order, please. The hour provided for the consideration of private members' business has now expired.

It being 5 o'clock p.m., this House stands adjourned until Monday at 2 o'clock p.m., pursuant to Standing Order 2(1).

At 5 p.m. the House adjourned, without question put, pursuant to Standing Order.