

COMMENTARY

Developing countries should be big food producers

Late last year the former President of the IDRC, Dr. W. David Hopper, was interviewed by Robert Reford of the Canadian Institute for International Affairs for one of a series of taped programs on Canada/Third World Relations being prepared by the Ontario Institute for Studies in Education. The subject was "Changing economies and agriculture", and Dr. Hopper, who moved to Washington in January to become Vice-President for South Asia at the World Bank, gave his views on the world food situation and the prospects for world food sufficiency in the year 2000 and beyond.

Following are extracts from that interview, with Reford, a former journalist, putting the questions.



David Hopper, former IDRC President, now with the World Bank.

I would like to start by looking at what I think we are all now beginning to realize more and more is a major problem: the problem of food. Are we going to have enough food?

We have a vast potential in the world for increasing food production, but as yet we have not tapped that potential, and it is going to take time to do it.

At the present time the populations of the developing countries represent about two-thirds of mankind, but they produce less than one-third of man's food. If present population trends continue (and I am not an alarmist on population, I believe we can feed a much much larger population, and I already see signs of a slackening in population growth) we will be in the year 2000 with roughly three-quarters of the world's population in the developing countries. They will still produce, if present projections hold, less than 30 percent of the world's food. On that basis we have a very severe food imbalance. It will either mean that the developed countries are going to have to transport more food to the developing countries, probably on some sort of concessionary terms because these countries do not have the foreign exchange to pay for it, or we are going to have to raise food production in the developing countries.

The drought of 1972, which was a worldwide drought, was what caused the big run on the grain stock supplies of the US and Canada. A similar circumstance today could be met, because again Canada and the US have had bumper harvests, but the difference between today and 1972 is that in 1972 there were 60 million acres of land in the soil bank in the US; that 60 million acres is now under plough. We are now pushing against the capacity of the temperate zone to produce food.

That said, my concern is that the developing countries should be the big food producers, not the residual food producers. They have the sunlight, they have the water, they have the year round growing temperature, they can grow three or four crops in sequence one after the other, which we cannot do. It is the

lag in their agricultural development that has been my major concern.

The issue is resources. Just take a drive through our rural areas and take a look at the networks of roads, of service facilities, of machinery depots, of supply facilities, of milk pickup points, of packing plants, and so on, that are all part of our agriculture. Then drive through India, where the roads are 30 or 40 miles apart, where there are none of these facilities, where villages are deep in the interior, where all the paraphernalia of a modern agricultural economy does not exist. That is what has to be built in the developing countries if they are going to pursue their agricultural potential, if they are going to build a modern agriculture and really tap the resources that they have. To do that is going to take colossal amounts of money and they don't have the resources.

The Sahel is a very good example. There are five rivers and a very large lake, the Lake Chad Basin, in this region. Each one of these rivers could be tapped. They could greatly increase the land that they have under irrigation, to produce the kind of crops that they need. The six Sahelian nations among them have about \$2 billion of GNP (Gross National Product). It is a ridiculously small GNP. It is less than the profits of the General Motors Corporation. To develop the five rivers and the Lake Chad Basin would cost something like \$30 billion. For these countries to say "We are going to embark upon that development" with a GNP that is as small as they have is just ludicrous. It is like Canada, with our GNP of \$150 billion, saying that we are going to proceed to develop our north although it is going to cost us, say \$1 trillion. It won't be done. Somebody has got to provide the resources if those nations are going to be brought to the point of feeding themselves.

For an investment over the next 10 years of approximately \$100-150 billion, and these are very rough estimates, I think we could provide food security for both the populations of the year 2000 and possibly for the populations of the year 2050, when I do see population

beginning to level off, mankind having a total population then of about 15 to 16 billion people.

Why isn't it being done?

I think there are three reasons. In the first place the food resources of the world have been sufficient to tide all of mankind through. We have lived in a remarkable period — there has not been a major famine in the world since 1942. Now, there is no other period of almost 35 years of world history where we can identify no really major famine. We haven't had it because the grain reserves of the North American continent, Australia and Argentina have underpinned the periodic recurrence of drought in these large-population countries. With that there has been a lack of urgency.

The second reason is that the developing countries themselves have very limited resources, and the urban industrial complex has attracted the bulk of the investment in the developing countries. They are concerned with building their industries, they are concerned with modernizing the cities, and they have neglected their agriculture.

The third reason simply has to do with the costs involved. No agency, not even the World Bank, has yet been able to muster the resources necessary to mount these very high cost programs, and until the governments of the world are willing to stand up and say "Yes, we are all going to pitch in and cooperate" we are not going to get it done.

What happened to the Green Revolution?

For many of the developing countries the Green Revolution varieties, the new high-yielding varieties of wheat, and rice, and sorghum, and maize, would make a terrific difference, but they do not have the infrastructure supporting the decision by the farmer to move to the modern agriculture. And it is that infrastructure that has got to be built.

Can we transfer modern agriculture from our society, as we know it, to the developing world?

What we may not transfer is the high productivity per worker that we have in our agriculture. We may follow what the Japanese have done, and that is a very high productivity per acre. Our productivity per acre in Canada is really very low compared with Japan. We are producing just a little over one metric ton per hectare on our Western grain farms, in Japan they are producing between six and seven metric tons per hectare of rice. They have very small farms in Japan, but they have put the inputs in — the intensive agriculture, the intensive labour that goes to producing a very high yield per hectare, and that's the road the developing countries have to go.

We can help them with the building of the infrastructure, we can help them with

the scientific research, and this is where the IDRC is basically operating at the present time, we are financing research in developing countries. The new dwarf wheats that underpinned the so-called Green Revolution cost the Rockefeller Foundation perhaps \$10 million to develop over 20 years. When they came into India it was a very cheap transfer, but it cost the government of India \$280 million the first year to buy the fertilizer necessary for these crops. So there needs to be, accompanying the technology, a very heavy investment in the infrastructure of supply to the farmer to back him up as he picks up this research.

There must be some things that you have done that you are proud of.

My work in the Indian village in the early fifties convinced me, after visiting all the research stations in India, that the problem was not the Indian farmer, he was not stubborn and unwilling to change. It took seven years to get hybrid corn spread reasonably well in the province of Ontario (Canada). It took only three years to gobble up all the irrigated acreage in India with the dwarf varieties of wheat. India has more than doubled its wheat production from what it was in 1966. India now produces 50 percent more wheat than Canada, and wheat is not their most important crop, rice is. And exactly the same thing occurred in the rice area of agricultural production.

Is India reaching the point of self-sufficiency in food?

India now has a huge surplus in stock; she has over 20 million tons of food grain in a buffer stock at the present time. India can now sustain a very substantial drought and feed herself from her own resources. But if the population continues to grow, agriculture in India will have to grow faster than it has been growing in the past decade.

Let me give you an example. The Mahanadi River delta at the present time produces about three million tons of rice annually. With an expenditure of about \$1 billion over the course of the next 10 years, rice production could be increased to ten million tons. That extra seven million tons of rice in one year would be worth about \$1.4 billion at the present price of rice on the world market. So India pays off the investment in one year's increase in production. It is a question of how India gets the \$1 billion for that purpose.

What about Canada? What has Canada been doing, and what can Canada do?

My own feeling is perhaps that Canada has been too much "me too" in the foreign aid game, when it could have branched out more aggressively to provide world leadership in particular areas. I use agriculture as an example. Canada does have a unique position with regard to the developing countries as being a

very neutral country. I think that if we in Canada had said "Look, our concerns are going to be primarily in the problem of feeding hungry nations and hungry people," I think we could have carved ourselves a niche that would have provided far more leadership.

Canada has played an important role. We are in the upper average group of the industrial nations in what we do to assist in developing countries, and for the most part the projects that Canada has supported in the developing countries have been good projects.

What about the individual Canadian? What can I do?

I think that the individual Canadian can become more aware of the issues facing the developing countries. We are going to face in the not-too-distant future the trade-aid question. Many of the developing countries have the skills, the labour force and the industrial base that allows them to compete at the lower end of the consumer goods area — textiles, ready-made shirts, shoes, and so on. These do affect Canadian industry, and Canada has put quotas on developing country products. We in fact may do more harm to the progress of the developing countries when we put these quotas on than we would do good by increasing our aid flows to them.

These are issues that are going to be on the agenda in the future. It is either going to be a very much larger aid transfer, or it is going to be a freer access for the developing countries to Canadian markets.

And do you still remain an optimist?

On the food question, yes. Despite the fact that my feeling is that time is short, that time is quickly running out on us, I see moves by more and more of the developing countries, and even by some of the developed countries, to come to an accommodation. The only new United Nations fund created in the 1970s was the \$1 billion which the nations of OPEC and the developed industrial countries put up for the international fund for agricultural development. I think that within 10 years it is likely that, if these trends continue and we do not become complacent again, we will see the foundations laid for an agricultural development movement which is not going to be stopped. □

Copies of the complete interview on tape may be purchased from the Ontario Institute for Studies in Education, 252 Bloor Street West, Toronto, Canada, M5S 1V6.