

Sahel drought: photo by Nick Fogden

Looking for a strategy to feed the World over the next decade, the World Food Conference put together a comprehensive action pack—but not all its elements looked easily compatible and the conference called on science and research workers to bridge the gap. Robin Sharp who has attended numerous United Nations conferences as a journalist and now heads Oxfam's Public Affairs Unit was in Rome writing for PAN, the highly successful conference newspaper.

To imagine that giant leaps for mankind could spring directly from a two-week 'talkfest' like the World Food Conference would be to misconstrue the nature and purpose of such events. Indeed it is probably better that the United States, the EEC and the OPEC countries did not come forward at that moment with the billions of dollars being asked for them, because with so much stress laid on the easy-to-grasp, short term crisis, we might all have returned home in a dangerous

state of euphoria. The temptation to call the conference a success would have risked implying that somehow it had 'solved' the problem of how the world is to feed itself in the next 10 years. And nothing could be further from the truth.

The principal function of the Rome meeting was to act as a means of harnessing all available political energy and then channelling it out to power the productive machinery of government, international agencies, research institutes and so on. This it has done and, as far as can be judged at such close range, done to measurably good effect. A momentum has been created; the job now will be to use and sustain it.

Already the dimensions of the immediate crisis are more widely known—some accomplishment in itself. The people of Africa, Asia and Latin America have spent about \$10,000 million in the past year to buy abroad the food they need to live. Now the money has run out, but at the end of the conference they were still short of 7.5 million tons of grain, which would cost about \$2,500 million at market prices. Over the next nine months, reckoned by average

grain consumption in the developing countries, we are talking about the food of 45 million people. And without some drastic intervention, the story over the next 10 years will be the same, with a high rate of compound interest.

Faced with disaster warnings of such magnitude, a world food strategy based on large scale, capital-intensive technological inputs was virtually irresistible: the answers had to be on the same scale as the problems. The potentially serious flaw in this approach is that it depends on how the problems are defined-and they get defined in their 'macro' aspect because that is the only way they are manageable. In fact, the 30-man Food and Agriculture Organisation (FAO) task force which drafted the conference's Action Plan had originally thought of submitting alternative strategies-one based on high technology, the other on labourintensive schemes utilising intermediate technology and fed in much closer to the grass roots. In the end they tried to blend the two together but the result was something of an oil and water mixture, with a preponderant dose of oil.

To improve the strategy's consistency, Third World delegates and others introduced many amendments underscoring their conviction that the aims of increased food production must be fitted into a pattern of integrated rural development, taking full account of social, cultural and environmental conditions. And perhaps it was because the massive macro schemes often seemed incompatible with the needs of the millions of poor rural workers that the final conference document laid special stress on the need for more research

In a lengthy resolution from its First Committee, the conference expressed "concern at the inadequate amount of basic and particularly applied research directed to developing new agricultural technology suited to the needs of developing countries, as well as weaknesses in adaptive research. training and extension to achieve more effective transfer and utilisation of both existing and new technology . . . There is a paucity of trained technical personnel, the resolution added, and much current research "lacks coordination and makes inadequate use of important information already available from research in ecologically comparable regions.'

Among its nine proposals on research issues, the conference recommended:

- Rapid establishment of a global network of plant genetic resource centres and the extension of this to animal gentic resources.
- Intensified research by national and international institutions on the application of meteorological information to land-use and other agricultural planning, such as the development of alternative cropping strategies to suit different weather conditions.
- That the FAO/World Bank Consultative Group on International Agricultural Research (CGIAR) should study the feasibility of an international programme on the use of remote sensing techniques in agriculture, including the use of data from the Earth resources satellites.
- That extensive adaptive research programmes be developed, involving testing in farmers' fields the economic and technical viability of new technology and thereby tailoring recommendations to suit specific locations, farming situations and socio-economic conditions.
- That means be found to give the developing countries better access to research equipment and activities, including germ plasm resources.

On specific areas of research, the Action Plan pointed out that the so-called Green Revolution has so far only made a substantial impact on varieties of wheat, maize and rice. It

suggested that barley and triticale—a hybrid between triticum (wheat) and cereals (rye) species—were other grains deserving a greater research effort, triticale in particular because of its potentially high yield, high protein content and potential for flourishing on marginal lands. Also, the plan stated, no work is at present supported at international level on oil seeds such as sunflower, safflower and rapeseed, although their oils are important in the diets of many developing countries. Similarly more work is justified on root crops such as cassava, which provide the energy requirements of perhaps 40 million people.

While accepting the need of extended research and development in these fields, less attention was given to the equal need for high-yield varieties able to survive without sophisticated inputs. For it is the cost and scarcity of these essential inputs—chemical fertiliser, diesel fuel for irrigation pumping, petrol for transport-which has suddenly made the first Green Revolution turn sour for many who committed their livelihood to it. And this, in turn, leads to wider questions which the World Food Conference made no attempt to assess. How far has the present crisis been exacerbated by existing large scale rural development projects? How much capital has gone into underused facilities which could have been used to create jobs and therefore food-buying power?

While pondering these dilemmas, there are formidable problems of a more practical kind to be dealt with. For example:

Development of land and water resources. The secretariat's programme

Botswana food programme; FAO photo



called for the improvement of 46 million hectares of existing irrigated lands, the expansion by 1985 of a further 23 million hectares under irrigated agriculture and development of 153 million hectares of new land in rainfed areas. The cost of this programme would, however, amount to \$89,000 million, including about \$30,000 million in foreign exchange—and even before the conference began several delegations had registered their scepticism as to whether resource transfers on this scale could be realistically envisaged or fully absorbed.

Post-harvest losses. The importance of improved food storage received only a passing mention in the final resolutions but figures cited in the Action Plan illustrate the need for better facilities at all levels of distribution. Postharvest losses in cereals, as a result of mildews and fungus diseases, rodents and insects, are estimated at 5 to 10% but up to 40% in exceptional cases. Losses of 30 to 40% are common in perishable fruit and vegetables. Insects consume the most nutritious part of the grain, leading to deterioration in its calorific, protein and vitamin contents; and damaged grain absorbs moisture, encouraging the growth of harmful micro-organisms.

Nutrition. Information on food consumption patterns and on their consequences for the nutrition and health status for the majority of people in developing countries is insufficient, said the 15-joint resolution on this subject. Improved knowledge about how to prevent malnutrition through better use of available food resources, including human milk, is essential. The conference called on governments to explore the "desirability and feasibility of meeting nutrient deficiencies, through fortification of staples or other widely consumed foods, with amino acids, protein concentrates, vitamins and minerals." It also recommended the establishment of a global nutrition surveillance system to monitor, inta alia, the condition of disadvantaged groups, and an inventory by the FAO of vegetable food resources other than cereals, including roots, tubers, legumes and "also those from unconventional sources."

Now these and the many other recommendations of the Rome conference are in the hands of the United Nations, its various specialised agencies and individual governments, waiting to be implemented.

Ultimately, as the conference Secretary-General, Mr Sayed Marei, phrased it, "judgment on the success or failure of this conference is going to be made by hungry men and women in Africa or Asia, or by a hungry child..." But how long will they have to wait?