Food conference: New beginnings

As weary, snappish delegates slowly drifted away, the World Food Conference ended its two-week course with little fanfare. Its major accomplishment: a general agreement to hold still more meetings and an awareness of new imperatives for research and economic development.

Technical resolutions, for the most part, had smooth sailing, and from the deliberations emerged a new emphasis on "appropriate technology" as the key to raising underdeveloped nations from age-old cycles of poverty and malnutrition. A sense of awareness of the need to protect the environment during the development process and the inadvisability of wholesale transfer of advanced technologies was apparent among both industrialized and Third World nations.

Recognizing the need for better water management as a means of bringing new land into production and producing greater harvests from existing farms, the conference directed the United Nations Food and Agriculture Organization (FAO) and the World Meteorological Organization (WMO) to begin a comprehensive survey to see what water potentials exist, and to follow the survey with extensive programs aimed at expanding the amount of irrigated land, reclaiming land lost to salinity through improper irrigation, and exploring the economic feasibility of such "nonconventional" water resources as desalted seawater. The resolution also called for development of ways to use brackish water for food production (new plant strains are being bred to grow in such water), and to provide flood protection and watershed management in areas subject to frequent crop loss due to floods (such as Bangladesh, this year).

The conference followed the suggestion of the organizing committee in calling for a program to irradicate tsetse fly infestation in central Africa—a move that could open some seven million square kilometers of land for grazing. Cattle cannot now be raised in the area because of the disease trypanosomiasis, borne by the tsetse fly. A coordinating committee within FAO will initiate the program.

Other technical resolutions included moves to improve the quality and distribution of seeds to improve local crop strains, to have international coordination of pesticide and fertilizer supplies, and to improve nutrition through better use of foodstuffs once they reach the consumer. Again, the FAO was instructed to coordinate proposals by which international organizations would promote nutrition education, begin a worldwide program of

326

nutrient fortification (especially supplementing vitamins) and conduct a global nutrition surveillance particularly aimed at identifying and helping the world's starving children.

The politically sensitive issue of land reform was largely ignored. But other social issues received heartening support. The conference paid particular attention to the role of women-who are the chief producers of food in many parts of the world, and the major marketplace consumers almost everywhere-and resolved "to involve women fully in the decision-making machinery for food production and nutrition policies as part of total development strategy." Special emphasis was placed on the need to improve nutrition for nursing mothers and education for all women "to promote equal rights and responsibilities. . . with men in the battle against world hun-The conference delegates also reaffirmed the resolution made at a population meeting in Bucharest, asserting the right of all couples to determine the spacing and size of their families.

Agreement on the issues of aid and trade proved harder to come by. The organization of Petroleum Exporting Countries (OPEC) promised to contribute some of their oil money to an Agricultural Development Fund, to aid hard-pressed developing countries overcome the rising costs of imports needed to improve their crop production, but the United States apparently wanted to see specific figures before committing itself to the fund.

Deputy Head of the American Delegation Edwin Martin said that perhaps the most important thing to come out of the conference, in his view, was an agreement to establish internationally coordinated, nationally held food reserves. The details will be worked out later by producer countries.

The conference called on the United Nations General Assembly to form a World Food Council to coordinate the food related activities of various U.N. branches and also keep a watchful eye on individual governments, recommending policy changes when necessary, to avert shortfalls. Follow-up duties on the research proposals were given to the Coordinating Group on International Agricultural Research (CGIAR) which now oversees the eight major laboratories that fostered the "Green Revolution."

The conference agreed, in principle, to setting up an "early warning" system to share harvest data. Administered by FAO, the system would involve voluntary input of crop prospects, prices of food products, and livestock health by member countries. But cooperation

by the two countries that now account for most of the world's uncertainty in crop reports remained in doubt: Russia said only it would "not object" to setting up such a system and would "consider" participating. China expressed "reservations."

The secretary general of the conference, Sayed Marei, expressed general satisfaction with the medium- and longrange resolutions that came out of the conference, and expressed hope that near-term emergency aid could quickly emerge from subsequent meetings. Addeke Boerma, FAO director general, also praised the new sense of urgency and the need for new priorities he sensed among delegates to the conference: "I think the conference will have an influence on these [developing] countries to help themselves."

Whether the world's half-billion starving people can really derive much cheer from all these words will depend entirely on how swiftly and how well they are put into practice.

Enzyme therapy: Another success

There are some 2,000 known single gene disorders—that is, inborn errors of metabolism. About a hundred of these disorders are problems of enzyme deficiencies. Until 16 months ago, efforts to correct these deficiencies with enzyme therapy largely failed. Investigators couldn't get enzymes purified enough, or into the nervous system and brain.

Then Roscoe O. Brady and his colleagues at the National Institute of Neurological Diseases and Stroke managed to bring off successful enzyme therapy in two patients with Fabry's disease. This disease consists of fataccumulation in the body because of the presence of an abnormal fat-metabolizing enzyme, a so-called alpha-galactosesidase. The main key to their success was purifying enough of this enzyme to use for treatment (SN: 4/28/73, p. 268).

Brady and his team now report a second success with enzyme therapy in the Nov. 7 New England Journal of Medicine. This time the therapy is for Gaucher's disease. This disease also consists of an abnormal accumulation of fats in the body. But the culprit is an abnormal fat-metabolizing enzyme called glucocerbrosidase. An editorial in the journal describes the results as "an important and exciting advance in the therapy of inborn errors [and] even more promising than those reported by Brady and his co-workers just 16 months ago. . . ."

Brady and his colleagues purified enough glucocerbrosidase from human

Science News, Vol. 106