

NUTRITION

Poor Become Poorer

Ignorance, hunger and malnutrition along with low productivity, lack of capital and political unrest widen the gap between rich and poor countries—By Barbara Tufty

► THE INCOME GAP between the rich and poor countries of the world has become more pronounced in the last few years—despite all the solemn declarations of governments in both types of countries.

There is a vicious circle that holds poor countries chained to poverty, low agricultural productivity, hunger and malnutrition, Dr. K. Gunnar Myrdal, Stockholm University, Sweden, told the World Food Congress in Washington, D. C.

Some of the things that cause this vicious circle are widespread ignorance, apathy, stale institutions and attitudes, lack of capital, and the extremely low productivity of the 60% to 80% of the people engaged in agriculture.

Inadequate nutrition is a powerful force in this abysmal state of affairs, Dr. Myrdal said, for it causes ill health, lowers productivity and perpetuates apathy of a stagnant society.

These factors can continue to deteriorate, with the result that the country actually regresses economically.

Another major factor preventing some newly developing countries from raising their living standards is the economic, social

and political power held in the hands of a few people. In these countries, and in the villages themselves, an upper stratum of landlords, traders, money-lenders and other middlemen feel a vested interest in preserving the old order of land ownership and other archaic institutions and attitudes.

These conditions must be changed in order to open the road for economic progress, Dr. Myrdal firmly believes.

The rich countries, on the other hand, he said, have enjoyed very rapid economic development—with the major exceptions of the United States and Great Britain, "which for some time have been satisfied with relative economic stagnation."

There is need for a very much increased capital flow from the rich countries to the poor, Dr. Myrdal stated, if the world wants to avoid a calamitous development.

But this aid in the form of grants and loans should be channeled through inter-governmental organizations within the family of the United Nations.

Also, the confusion of the words "aid" and "assistance," which are used to cover both grants and credits, should be clarified. Aid in the sense of a beneficial contribution should be distinguished from business, he said.

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Diet Causes Malnutrition

► IN AREAS where the daily diet consists of cassava, banana or corn, the people suffer more from malnutrition than those in areas where the staple food is millet or wheat.

That is because the cassava, banana and corn lack sufficient amounts of protein, the body-building element in food.

Although inadequate diet is the basic condition for developing a protein-calorie malnutrition, there are also other factors, Dr. M. G. Candau, director-general of the World Health Organization, told the World Food Congress in Washington, D. C.

These factors can be poor sanitation, as well as an abundance of parasites and infection, he said. Relatively trivial infections in a poorly nourished child produce diarrhea, and this diarrhea accentuates malnutrition to the point that malnutrition perpetuates the diarrhea. Thus forms a typical vicious cycle.

Nutrition and deficiency diseases follow the food pattern in different areas of the world very closely, Dr. Candau said. In the monsoon-swept areas of the tropical zones, and in South and East Asia, rice is the principal crop. Epidemics of beriberi can often strike these rice-eating people.

In some parts of the Americas and Africa, cassava is the most important staple food,

and here the people suffer from diseases caused by protein and calorie deficiency. These diseases are commonly known as kwashiorkor and marasmus.

In countries where maize or corn is a firmly established basic food, the people break out with pellagra—a chronic disease characterized by skin lesions, stomach disturbances and nervous symptoms.

Dr. Candau believes that food and health standards can be raised by increased activity of the health services in each country. Public health authorities can tackle nutrition problems best by appraising the nutritional situation in the country and by treating severe malnutrition.

To break the vicious cycle of malnutrition and infection, sanitation measures should be taken.

With these and other efforts by alert health officials, people could produce more, and in general raise the economic, social and living standards of their country.

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Key to Hunger Problem

► WORLD HUNGER, man's oldest problem, can be solved. This will come from long-term research, without expectation of immediate practical results.

Prof. Henri Laugier, a French physiologist, called for the creation of an international institute against hunger. This institute, staffed mostly with scientists, could be a part of the existing Food and Agriculture Organization of the United Nations.

The proposal was made at the World Food Congress, a 100-nation gathering in Washington, D. C., sponsored by the FAO. The French scientist also listed some of the most crucial problems to be studied by such an institute.

Photosynthesis is one of these problems, said Prof. Laugier of the Sorbonne, Paris. In this process, chemical compounds are formed in the chlorophyll-containing tissues of plants exposed to light.

If this natural photosynthetic process could be repeated artificially in a laboratory, a large step would have been made. Synthetic food could be produced at a massive rate, exactly as nylon was after the discovery of synthetic fibers.

It would also yield a method for accelerating photosynthesis in existing plants, thus gaining larger crops.

Prof. Laugier reported on efforts being made in "conditioning the world," or improving weather conditions. Artificial rain-making processes, such as chemical action in the atmosphere, could drastically change climate over dry areas.

The harnessing of solar energy and its storage would also be a major breakthrough. Prof. Laugier said as much importance should be given to solar energy research as to atomic energy.

The use of plankton, the floating plant life found in oceans, could improve the diet of underfed millions. Plankton exists in huge amounts around the world, but in extremely low concentration. Scientists hope to develop a cheap way to harvest it on a large scale.

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University of Michigan

MECHANICAL KIDNEY—A new mechanical kidney developed by Dr. Harold P. McDonald, University of Michigan urologist, is operated by the patient's heartbeat and primed by the patient's blood. It is smaller but much more efficient than standard machines now in use.