The increases in per capita income, modest though they may be, gradually increase the level of domestic demand. In developing nations the income elasticity of demand is higher than in developed nations, 0.5 or 0.6 compared with 0.2 or 0.3; thus, a given increase in income converts to a larger demand than in developed countries. High rates of population increase, stemming from high birth rates and sharp decreases in death rates, also add substantially to the increase

Thus, over time, the internal consumption of agricultural products increases. A number of developing nations, once exporters of rice or beef and certain other food products, have become less significant in world markets or have disappeared entirely. This set of circumstances ensues when the expansion of production lags behind the dynamics of income and population. This tendency toward a larger internal consumption pervades all countries. Continued and expanded exports requires a significant internal effort to increase production. Thus, a static or relatively static situation with respect to agriculture will lead to a gradual reduction in exportable surpluses, a decline in the volume of exports, and a reduction in exchange earnings, unless increases in world prices compensate for the decreases in volume. A present concern is that a significant number of developing countries are becoming less capable of feeding their own population.

PRODUCTION, POPULATION AND FOOD AID

The rate of agricultural expansion in developing nations has been substantial. "During the period 1948-63, the rate of increase in crop production . . . exceeded 5 percent a year in seven countries . . . Israel, Sudan, Mexico, Costa Rica, the Philippines, Tanganyika and Yugoslavia. It varied from 4 to 5 percent a year in five other countries . . . Taiwan, Turkey, Venezuela, Thailand and Brazil." 28

Food production is expanding in the developing countries of the world. During this century, at least, the United States only occasionally has attained increases of 3 percent; the usual figure is smaller and occasionally negative. However, these substantial improvements in agricultural production are matched with high rates of increase in population and by increasing per capita incomes, part of which goes to increase per capita consumption of food products. Nonetheless, most of the countries listed above have been able to improve their consumption export balance. However, among the nations whose agricultural progress has been less dramatic, many face actual or potential shortages of food at current prices; with possible combinations of alternative consequences of (1) increasing prices to consumers, (2) rationing of existing supplies, (3) increased investment in agriculture designed to expand domestic production more rapidly, (4) expanding imports, (5) population control as a long-term solution.

Popular discussions of world food problems have been confused by the mixing of two concepts, the need for food and the demand for food. The need for food derives from estimates of the kinds and amounts of food required to feed the world's population a nutrition-

²³ ERS/USDA, "Changes in Agriculture in 26 Developing Nations, 1948 to 1963," Foreign Agricultural Economic Report No. 27, November 1965, pp. 6-7.