

FREEDOM FROM HUNGER

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There has been much written and spoken in recent years about the great world dilemma created by rapidly rising populations that require the basic essentials of food, clothing, and shelter. In this same period, the increases in agricultural production have not done much more than keep pace with the mouths to be fed; and the fervent hope that living standards could be raised in every country has yet to be achieved. The problem is critical, since more adequate agricultural production must be achieved in every country so that it becomes possible not only to feed and clothe all of the people, but to provide better health and sanitation, better education, and the development of transportation, processing, and industries. Although all advances in general must proceed hand-in-hand, none is really possible without improvement in agricultural production as a prerequisite.

However, the outlook is not as bleak as it might seem from a mere comparison of population and agricultural production data. First, there are a number of nations in western Europe and North America, as well as Australia and New Zealand, where agricultural production has reached unprecedented levels through the application of modern science and technology. The experience gained in these countries is being transmitted to the other nations by a variety of means, and greater benefits may be expected as basic principles are recognized, and the adaptation and use of these to meet the local conditions are developed. Only rarely will it be possible to transplant the complete systems of production from the western nations to regions with other environmental conditions. Moreover, it should be recognized and accepted that improvement in every country will be a step-by-step advancement; hopefully, these steps will be rapid and long if full advantage is taken of all opportunities.

Second, there are still living, many farmers and agricultural scientists of North America who were born into an era when much of the country had no paved roads, no community water systems, no electricity, no farm power other than horses and mules, and few home

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conveniences of any sort. Agricultural production was quite low in those years. These people have passed through the step-by-step advances in agricultural production, and have no difficulty in recognizing the problems of newly developing countries, and in drawing on their own experiences in finding ways and means of correcting factors that limit progress.

Drawing on the experience of the United States in the development of agricultural resources during the current century, the following salient features are apparent: Production capacity is controlled by (1) the character of the land and the soils on these lands, (2) the nature of the climate, particularly temperature, rainfall, and latitude, (3) the nature of the vegetative cover and the availability of adapted cultivated species, and (4) the skill of the people in management of these resources. Newly developing countries can greatly shorten the time required for progress by recognizing these basic factors, early identification of those things which now limit production, and intensified effort applied to the reduction of the most limiting factors. Obviously, there must be great flexibility in mental outlook in evaluating the natural resources of soil, climate, and adapted crops available, and making judgements on how best to exploit these. The food habits of people and the farm production customs of the region should be brought into as good adjustment as possible to the resources at hand, after adequate tests have been made on new cultural methods and improved strains of crops, and changes in livestock production.

These are often difficult adjustments, which become vastly easier after the people have been shown the benefits that could be realized.

As mentioned before, the farmers of the United States passed through the slow and often painful adjustments over a period of 50 years before reaching the present levels in efficiency of agricultural production. The advances were paced by gradual accretion of scientific knowledge, the development of suitable power and machinery, and the advances made in industrial support of agriculture in providing equipment and materials, and in harvest, storing, and processing of agricultural products. There is good reason to believe that other countries may greatly shorten the time needed to fully exploit their own agricultural resources by the application of present-day knowledge to the situations that now exist.

It seems obvious that a parallel problem to that of greater agricultural production to meet the needs of people is that of somehow limiting growth of population. There is little prospect of achieving an abundance of agricultural production that not only will correct the present deficiencies in food, fiber, and shelter, but also will meet the demands of an uncontrolled population increase. However, population adjustment is receiving attention by others, and the agricultural scientists and the farmers will be doing their share by aggressive action in increasing the amount of agricultural produce and their efficiency in doing so.

Perhaps the most powerful force at the disposal of every newly developing nation is the conviction that progress is possible, and that such progress comes from the will of the people to understand their resources and to more fully exploit them. With this will as the driving force, and with modern science and technology as the tools, who can say how far and how fast will be the advances in agricultural production of a nation?