

## Science Has Obligations Toward Freedom from Want

M. A. McCALL

Bureau of Plant Industry, U. S. Department of Agriculture

SCIENCE ALONE CANNOT BRING "freedom from want."
On the other hand On the other hand, science must play a prominent role in doing the job. Certainly agricultural science has the definite responsibility to develop methods and materials for producing food of the qualities and in the quantities necessary properly to nourish the world's people. Science has also had the responsibility to stabilize food production by removing hazards so that we will not be faced at any time with specter of "too little." Likewise on science rests the obligations to increase efficiency of production to the point that ample food can be produced profitably at a price low enough to ensure that it will be available in adequate amounts to everyone on whatever economic level. Science too must provide the means to produce our food supplies on a permanently sustained basis. And finally, science must play its part in helping to adjust its contributions within existing political, social, and economic structures so as to ensure effective use.

The lag in use on farms of the best practices of soil management is primarily due to failure of scientists to transfer the basic principles of soil and crop science into systems of management workable on farms under a wide variety of conditions. Inadequate methods for educating and training farmers in the use of the better systems of management also contributes. We dodge the issue if we ascribe slow acceptance to inertia on the part of farmers in accepting and using sound land use, management, and cropping information. We must recognize that the result stems back to certain omissions on the part of ourselves as scientists. The correction of these omissions is an important immediate responsibility of science in attacking the long-time problems of "freedom from want."

The very prompt acceptance of hybrid corn and the new disease-resistant field crops on the part of farmers demonstrates that they are not unwilling to accept the new and better.

It is obvious that "freedom from want" can be attained only by attack on a very wide front. It is not alone a question of the natural sciences and their ability to develop means to provide food. Religion, superstition, racial customs and prejudices, economics, politics, to name only a few factors, play a part. To the extent that the social sciences can contribute in solving these factors in the complex, they must be recognized and used.

Modern science is highly specialized. Specialists, unless keenly conscious of the broad implications of their own contribution in relation to other credit factors, may not always be aware of the part which other disciplines must play and are playing in making their own results effective. It is always an unfortunate human trait that an individual who succeeds notably in one field may be inclined incorrectly to assume equal competency in another. Scientists must guard against such attitudes.

Finally, as scientists, we must remember that the solution of any problem in science is not alone dependent on accumulating and analyzing facts according to the experimental method. It is also dependent on an open and inquiring mind and all that this implies in clear sound thinking. "An open and inquiring mind" defines in simple summary our primary obligation in attacking the problem of "freedom from want."

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