

In focusing on these specific problems, the subcommittee is fully aware of the need to assess the precise extent of the chief impediments to production processes. For example, a rain forest may contain islands of drought; a desert may contain islands of arable land. Appraising the hemispheric extent of these areas requires hemispheric maps of rainfall, radiation, soils, and frost. The maps must show the probabilities or frequencies of quantities needed to appraise the dependability of production. This Subcommittee endorses, therefore, the efforts of those organizations, such as the World Meteorology Organization, that have mission and capability of organizing these fundamental surveys.

The Subcommittee also sees the need for investigations - often by international, interdisciplinary teams - that might reveal ways of removing limitations upon photosynthesis of food. Unquestionably many investigations can contribute to this, but the Subcommittee endorses those that take advantage of this rare opportunity of internationality. New combinations of nationalities, disciplines, and agricultural ecosystems may reveal new ways of removing such limitations as drought, soil fertility, and cold. It seems that the prospects of discovery would be particularly good if several scientists could be brought together for study of an ecosystem unlike the well-known ones of Temperate Zone agriculture. Several months of on-the-spot study would be followed by laboratory research at home bases. Several studies of this kind could be carried out during the life of the IBP.

PROCEDURE

To advance research in the four problems designated the Subcommittee will hold two symposia with working conferences during 1967. The first will deal with physiological limitations on primary production under conditions of water and temperature stress; the second will deal with nitrogen balance.

About thirty scientists will be brought together from throughout the Hemisphere. First the state of knowledge will be presented in the symposia, then the goals and review procedure of proposals will be advanced, and finally, the conferees will be invited to join in research.

Further, the four goals and procedure for review will be announced through publication.

Proposals for training graduate students and others are invited for review. The Subcommittee will examine each proposal for pertinence to the four problems. Each proposal judged to be pertinent and scientifically sound will be forwarded, with the Subcommittee's endorsement, to the funding agency designated by the person making the proposal.