

3. Social and political systems and patterns of leadership and authority.

4. Expectation, attitudes and value orientations, with special attention to the reactions to past governmental attempts to induce change.

The baseline study along the lines just mentioned must be sufficiently comprehensive to enable those making subsequent studies to understand the nature of the changes occurring in all sectors of the different cultures. Relocation and rapid social change can be expected to increase stress within the societies involved. For example, relocation usually brings major dietary changes and temporarily increased mortality. It widens social contacts with other groups and increases the number of cultural alternatives among which choices must be made.

The very complexity of changes arising from major engineering projects requires a long-term, interdisciplinary approach. The anthropological aspects of these studies can be appropriately incorporated in biological programs, national resource surveys, and other similar projects. The shortage of qualified personnel makes cooperation among national and international agencies essential. It is especially important that every investigation effectively involve educational and research institutions in the host country and that it bear in mind the development goal of the country involved.

Man has been changing the face of the earth from his earliest beginnings, but the immensity and the rapidity of the changes being made at the present provide both an unparalleled opportunity for large-scale research during the course of these changes and a new major responsibility to apply our best scientific insights and understanding to the direction of these changes.

#### RESOLUTIONS

The full text of all resolutions is presented here as a summary of significant conclusions of the Conference. The conferees resolved:

1. That the participants in the Smithsonian Conference on Tropical Biology urge the development of a worldwide tropical biology program, including initially inventories and surveys such as those required in connection with the construction of a sea-level canal and the Bayano Dam.

2. That the Smithsonian Institution, with appropriate advice from a body of recognized scientists from various countries, should:

a. Seek funds immediately for a marine program in the Caribbean and in the Pacific Ocean adjacent to the Isthmus of Panama.

b. Seek funding for world-wide surveys of terrestrial and fresh-water environments.

c. Seek funding for intensive ecological studies in the tropics, initially in Panama.

3. That the Smithsonian Institution seek the advice of foundations and federal granting agencies, such as the National Science Foundation and the National Institutes of Health, in establishing policies governing the distribution of financial support.

4. That administrators of museums, and other institutions which maintain systematic collections, anticipate the large increases of such collections that will result from any successful tropical biology program, that they accept the responsibility of storing and protecting them adequately, and that they provide space not only for their own staff but for other scientists who need to consult and study these collections.

5. That the Smithsonian Institution consider the establishment of supported chairs of tropical biology at universities in the tropics to encourage the development of scholars with the time, opportunity, and finances to carry on research and graduate instruction in areas of interest to the Smithsonian Institution, the filling of the chairs to be under control of the universities concerned; it is recommended that the chairs be occupied by a citizen of the country in which the university is located as often as possible and practical.

6. That investigators obtaining grants and contracts for research in tropical biology and anthropology include, where appropriate, requests for funds to provide advanced training of students to increase the number of qualified scientists concerned with science in the tropics.

7. That collaboration between scientists of the U.S. and those of host countries include: