PROGRAM STATEMENT

OF THE

SUBCOMMITTEE ON HUMAN ADAPTABILITY

The evolutionary success of the human species is based on genetic, morphologic, physiologic, and behavioral variation. The processes and mechanisms of human adaptability are the special concern of this Subcommittee. The term "adaptability" is here used in several senses, including the adaptability of populations and individuals and genetic and phenotypic adaptability.

Human adaptability has multiple bases, with consequences for human survival. However, neither the distribution nor the sources of man's variability have been rigorously measured. The International Biological Program presents a unique opportunity for determining the relative importance of these aspects of variability, and of establishing underlying mechanisms on the basis of closely comparable studies of different groups--groups having contrasting genetic, social, nutritional, and climatic backgrounds.

THE DYNAMICS OF HUMAN POPULATIONS

The range of human populations available for this type of investigation should provide the IBP with possibilities for thoroughly assessing sources of variability. At one extreme are few surviving examples of hunting-gathering and incipient agricultural populations, which represent what were the norms of adaptation until relatively recent times. At the other extreme are diverse industrialized populations.

Some of the primitive groups--e.g., the South African bushman, the Australian aborigines, the Eskimos, certain tribes of Central and South American Indians--are disappearing rapidly, culturally if not biologically. IBP studies of these groups would provide invaluable baselines for investigations of a variety of other populations that exhibit significant contrasts in genetic background, habitat, and culture. Many of the primitive populations have limited resources and have, therefore, been exercising control of population size for centuries. Thus, the study of primitive populations will shed light on processes by which populations control their sizes. The study of such groups is not only extremely timely, but because of their location, may provide unusual opportunities for international cooperation.