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## Latin American Aspirations

The great disparities among standards of living in the world during the 1950's and 1960's touched the consciences of many people, and foreign aid programs, such as that of the United States, were politically feasible. The passage of time has eroded popular support and, correspondingly, the national commitment has diminished. The reality of widespread poverty remains. If the poorer countries are to develop, they must do so largely by their own efforts. The example of Japan, with its very limited resources, makes it clear that effective use of science and technology is crucial to, and can facilitate, development.

This example has not been lost on leaders of Latin America. For example, the presidents of the American republics, at a meeting held in Punta del Este in April 1967, sounded the hopeful note that "Latin America will share in the benefits of current scientific and technological progress so as to reduce the widening gap between it and the highly industrialized nations in the areas of production techniques and of living conditions."

In May 1972, another meeting sponsored by the Organization of American States was held, this time in Brasilia. This was a Conference on the Application of Science and Technology to Latin American Development (CACTAL). A report on the conference\* provides a comprehensive outline of the many legitimate aspirations of our southern neighbors.

"... scientific and technological policies must be geared to the permanent objectives of economic growth, social justice and enhancement of culture."

"The objectives... should include narrowing the technological gap, eliminating technological dependence on the developed countries and advancing toward the creation of indigenous technologies."

"Scientific and technological development... should give preferential attention to the needs of both rural and urban marginal sectors and to the development of the most dynamic sectors of the economy that make intensive use of advanced technologies."

This is only a small sample of their aspirations. A reality is that in Latin America there are a total of only 50,000 scientists and engineers (a few percent of the number in the United States). Moreover, scientists are not effectively employed in industry. If the Latin American countries are to make substantial progress toward the fulfillment of their aspirations, they must succeed in bringing to bear on the task much larger intellectual and other resources than have heretofore been employed.

One method is to utilize outside resources: for example, the transfer of technology through foreign investment. The CACTAL report seems to restrict that avenue, for it recommends restrictions on the operations of foreign firms that those firms would be reluctant to accept.

The Latin American countries might try to utilize some of the bounteous resources of scientists and engineers in developed countries. This would require an unprecedented degree of cooperation on the part of the Latin Americans and a willingness to provide conditions that would permit effective tackling of problems. On their part, scientists and engineers are by inclination problem-solvers, and many of them would be greatly attracted by new challenges. At the June 1973 AAAS-CONACYT meeting in Mexico City, many matters vital to Latin America will be discussed—among them, technology transfer. The occasion might well serve as a crossroads where problems and problem-solvers get together.—PHILIP H. ABELSON

\* Specialized Conference on the Application of Science and Technology to Latin American Development, *Final Report* (General Secretariat, Organization of American States, Washington, D.C., 1972).