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Office of the President

Cable Address "Bulac"

Testimony on the
Institute For Technological Cooperation
Senate Foreign Relations Committee
March 15, 1979

My comments today in support of the proposed Institute for Technological Cooperation come out of several different strands of thought and personal experience over recent decades.

The first strand grows out of my direct experience in developing countries. I have traveled extensively in developing countries and met with national leaders, development program specialist and talked with the people directly. The conditions of life I have personally sensed and observed abroad and the statistics of poverty which I have studied, make me proud that our country is so active in trying to alleviate the worst elements of poverty and to bring a better life to people living in remote areas and under deprived conditions.

The problem is great -- perhaps "staggering" in immensity -- but for the first time in the history of man, there are hopeful

signs that with the will to get on with the job, we may be able to meet the challenge within the next two decades -- to eliminate the worst physical manifestations of poverty by the year 2000. It is a thrilling and awe-inspiring thought that within the lifetime of most people in this room we may be able to eliminate from the world famine and serious malnutrition, the sadness and waste of early death from diarrheal and tropical diseases, the terrible loss of human potential caused by illiteracy. It is a challenge we must accept and address as a nation. It is worthy of our best efforts.

This first line of experience and observation has given me hope for it has brought me in touch with those who are doing something about the problem, whose analyses help to show the way.

My Experience with the so-called development community has included the people of the Overseas Development Council and Rockefeller Foundation scientists and AID specialists at home and abroad. Their efforts and those of the people in the developing countries are a source of hope. If we can put together the right combination of knowledge and resources, make use of past successes and failures, and combine it with political will, we can do this job together.

The proposed Institute For Technological Cooperation would be an excellent part of the mix. The Research and Development

emphasis it will bring is an essential ingredient. The new varieties of grain and other aspects of the new agricultural technology which comprised the "Green Revolution" is ample testimony to the difference research can make. Millions are now eating the product of that long-term research and development effort. Sure there are complications and problems growing out of the new rice and wheat production technology, but the increased nutrition available to the many is a fact and the side effects -- both good and bad -- are manageable over time.

The answers to development problems are not simple; they are complex. And that is precisely why we need an on-going research and development effort, an analytical competence as an underpinning to the effort of the next few decades. We need it in this country and the developing countries need it directly as a part of their own national capacity. The Institute program addresses these needs. It focuses not only on specific problems but on building the capacity within developing countries to utilize science and technology on a continuing basis for the benefit of mankind.

This takes me to a second line of thought, again based on personal experience. From 1954 to 1966, I served on the Board of the National Science Foundation. Those were the formative years of the NSF -- the first twelve years. The organization was new and

different. Not all was smooth and easy within the Board or the Foundation. Its goals were clear: to strengthen U.S. science and scientific research in this country. Its success -- and the reputation of U.S. science around the world -- are well known and as a nation we have derived many benefits which touch our lives in both obvious and hidden ways.

Those twelve years of close contact with a new organization left an indelible mark on my own thoughts which relate directly to the proposed Institute. I am convinced that a new organization can make a difference -- even in ways that its own sponsors may not predict. It can stimulate imagination and creativity. It can do things which others might not risk, and occasionally accomplish the unexpected. It can stimulate new effort, attract new talent, build new bridges and cooperative ties. It can signal new determination and generate new "esprit". For those of us concerned with development and with the role of our nation in leading this cooperative effort, I believe the new Institute offers a real chance of performing above and beyond the simple sum of its parts, the totaling of its modest initial program components. My experience with the new NSF and with the planning of the IFTC gives me genuine hope and some thoughtful confidence that a new move of this sort at this time will make a major difference.

This takes me to my third and final strand of thought -- my contact with preparations for the UN Conference on Science and Technology for Development scheduled for Vienna in August. I mentioned that a new organization at this time will make a difference. I find the IFTC proposal to be timed extremely well. It represents a U.S. initiative toward putting science and technology to work more effectively on development problems and that is at the heart of the purpose of UNCSTD. It will be an important part of our national position at Vienna, but that is not the full story.

The UN Conference signals a worldwide, serious interest in this subject at this time. It will be preceded by a series of international meetings -- formal and informal preparatory sessions which focus attention on needs and possibilities. There will be a mounting crescendo of voices and national positions on the subject. There have already been circulated over 100 national papers on science and technology for development. The single message that comes out of reading these papers is that there is a crying need, there is a demand, and there is an opportunity to create new and better mechanisms to make science and technology work for the poorer countries, to help them solve their need for food, health, education, and equality of opportunity for a better life.

What better time could there be for the planning and launching of the U.S. initiative in this field??

We should understand that the issues which will receive attention at Vienna are complex and go beyond those directly addressed by the IFTC. However, the Institute plan does address one of the most basic, i.e., strengthening science and technology capabilities in developing countries directly so that they may evolve a pattern of self-reliance in choosing and negotiating new technologies, in adapting public technologies to their own national ends, and solving their own problems through use of science and technology.

The UN Conference itself is one in a series of meetings in which issues of North-South relations will be discussed and debated. We are planning a constructive, positive outcome to the Vienna Conference, which is to be one of the most important in the series. The Institute For Technological Cooperation is to be a central component in our approach to Vienna. It is already pointed to by other countries as a creative response to the needs of our time.

To sum up, I have described three lines of personal experiences and thoughts that cause me to be highly supportive of the proposed Institute. One is my intimate contact with development needs and

programs and with organized efforts to meet the goals for the year 2000 which could mean so much to humanity. The IFTC is an essential element in that formula. Secondly, my years of experience with the new National Science Foundation Board convinces me that a new organization can make a difference beyond even the expectations of its sponsors. The IFTC, symbolizing the use of America's strength in science and technology, can be larger in impact than the sum of its parts. Finally, our preparations for the U.S. position at the UN Conference make the IFTC proposal extremely important and timely.

Action of this committee of the Senate to authorize the new U.S. initiative is much needed and would be in the best tradition of U.S. leadership toward a world system in which our people can realize our nation's humane and progressive values -- in peace.

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PROPOSED INSTITUTE FOR TECHNOLOGICAL COOPERATION

Science and technology are increasingly seen as critical components of a development strategy for all countries, whatever their stage of economic growth. This is particularly evident for the developing countries of the world, who need their own capability to select and adapt technology for their needs, and to overcome the knowledge barriers to development.

The U. S. Government has long recognized this need in its foreign assistance programs. But it has proven difficult to mount fully satisfactory efforts in scientific and technological aspects of food, health, energy, resources, and other central sectors within an institutional structure also engaged in large resource transfers, and necessarily concerned with demonstration of short-term results.

Accordingly, President Carter has wisely proposed the creation of a new instrument -- an Institute for Technological Cooperation (IFTC) -- within what is to be a reorganized and upgraded foreign aid administration. The goal will be not only to help developing countries to use science and technology more effectively, but also to mobilize a larger share of America's scientific and technological strength to assist in the alleviation of global poverty, and in support of development.

A major barrier to the success of present and past development efforts has become more clearly seen in recent years: the inadequacy of present knowledge to deal with the problems of the majority of the

poor. We know now through sometimes bitter experience that developing and applying appropriate knowledge is not simply a matter of transferring technology from developed to developing countries. Rather, it involves a country having the capacity itself to diagnose its problems, to choose among available technologies, and to adapt them to their specific environments and needs. Ironically, some of the middle-income developing countries which are in the process of developing this capacity do not any longer have access under the AID legislation to U. S. assistance to help them grow further in collaboration with U. S. experts.

The primary missions of IFTC will be to increase the capacity of developing countries to use science and technology to meet their critical problems, and to expand knowledge through R&D. The Institute will focus on problem areas, rather than country programs, and will involve developing country experts as staff members and advisers, along with those in the U. S., in addressing these problems and in building capacity in the developing countries. It will also be able to cooperate with middle-tier countries not now eligible for concessionary assistance. Collaborative relationships with AID and other elements of the Government's foreign assistance program are essential to avoid ivory tower isolation, but the authority of the Institute to make its own decisions is equally necessary to permit a longer-term focus on problem-solving.

Therefore, an autonomous status is proposed for IFTC, parallel to other U. S. development programs. The Institute will also be intended to serve a broad planning and coordinating role for science and technology activities of domestic Federal departments and agencies that can relate to developing countries.

Our nation's success in assisting the development of Third World countries, and especially the poorest among them, is of great importance to us, and not only for humanitarian reasons. Our future economic security and physical well-being will depend on the ability to increase international trade, maintain stability, avoid inflationary moves that grow out of scarcity of food and resources, and meet global environmental and population pressures. The IFTC can be a major innovation in bringing about improvement in the ability of developing countries to put technology to work with maximum impact on their development. And, it can also gain greater results from investments in the economic and social development of these countries.

The IFTC is a promising organizational departure that has been crafted with intelligence and common sense. The IFTC is based upon the premise that for the first time in the history of humanity, we are enabled through the productive use of science and technology, to eliminate most of the dire effects of poverty that affect a fourth of the world's population. IFTC responds both to the increased importance attached to science and technology by Third World countries and to our need for institutional change to realize the new promise.

The effectiveness of U. S. policy and programs in the Third World -- and especially among the relatively more developed Third World countries -- is dependent on cooperation in science and technology in ways acceptable to both parties. The Institute holds the promise of providing that new institutional capability that will make new patterns of relationship possible, new development dreams a reality.

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