

**THE FUTURE
OF U.S.
TECHNICAL
COOPERATION
WITH KOREA**

**A Report to the Agency for International Development
By a Panel of the Board on
Science and Technology for International Development**

NOVEMBER 1969

**Office of the Foreign Secretary
NATIONAL ACADEMY OF SCIENCES**



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PREFACE

In accepting AID's invitation to study Korea's long-term technical assistance needs and their policy implications for the United States, the Board on Science and Technology for International Development of the National Academy of Sciences was moved by several considerations. It sought to fulfill the Academy's traditional role of advisor to Federal Government agencies. It saw in the study an unusual opportunity to focus on critical determinants of a nation's development - the mobilization and effective use of its intellectual resources. Finally, the Board welcomed the opportunity of participating in the current re-examination of United States relationships with developing nations, particularly in terms of the contribution the American scientific and technical community might make in forging cooperative links with them.

To carry out the study the Board named a panel composed of the following persons:

- Chairman: Dr. Walter Orr Roberts
President
University Corporation for Atmospheric Research
Boulder, Colorado
- Dr. Nicholas J. Hoff
Head, Department of Aeronautics and Astronautics
Stanford University
Stanford, California
- Dr. Frederick W. Riggs
Professor of Comparative Public Administration
Department of Political Science
University of Hawaii
Honolulu, Hawaii
- Dr. Harold F. Robinson
Vice Chancellor
University System of Georgia
Atlanta, Georgia
- Mr. Harry E. Wilhelm
Head, Office of Latin America and the Caribbean
Ford Foundation
New York, New York

Staff

Officer: Mr. Julien Engel
Deputy Director
Board on Science and Technology for International
Development
National Academy of Sciences

The circumstances of the study made it necessary for the panel to proceed with measured circumspection in Korea, and without the collaboration of a local counterpart group (unlike the Board's usual practice in overseas advisory activities). Moreover, the panel had to address itself to a range of questions extending substantially beyond those customarily treated by the Board in its consideration of the application of science and technology to economic development. In addition to issues of national interest, development strategy, and institutional "carpentry", the panel dealt with matters as diverse as the place of legal reform in the modernization process, and the promotion of private and public 'intermediate' institutions in a society still largely devoid of them.

The panel faced a demanding task in a severely limited time. It spent only two weeks in Korea, July 14-26, 1969. Several of its members were new to the field of economic development, though possessing much experience in international cooperative scientific enterprises. The small size of the panel negated the possibility of in-depth studies along sectoral or program lines. Perforce, the panel proceeded as a group looking at the problem as a whole.

Although the panel had the benefit of extensive briefings by senior AID officials both in Washington and Korea, it approached its task without instructions or preconceived ideas. It formed its conclusions largely on the basis of its consultations, collectively and/or individually, in Korea. Individuals and institutions consulted in Korea were in the fields of government, education, research, industry, agriculture, journalism, law, health and family planning, cultural exchange and others. Heads of leading non-Korean agencies, including the United Nations Development Program Representative, as well as a number of politically or otherwise prominent Koreans were also interviewed. (A full list of persons consulted and institutions visited appears in Annex A.)

The objectives of the mission were defined in the NAS-AID contract to be as follows:

The study "shall include, but need not be limited to, the following areas of investigation:

- a) The identification of the needs for technical assistance during the 1970's and beyond;

- b) The magnitude of foreign and local costs implied by the identified needs;
- c) The types of machinery which might be established to effect the identified technical assistance;
- d) How an administrative institution could be developed, financed, and coordinated with appropriate U.S. federal agencies, and nongovernment institutions;
- e) How support for the Contractor's recommendations might be generated."

The panel attempted to deal with all of these questions but the last one, which we believe might be treated more suitably at a later date. Against the background of limitations on the panel's work, as noted above, we would emphasize the fact that the findings and recommendations with respect to points (a) and (b) are offered as tentative and illustrative, whereas those for points (c) and (d) are firm and specific.

As a further qualification, we would add that the panel's findings and recommendations represent the collective but not necessarily unanimous judgment of the individuals who composed it. The report is submitted solely to AID for use and distribution at its discretion.

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MAJOR FINDINGS AND RECOMMENDATIONS

1. The National Academy of Sciences panel on the future of U.S. technical assistance to Korea is convinced that Korea will need help to face a broad range of technical needs and problems in the decade of the 1970's, and indeed well beyond. Further, we believe the United States has before it an exceptional opportunity to devise a new approach centered on cooperation and professional collaboration for handling future technical interchange between our two countries. Specifically, we recommend that a new bilateral organization - the Korean-American Development Institution (KADI) - be established as the principal instrumentality of technical cooperation and that it be financially supported by both countries on a long-term basis. Such a continuing investment by the United States is justified, in our considered opinion, because Korea has special importance to our country for historical and strategic reasons and also because the absence of such aid might impair its further development.

2. Heretofore, U.S. technical aid has supported priority economic objectives in a Korean development strategy favoring industrialization and build-up of infrastructure. Korea's remarkable growth testifies to the basic effectiveness of the aid and to the soundness of the strategy. However, we believe that if it is to assure itself long-term capability to sustain a high rate of growth and also to avoid the pitfalls of unbalanced development, Korea will need in the future to devote greater attention and resources to problems that it has tended to neglect in areas including rural development, education, and social welfare. Korea's future technical requirements, its needs for new competences and capacities, will result in part from its very success in reaching a higher, more complex level of development, and, in part, from the need to confront, largely for the first time, a wide array of non-economic problems in which the country's experience needs to be greatly extended.

3. The Korean Government's capability to tackle some of these problems will need to be stimulated and complemented by the efforts of nongovernmental institutions. These, in turn, will need encouragement and support. Future U.S.-Korean technical cooperation should draw inspiration from Title IX legislation and should attempt to serve the needs of both governmental and nongovernmental sectors.

4. To this end, we recommend that KADI be established as an autonomous, nongovernmental institution with a broad mandate to support cooperative programs and activities which will help Korea achieve balanced economic growth, develop its intellectual and human resources, and further its social and civic modernization. Our preference is for a bilateral organization financed by both countries and

governed by a board of able and interested Koreans and Americans, most of whom should be drawn from the private sector; but we also consider it possible to make KADI a purely American organization in the event the Korean Government chooses not to contribute to its core financing. KADI should be a lean organization operating principally to stimulate and sustain high quality programs and activities of other entities by means of grants provided on a matching, topping-up, or joint participation basis.

5. We recommend that KADI have at its disposal annual funds equivalent to \$5 million, of which (assuming KADI is established as a bilateral agency) the United States should contribute no more than 80 percent, and Korea the balance. Contributions of both governments to KADI should be made as unrestricted grants. KADI's core budget should be assured for at least five years and preferably ten. We recommend that appropriate U.S. legislation be sought to obtain these two conditions.

PART I. THE BACKGROUND

Korean Development

In our view, Korea's mid-1969 profile is one of jagged peaks and valleys. Of the peaks none is more striking than the country's present rate of economic growth. In 1968 it was 13 percent; this year it is anticipated to rise to 15 percent. Few present-day economies show such dynamic pace in their development. (Admittedly, Korea, with a current per capita GNP of only \$171, is rising from a very low base.) Korea's achievement in building the infrastructure of power, transportation, communications, etc., and in giving itself an almost universally literate population in less than two decades, bespeaks impressive national resolve, capability, and performance.

Korea's industrial sector and her export trade have expanded well beyond the Second Five-Year Plan (1967-1971) projections. The entry of Japanese industry under the normalization agreement, the influx of U.S. private investments, and the sizeable earnings Korea derives from the Vietnam war - all of which became significant after 1965 - account significantly for these exceptional accomplishments.

Korea's economic progress is shown in the following comparative table:*

	<u>1964</u>	<u>1968 (est.)</u>
Total GNP (in millions)	3,476	5,210
Per Capita GNP	126	171
Investment	459	1,300
Savings (domestic)	238	660
Agricultural Production Index (1957-59 = 100)	138	142
Industrial Production (1963 = 100)	108	236
Total Exports	119	460
Gold and Foreign Exchange Reserves	136	409

* Source: AID Program, Presentation to the Congress, Proposed FY 1970 Program

Korea's growth rests on a development strategy that places preponderant emphasis on industrialization and export of manufactured goods. These objectives, with the concomitant investments for supporting infrastructure, currently claim the bulk of the country's resources and attention. Rapid growth in industrial output is to be maintained in the period of the Third Five-Year Plan (1972-1976), with perhaps an even steeper rate of increase in export-related industries. The purpose is to enable Korea to improve its position in world markets and

compensate for the anticipated drop in Vietnam earnings. By the mid-1970's, Korea expects to reach a per capita GNP of \$250.

The valleys in this profile reflect the imbalances in the economy and in the development of the society as a whole produced by Korea's decision to allocate resources primarily to physical infrastructure and industrial growth. Agriculture and rural development have suffered from long neglect, as have education, public health, and other areas of social welfare and modernization.

Several problems have begun to loom very large. Among these are a growing disparity in incomes between the urban and rural populations; a massive influx of population to the cities, with negative effects on urban life; urban unemployment and rural underemployment; and a growing mismatch between what the schools supply and what the economy demands. All these conditions appear to us to contain the seeds of potentially serious disaffection.

Koreans argue persuasively in support of their strategy of national development. But they also admit that Korea has failed so far to lay adequate foundations in important areas of economic, social and intellectual development that are needed in the long run to sustain the nation and the momentum of its growth. Official reports acknowledge that neglect of farmers, intellectuals and professionals, urban conditions, etc., may endanger the objectives Korea is now so single-mindedly pursuing. Korean leaders are divided about the course to be pursued in the 1970's. The weight of influence appears to be with those committed to continued rapid increase in national income through intensive and large-scale industrialization. The effect of this policy would be further to postpone attention to the nation's social needs.

The U.S. and Korea

Since World War II the United States has given Korea \$4.5 billion in economic aid and \$3 billion in military aid. These considerable sums provide a measure of the importance the United States has attached to this country.

Until the early 1960's U.S. economic assistance was used primarily to promote reconstruction of the country, to furnish it with basic physical infrastructure and human resources, and to provide the Korean Government with vital budgetary support. During the past several years AID has pursued a development policy for Korea emphasizing stabilization and growth designed to make the country economically self-supporting at the earliest date. Programs under this policy have included: (1) participation and guidance in the formulation of economic plans; (2) provision of development loans for government infrastructure projects (power, transportation, etc.), intermediate financial institutions

(Medium Industry Bank, Korean Development Finance Corporation), and private concerns (cement, chemicals, etc.); (3) support to help Korea reach agreed economic stabilization goals through financing of needed imports; (4) support to relieve heavy budgetary pressures - especially military - through allocation of U.S.-owned or controlled currency for military support; and (5) provision of technical assistance to Korean government agencies such as those dealing with agriculture, industrial development, and administrative reform.

The level and distribution of AID's technical assistance in the past four years may be seen in the table on page 6.

At present AID's technical assistance effort in Korea consists predominantly of projects scheduled to terminate within the next 24 months. (It may be assumed, however, that public safety /internal security_/and family planning - each for its own obviously compelling reasons - will continue to be favored by American assistance in various ways beyond that period.) We find it noteworthy that most technical assistance activities are oriented to objectives which are essentially economic in character. For instance, excluding a period of assistance for the upgrading of certain professional schools at Seoul National University (SNU), AID has not been able to devote resources to the strengthening of higher education in Korea. Nor has it been able to pursue significant social and political objectives prescribed by Title IX legislation, especially in areas not directly contributory to economic growth.

Given AID's overriding economic concerns, which are fully shared by Korean economic planners, the application of U.S. capital and technical assistance resources has generally served to reinforce and accentuate the imbalances in the Korean Government's own policies, as described above.

In making these observations we wish to suggest some of the tasks that should claim attention in the future rather than to criticize AID for failing to do that which it did not intend or was unable to do. We fully appreciate the constraints on resources and policy options within which AID has had to operate.

The question may now be asked: Why should the United States, having helped Korea on the road to economic self-sustenance, feel continued responsibility for that country's domestic evolution? We believe that our discussion below will touch upon the most important reasons. First, however, it seems appropriate to look at Korea from the general standpoint of U.S. national purposes, policy interests, and standing, in Asia and elsewhere. This perspective suggests important considerations that support a number of our recommendations:

AID PROJECT PROGRAM FUNDING IN KOREA
(in thousands)

	All <u>Prior</u>	<u>FY 67</u>	<u>FY 68</u>	<u>FY 69</u>	<u>FY 70</u>	All <u>Future*</u>	<u>Final FY</u>
<u>Agric/Rural Dev.</u>	6,197	748	847	769	813	870	72
<u>Water Resources Dev.</u>	110	293	279	319	279	201	71
<u>Mineral Dev.</u>	509	422	72	62			69
<u>Transportation</u>	399	168	96	58			69
<u>Industrial Dev.</u>	3,442	769	265	251	360	120	71
<u>Policy Adv. to ROKG</u>	2,714	895	684	1,042	778	639	--
Economic Policy		(303)	(179)	(364)	(262)	(375)	71
Bank/Credit		(135)	(102)	(137)	(91)		70
Investment Promotion		(46)	(29)	(75)	(91)		70
Education		(223)	(185)	(161)	(168)	(133)	71
Public Administration		(188)	(189)	(205)	(166)	(131)	71
<u>Legal Development</u>				100	80		--
<u>Internal Security</u>							
Development Grant	251	209	445	531	485	293	71
Supporting Assistance			5,000 ^{a/}				
<u>Family Planning</u>	161	80	1,491 ^{a/}	200 ^{a/}	1,000 ^{a/}	1,250 ^{a/}	72
<u>KIST</u>	764	3,800	2,625				68
<u>Technical Support</u>	23,577	1,365	1,426	1,198	1,085	2,040	xx
<u>Total Dev. Grant</u>		<u>8,749</u>	<u>6,740</u>	<u>4,230</u>	<u>3,880</u>	xx	xx
<u>Total Support Assist.</u>			<u>6,491</u>	<u>1,200</u>	<u>1,000</u>	xx	xx
GRAND TOTAL		<u><u>8,749</u></u>	<u><u>13,231</u></u>	<u><u>5,430</u></u>	<u><u>4,880</u></u>	xx	xx

* from Congressional Presentation
a/ Supporting Assistance

Source: USAID/Korea

- (1) Korea today is largely the product of our huge investment in that country - financial, military, and other - during the past 20 years. Its economic achievements are a source of real satisfaction, but its political and social progress still leave cause for grave concern. Korea is thus only half a success story. It remains to be seen whether it can achieve balanced economic growth and also a stable regime committed to social justice and fully responsive to the aspirations of its people. The United States can contribute significantly towards that end. It is the only one which in the long run will justify our huge investment in the eyes of the American people and of many onlookers around the world.
- (2) The persistent threat from the North cannot be countered by military and economic strength alone, important as these may be. South Korea must also create an alternative way of life that can generate national solidarity and massive popular support.
- (3) The substantial U.S. military presence in Korea, and its necessary intimacy with and support for the Korean military establishment, does not have a wholly welcome or desirable impact on Korean society. To preserve an environment congenial to such a presence as long as international security interests may dictate, it is important that the U.S. military not be the sole substantial American presence in the country and that counterbalancing efforts to strengthen the foundations of Korean civic life continue.
- (4) Changes in U.S. relations with nations along the rim of the Asian mainland, accompanied by the reduction or withdrawal of American military forces from some, may well increase Korea's strategic importance to the United States.

Propositions and Observations

As we went about our task, a number of propositions and observations which seemed persuasive to us emerged. They influenced the character and direction of our recommendations for the future of the U.S. technical aid relationship with Korea. They are:

Korea a pilot case. In our judgment, the policy question facing the United States with respect to Korea - to which this panel has been asked to address itself - is of exceptional importance. It has confronted this country twice in recent years, without receiving an adequate answer, when our aid programs in Taiwan and Iran were brought to a close. The problem will surely reappear as other countries in whose development we have played a leading role reach a point at which we can no longer justify continuation of an aid program of grants,

loans, and other assistance on concessional terms.

We may safely assume that countries like Korea, will, beyond that point, continue for a long time to be greatly dependent on the intellectual and technical resources of the United States and, furthermore, that private philanthropic and voluntary service contributions will remain a negligible factor in filling the void that cessation of conventional government-sponsored assistance will produce.

Under these circumstances, then, we interpret the policy question in the following sense: Following the phase of conventional capital and technical aid, how should the United States organize itself to respond helpfully to Korea's needs, and to what purpose?

The answer to this question may well furnish the basis for a new course in our relationships with a number of developing nations that have reached self-sustaining growth, or will attain it in the near future. Thus we believe that Korea presents a timely pilot case and that our recommendations, though specific to Korea, also have wider relevance.

Sustaining the learning process. The recent "technological gap" debate and the pleas by Europeans for a new "technological" Marshall Plan have served to illuminate the disparities (more social and managerial than technical, as recent studies have shown) existing even among highly-developed nations. Two points are worth noting: (1) despite their strength and resourcefulness, their easy access to and great diversity of interactions with the United States, Europeans found that their countries were lagging increasingly behind the United States in critical sectors; and (2) the Europeans were convinced that the problems could be alleviated only through a large, organized, U.S. Government-sponsored effort.

What, then, is to be said of a nation - with a per capita GNP of \$171 - only recently liberated from a static traditional, agrarian past?

The question is by no means rhetorical, in view of the currency and appeal that the notion of "graduation" for aid-receiving countries has achieved in the United States during the past six or eight years. We consider this notion dangerous and deluding, even though it expresses well enough our impatience to see a job completed. Moreover, declining appropriations, plus statutory limitations imposed on AID regarding the total number of countries eligible for major categories of assistance, have placed AID under great pressures. There is a consequent urgency to "discharge" countries completely, like patients from an overcrowded hospital, as soon as they appear to have become "ambulatory."

To pursue these metaphors further, "graduation" does not signify the end of the learning process, nor "discharge" an assurance that the patient no longer needs special care. However self-evident or elementary, these arguments point the way to the responsibility the United States should assume in the new phase of its relationship with a developing nation. In our view, that responsibility is to ensure that the developing nation's learning process (by which we mean the sum total of its intellectual and professional interactions with the world at large, as well as its capacity to absorb new ideas) keeps on expanding vigorously, to stimulate the forces of internal change and to strengthen the bases for further growth.

This process does not have a built-in, self-generating momentum, especially in view of its dependence on hard currency resources and (to no small extent) on external initiatives. It is precisely in the allocation of its still very scarce foreign exchange resources that a nation now forced to earn its own way, and unsure of its long-term prospects, is driven to favor the importation of "hardware" in preference to "software." Without benefit of specific financial support or the incentive of monetary reward, the outreach of counterpart individuals or institutions in the United States scarcely extends beyond the water's edge.

Recent budget cuts have caused a sharp decline in the two-way intellectual traffic between Korea and the United States previously supported by the Fulbright and State Department educational and professional exchange programs. The resulting sense of isolation and abandonment enveloping the Korean intellectual and professional community gives timely warning of what may be expected, on a much larger scale, if provision is not made for a bridge to be kept open between the two countries. Most important, we believe that this will require a long-term commitment on the part of the United States, well beyond the next decade. We cannot emphasize strongly enough the need for the United States to recognize and accept the fact that no developing country - especially one of the low income type that Korea represents - can stand a total severance of aid from the United States without jeopardy to the progress already made and serious harm to the effort it must maintain in the years ahead.

The inexhaustibility of technical needs. The very nature and substance of technical assistance conspire to perpetuate the need for it. Acquired expertise attenuates or becomes stale; research equipment runs down; books become out-of-date; and new institutions - especially academic ones - lose their initial vigor if no provision is made for their regeneration or self-renewal. (This happens to be the case in Korea.) In short, the competences and capacities that technical assistance transmits have a built-in tendency to degenerate which few developing nations are able to redress.

In the conventional technical assistance relationship, the juxtaposition of urgent, abounding needs and limited resources puts great pressure on donor and recipient government alike to move rapidly from one bottleneck problem to another - without a backward glance. Thus, the beneficial impact of a university-to-university contract - e.g. Minnesota and Seoul National University - begins to dissipate virtually on its termination.

Two other factors heighten a developing nation's dependence on the knowledge resources of the developed world. One is the changing character of a dynamically growing society, which generates demands for ever newer and different types of knowledge. From the straightforward acquisition of the basic skills, basic technologies, and basic institutions necessary to attain a minimum of economic viability, a developing nation must move on to attack progressively more complex problems of political, industrial, and social organization.

The other factor stems from the interaction of technological progress in advanced societies with the patterns of international trade. An industrially developing nation, whose economic growth rests on the export of manufactured goods, in the production of which her industries have attained comparative advantage becomes steadily more vulnerable to technological and market changes that occur abroad. To ensure her own survival in the endless competition for markets, the developing nation must acquire an increasingly sensitive perception of these changes, a capability for fast reactions, and skill in adapting its local conditions to the most efficient technologies emerging abroad.

Limitations of government-to-government technical cooperation. Technical cooperation channeled conventionally on a government-to-government basis is subject to influences and constraints that severely limit its range of impact. Technical cooperation is generally designed to support the immediate economic objectives of both governments - one impelled to achieve basic self-sufficiency in record time, the other driven to disengage itself as rapidly as possible. Program priorities are hence confined to the sector of prime urgency, and all too often projects are shaped by considerations of short-term feasibility, quick payoffs, and the clearly limited continuity of involvement of the donor. Political timidity or "discretion"; rigid programming requirements; the tenuousness of official relationships with the nongovernmental sector; all tend to make government-to-government technical assistance a tunnel-visioned, single-track effort. Its net effect is to reinforce the strength of the central government and of leading economic units to the neglect of other no less vital sectors of society.

We believe that the political and social objectives of Title IX legislation are peculiarly appropriate to Korea at this stage of its development. As the concept of "popular participation" suggests, the

intent of Title IX (among other purposes) is to stimulate a broader distribution of material benefits as well as the diffusion of political power among all layers and sectors of a developing society. It may, however, be unrealistic to expect the Korean Government readily to make such objectives its own. The strategy of concentrating resources on areas of prime growth does not lend itself to a policy of distributive justice. Furthermore, a highly centralized and authoritarian government is naturally disinclined to build up extra-governmental centers of influence that might challenge its judgment or limit its authority.

Nonetheless, we believe that the Korean Government, surely motivated to keep the country's economic development purposeful and stable, will come to appreciate the advantage of moving toward the objectives discussed above. We feel, further, that this shift in emphasis could be realized sooner rather than later, given a new American technical cooperation effort characterized by more freedom of action than has been possible for the present program in responding to needs other than the first priorities of the Korean Government.

A system of pluralistic linkages. For Korea, as perhaps also for other nations at a similar stage of development, the critical requirement is no longer the procurement of specific bits of advice or assistance for readily perceived, discrete problems and needs, numerous as these still are. It is, rather, the acquisition of institutional machinery, established channels, and effective procedures, plus assured means of support, whereby Korea - for both governmental and private-sector purposes - may continue well into the future to avail itself of the knowledge and professional expertise from abroad necessary to sustain the processes of modernization.

Conversely, the problem for the United States is to provide means which will foster and promote pluralistic relationships and linkages between this country and Korea, in the interest of both the public and private sectors of the two countries. These relationships, whose character should become increasingly nongovernmental, are commonly found among developed countries. They will be necessary, ultimately, to a developing country if it is to become truly self-sustaining.

Accent on cooperation. As has already been suggested, the technical needs Korea will face in the next phase of its development are in many ways of a second-generation order, different both in nature and scope from the type of technical assistance hitherto required. These needs stem from the increasing complexity of Korea's economy, and its pattern of social evolution. They relate also to the present availability of highly qualified manpower in Korea in certain fields and to the country's desire both in and out of government to exercise greater responsibility and initiative in determining what it needs and what it should do.

These circumstances call for new types of technical support and interchange, better and more genuinely characterized as "cooperation" than as "assistance." Many opportunities for the conventional transfer of skills will remain. But in many areas there are complex new problems that will no longer yield to straightforward "know-how, show-how" tutelage. Their solution requires the cooperation of both foreign and local professionals in joint research and experimentation.

Such professional collaboration offers the most promising approach to building up a developing country's problem-solving capability. It is clear that as Korea's development places increased demand on research (in areas such as social behavior or urban problems, for example) joint effort can be expected more and more to yield benefit to both parties.

The interchangeable use of the expressions "technical assistance" and "technical cooperation" tends to conceal important differences in the motivation and attitude of both donor and recipient countries. The panel finds it desirable to apply "technical assistance" to the funding aspect (which is likely to be concessional) and "technical cooperation" to the activity or project instruments sustained therewith as well as to the spirit of professional collaboration which should animate the effort. We believe that future relationships between the so-called "donor" or "advisor" and the "recipient" or "advisee" will call for marked changes. There will be need for a much greater sense of intellectual and professional parity between the parties. This may require a rise in quality and a lowering of the age level of the Americans working with Koreans, to ensure a more productive match between the Americans and the growing number of young, able, well-trained Koreans holding positions of executive responsibility. In the past, the Korean's image of the United States has been that of a "shadow government." This was the consequence of pervasive AID involvement in major areas of decision-making. The new relationships should be free of this notion. They should seek to bolster Korea's newfound sense of self-confidence and independence through genuine professional cooperation. The Korean-American Development Institution, the establishment of which we propose in Part III of this report, is conceived with this end in view.

PART II. NEEDS AND PROBLEMS

Introduction

Part I of the report presented a number of general considerations to explain why Korea will continue to have needs and problems requiring assistance from abroad, why these should continue to deserve attention from the United States, and why future attention should be expressed in new ways.

In Part II the panel reports on its examination of some of these needs and problems (in broad, illustrative terms) and presents measures that seem appropriate to meet them. Part III contains the panel's recommendations for the creation of a new organization the Korean-American Development Institution, to serve as the central instrumentality for mobilizing and administering American resources for long-term technical cooperation with Korea.

On the basis of the panel's limited exposure to Korea, we do not presume to speak with authority and in detail on the requirements for assistance that this complex and dynamic society may have. We state the strongest of our impressions, realizing full well that each member of the panel has a slightly different slant on the important issues, and that persons with much longer experience may see things differently.

We have proceeded on three assumptions:

- (1) That for the purpose of this report it would suffice to present a discussion of critical areas in which necessary and significantly useful technical assistance may be rendered in the future; and that these critical areas relate to certain major and enduring goals shared by the Korean and United States Governments;
- (2) That the above analysis should lend itself to the formulation of a tentative work program, budgeted according to major categories of activity, for the purpose of indicating a desirable level of long-term annual spending;
- (3) That in view of the organization (KADI) and procedures that we recommend for the future, it would be inappropriate for this panel to go beyond the foregoing assumptions, or to pronounce ourselves concerning such aspects as the long-term order of priorities, the relative allocation of funds among them, or the desired mix of program activities. As stressed in a later part of this report, consideration of these variables, and their relative weighting, would be an important function of KADI's future management.

We believe that there are three major and enduring goals shared by the Korean and U.S. Governments, which provide structure and focus to a long-term technical cooperation program. These goals are to:

1. Promote Korea's balanced economic growth;
2. Develop its human and intellectual resources;
3. Further its social and civic modernization.

A discussion of Korea's needs and problems in terms of these goals follows:

Balanced Economic Growth

Economic growth has been the major goal in the past, claiming the bulk of AID's technical assistance resources. Though its importance will not diminish, the overall demands of the economic sector on U.S.-sponsored technical assistance (excluding the field of agriculture) may be expected to decline as Korea becomes progressively more able to pay for particular services needed from the United States, and as it takes advantage of increasing opportunities for cooperation with Japan, other industrial countries, and international agencies.

Economic Planning. The essential mechanisms for effective decision-making (Economic Planning Board) and for vital economic processes (official investment banks, taxation system, etc.) have already been successfully implanted, largely with AID assistance. Korea has reached a high degree of self-sufficiency in basic cadres for economic planning and analysis. Nevertheless, it continues to need high-level foreign expertise: to fill gaps in specific fields where it still lacks strength, and to provide external counsel and professional support for its own planning efforts. Both forms of help will be particularly needed during the latter phase of the formulation of the Third Five-Year Plan (1972-1976). Requests for U.S. advisory services in economic planning and related fields (fiscal and monetary policy, international trade and finance, etc.) should continue to receive sympathetic attention, in view of past U.S. involvement and the intrinsic interest of the subject.

However, serious consideration should also be given to the Economic Planning Board (EPB) proposal for a Korean Institute of Development Economics, and generally to Korea's efforts to acquire a more adequate indigenous planning capability and self-confidence. The proposed Institute's functions would be to conduct ongoing basic research on Korea's development, to provide training in analytical techniques to people in universities, government, banking and private business, and to assist government in the formulation of long-range planning and development strategies.

We feel these purposes might be served more effectively and objectively by an institution with independent academic standing wholly divorced from government, rather than by one directly affiliated with the EPB.

Industrial Development. Diversified industrial development will undoubtedly generate a vast and long-continuing array of technical needs. But to a large extent these will be met through commercial channels outside of government-supported programs. The sharp decline of AID-funded activity in this sector in recent years is perhaps indicative of this trend. The industrial sector, enjoying top priority in Korea's development plan, has access to hard currency. It can therefore make straightforward purchases of the technical services it needs from abroad. Moreover, private foreign investment has become increasingly important in Korea's industrialization and can be expected to become the major vehicle for the transfer of technology and technical services.

However, modern industrial management is an important potential area for technical cooperation. The demand for professionally trained managers will soar in the coming decade. Korea will need help to achieve an adequate local training capability in this field. Consideration might be given to assistance for the upgrading of existing schools of business administration and management or for the establishment of a wholly new institution, or both.

Specific areas of weakness in Korean industry (quality control, cost control, etc.) to which the Korean Productivity Center (KPC) addresses itself, might be met by the provision of consultants and advisors to KPC plus training opportunities for its staff members abroad. Both approaches would strengthen KPC's services to Korean industry.

Other industrial countries (Japan, West Germany, etc.) are acquiring strong interest in Korea's economy through trade and investment. They may be expected to provide Korea with an increasingly broad range of cooperative assistance, as in fact Japan already has in such fields as productivity and technical training.

Physical Infrastructure, Natural Resources, and Energy Development. As with industrial development, Korea's growing foreign exchange resources earmarked for physical infrastructure, natural resources, and energy development, as well as her ability to secure foreign loans, should make her able to pay for most forms of technical assistance required for these purposes from abroad. Korea will require various types of facilitative and referral assistance to secure participation and services of appropriate U.S. Government agencies and private consulting organizations, primarily for surveys, and for engineering and feasibility studies.

Agricultural Development. Despite considerable AID capital and technical investment in the agricultural sector, and the establishment of essential rural development institutions, the progress of this

sector still falls far short of requirements for balanced economic growth. Crop yields are well below their potential; agricultural productivity is nearly static; rural incomes are lagging increasingly behind rural incomes; and Korea's substantial foreign currency expenditures on food imports impede her overall growth. One cause may be the ambivalent attitude of national policy-makers toward the agricultural sector and their tendency to downgrade its importance in the Korean economy. Other causes include the difficulty of inducing change in a rural world bound by isolation, enormous debt, uneconomic, small landholdings, and unfavorable pricing policies. Governmental failure - at national and local levels - to approach agricultural development with systematic, comprehensive, and persistent efforts in training, research and extension; its inability to formulate sound credit and marketing policies, and to acquire effective planning and management capabilities: all these indicate some of the tasks that remain to be tackled.

We believe that real progress in the agricultural sector is critically important for the future stability and well-being of Korea and that there is need for continuity of the technical and advisory presence the United States has maintained in this field. We conclude that agriculture and rural development should remain a prime element of future U.S.-Korean technical cooperation, at a level of funding perhaps even higher than in the past.

Needs for advisory activities at many levels of decision-making that affect both technical and policy matters will persist. However, the major thrusts of a continued technical cooperation program should be directed to the strengthening of Korea's capabilities in agricultural research and development and teaching, as well as in planning and economic analysis. The Office of Rural Development and the SNU College of Agriculture, were they to collaborate rather than ignore each other, could with the aid of technical cooperation inputs provide a base for the development of an effective integrated teaching, research and development program. In this connection, the recent proposal jointly submitted by these two institutions to the Rockefeller Foundation represents a promising step forward. We subscribe to the substance of that proposal. In the absence of foundation sponsorship, we believe support for the purposes sought should be made a part of the broader program of technical cooperation in agriculture advocated here.

Lack of competence in economic and statistical research and analysis in the Ministry of Agriculture has handicapped agricultural policy development and long-range planning. Advisory and training assistance will be required to help the Ministry set up an appropriate unit, and also to strengthen the Agricultural Economics Institute in the Office of Rural Development. With enhanced planning capability and better economic data, Korea should be able to use techniques of modern systems analysis in the formulation of her agricultural policy, con-

certing diverse factors and inputs required to achieve her objective, whether these be increased production of a single crop or the better utilization of an agricultural area.

These objectives might be achieved through long-term contract missions from an American institution or consortium of institutions.

Human and Intellectual Resources

Poor in natural resources and arable land, Korea must rely for her economic advancement on the most efficient use of her most conspicuous asset, the skills of her population of 30 million. In emulation of Japan, whose resource base is similar, Korea has chosen industrialization as the most productive means of mobilizing her people for development. The success of this strategy rests on at least two imperatives: (1) the availability of an educated and skilled labor force; and (2) a capacity to use science and technology as the motive forces of development.

For a nation but recently emerged from an agrarian, traditional past, these imperatives necessitate the compression of great intellectual and cultural changes into the lifespan of a single generation, changes that modern industrial nations such as Japan underwent over the course of a century.

There is evidence of awareness by the Korean Government that such changes must be planned. Its ambitious manpower-development schemes and programs for the promotion of science and technology so testify. However, there is less evident of an ability or willingness by the Government to finance or execute these measures.

Education in Korea has undergone two revolutionary transformations since World War II: an explosive growth, especially in secondary and higher education; and a fundamental though not yet pervasive shift in orientation from Japanese to American educational philosophy. AID capital and technical assistance and the efforts of other public and private American agencies have contributed decisively to these changes over the years.

Korea's school system, particularly at the secondary and higher levels, now faces acute problems, the consequences of rapid, uncontrolled expansion, heightened by the society's changing character and requirements. Government institutions have been badly under-financed. So, too, have most of the private institutions, which bear the brunt of secondary and higher education, though free of effective government supervision. Severe overcrowding, teacher shortages, outmoded and

unbalanced curricula, lack of materials and equipment - all combine to produce instruction of generally low quality and often of limited relevance. The distribution of graduates according to specialties has little relation, either in numbers or quality, to actual manpower needs of the various sectors of the economy. In addition, Korea still has only limited capability to provide doctoral-level training at home and virtually none in the sciences, engineering, and agriculture. Obligated to send her best students abroad to obtain advanced qualifications, Korea has become especially vulnerable to the "brain drain."

The establishment of the National Council for Long-Range Comprehensive Educational Planning early this year suggests that the Korean Government is about to set a new course in the field of education.

Significant reform of Korean education, if it should come about, will generate considerable financial needs, most of which Korea will have to meet from her own resources, supplemented by loans from bilateral and multilateral sources. It will also generate many technical needs which the panel feels the United States, in view of its prior role in Korean education, should attempt to supply within the framework of a technical cooperation program as suggested below.

Educational Policy, Planning, and Research. AID is already assisting the Long-Range Planning Council by underwriting the advisory services of several American educational specialists. Needs for top-level advisory and consultative services will undoubtedly persist for years. The recommendations of the Council will themselves generate demands for additional varieties of expertise. Some of these will have to be obtained via American specialists, while others will have to be acquired by Koreans in training programs in the United States. Demands on the few educational and manpower-research institutes (Korean Institute for Research in Behavioral Sciences, Central Education Research Institute, SNU Educational Research Institute, Institute of Population Problems, Manpower Development Research Institute, etc.) for research, analytical, advisory, and materials development services, can be expected to multiply greatly. The capacity of these units to respond effectively will need to be considerably strengthened.

Primary, Secondary, and Vocational Education. The free, compulsory six-year primary cycle, to which the government now devotes over three fourths of its education budget, does not appear to be of immediate concern to Korea's officials. The critical bottleneck lies in the long-neglected secondary and vocational-technical segments of the educational system. These supply the bulk of trained manpower to Korea's industry and agriculture, but receives far less (about 15 percent) of the nation's budget for education.

This allocation may be enlarged slightly in the future. The designated funds will still fall far short of meeting Korea's enormous, urgent requirements for qualified teachers, buildings, new curricula, and equipment. Korea is accordingly giving serious consideration to new educational technologies - wide-scale educational television, programmed instruction, team teaching, etc. - as the only hope for closing the gap.

Korea has contracted for a \$14.8 million loan from the World Bank to upgrade a number of secondary and post-secondary vocational and technical training institutions. AID is also contemplating an educational loan of similar magnitude, with the still tentative objectives of further strengthening secondary and post-secondary vocational and technical training, of equipping university science and engineering departments, and of providing various inputs related to the development of educational television. This loan and others that Korea might obtain in the future from the United States will normally include the technical assistance costs entailed by the project(s) being financed. To the extent that Korea resorts to U.S.-financed loans, she will need various facilitative and referral services in the recruitment of American personnel, the placement of Koreans in American educational and training institutions, and the procurement of equipment on the U.S. market.

While loans may dispose of certain large-cost programs, the scale and complexity of the reform and modernization task will undoubtedly stimulate many additional requirements for discrete types of assistance, especially of an experimental or innovative character. For example, Korea may find it profitable to explore the applicability of advanced training techniques developed and used in American industry, in non-academic institutions, and in the defense establishment.

Higher Education. Of the large number of establishments in Korea's system of higher education, only a few can claim to be institutions of higher learning by the standards of advanced countries. Seoul National University and the privately supported Korea, Yonsei, and Ewha Women's Universities are among the most important. The Korean Government has pursued an essentially laissez-faire policy in higher education, devoting to it less than 10 percent of its education budget, leaving it to private expenditure and private initiative to satisfy the bulk of the nation's demands for higher-level manpower. Consequently, there are very wide qualitative disparities in the system, which may be overcome, at least in part, through public action, such as the imposition of curricular standards and accreditation criteria. The Korean Government recently took measures to control university admissions by national examination and to limit student enrollments by stricter enforcement of institutional quotas.

From the standpoint of our inquiry, the chief deficiency of Korea's higher education is the absence of centers of advanced teaching and research appropriate for a nation of Korea's size, capabilities, and ambitions. (It bears noting that it generally takes such centers eight to ten years, if not longer, to reach full development.) Korea needs centers sufficient in quality, number, and diversity to: (1) provide the country with high-level manpower over a broad professional and disciplinary spectrum; (2) give the nation the intellectual, cultural, and scientific stature necessary for self-sustaining interaction with more advanced countries; and (3) relate the academic community and its resources more closely to the development effort of the nation.

We are aware of the ten-year comprehensive development plan recently formulated by SNU. This plan envisages administrative and academic integration of the colleges and schools, improvement of graduate education and research, and restructuring of undergraduate programs. These changes should open the way for modernization of the University's entire educational process. Since SNU is the most prestigious institution of higher education in Korea, its initiative can be expected to have wide impact throughout Korea.

Without committing ourselves to the details of the ten-year plan, it is clear to us that SNU should be given every encouragement and support to realize its goals. We would consider it unwise, however, to restrict U.S. participation in such an effort to SNU alone, thereby risking creation of an unbridgeable gulf between it and other ranking Korean institutions. They are critically important national resources. Since it is government-supported, SNU will probably have less difficulty financing its development than the private universities.

We therefore propose a long-term multi-institutional development program to help several key universities, including at least one provincial institution, make needed improvements in administration, teaching, research, curriculum, library and laboratory facilities, etc. Primary emphasis should be placed on their graduate programs, to help individual departments which already possess graduate disciplinary strength to reach full doctoral-level teaching and research competence in fields relevant to national needs.

Clearly, Korea has reached a point in its development that warrants such competence. The availability of advanced, high-quality centers will reduce the outflow of talented students seeking training in foreign universities, and hence lower the risk of losing them to the "brain drain," and will also draw back to Korea outstanding scholars who have settled abroad. The experience of the Korean Institute of Science and Technology (KIST) suggests the availability in the United States and elsewhere of a large pool of Korean talent willing to return if offered favorable incentives. (Taiwan has recently made this type of approach

in the principal fields of science, engineering, agriculture, and economics, albeit through the establishment of special inter-university centers of advanced study having their own higher-salaried special chairs. This approach may commend itself to Korea also.)

A program of assistance might include support for training and updating for Korean staff, visiting professors and specialists (Korean and American) from the United States, and books and equipment. Attention should also be paid to the infrastructure for these institutions, e.g., libraries, documentation services, and publishing facilities.

Other elements of higher education also warrant attention and support. These include professional societies, learned bodies, interdisciplinary research councils, and units that can cut across and link the differentiated and competitive institutions that now dominate and divide the Korean academic scene.

Science Policy, Planning, and Organization. The Ministry of Science and Technology (MOST), established in 1967, is now the Korean Government's chief advisory, planning, and coordinating agency for the promotion of science and technology. With its wide range of responsibilities, MOST may become a powerful instrument for organizing the nation's scientific and technological effort. As a counterpart to the Economic Planning Board, MOST relates manpower, research and development and technical assistance requirements to growth and development targets set by the economic planners. MOST screens the Ministries' proposed research and development projects for technical merit and adherence to research and development investment guidelines. MOST is also engaged in studies and forecasts of long-range manpower needs and national research and development goals, which are to be reflected in future development plans.

Because of its probable future impact on planning and resource allocations, we feel that MOST might benefit considerably from periodic external reviews and critiques of its policy-formulation processes and priorities, its manpower and technology forecasts, and its efforts to coordinate research and development within government. It is open to question whether MOST has adequate organization or statutory authority to perform effectively the tasks and functions implicit in the conduct of a comprehensive national science policy. (For instance, we fail to find within the structure and activities of MOST or of any other Korean agency a mechanism comparable to our National Science Foundation, which can support basic research in universities and independent institutes.) A formal review procedure, such as that employed by the Organization for Economic Cooperation and Development (OECD), or an informal workshop approach such as that developed by the National Academy of Sciences in its various bilateral science cooperation programs, would help reveal structural and other weaknesses and ensure the soundness

of this critical input into Korea's planning and decision-making processes. Indeed, senior officials of MOST might benefit from participation in special science-policy programs at leading U.S. universities.

Cooperation in Science and Technology. We believe that in KIST Korea possesses an institution of remarkable potential as an aid to industry and government in solving their technical problems and as a symbol of the excellence and modernity that must characterize the scientific effort. Development of Korean science and technology should go well beyond KIST, however. In recent years this institution appears to have become the consuming preoccupation of Korean leaders, seemingly to the neglect of other, equally urgent matters.

KIST aside, the general condition of Korean science and technology is one of acute poverty. As official reports acknowledge, the allocation of national resources to this sector is grossly inadequate for minimal needs, not to speak of Korea's ambitious goal to attain a high level of scientific and technological proficiency by the mid-1980's.*

- There is no defined policy to allocate a reasonable fraction of national research and development investment to the support of university basic research. The value of applied, problem-solving research appears well enough appreciated by economic planners and political decision-makers. The importance of basic research, as a necessary element in the training of the nation's future scientists and technologists, is not recognized.

- Many of the nationally supported research and technical service laboratories appear to operate at a very low level of productivity. Yet these laboratories consume 95 percent of the government's annual \$10 million research and development budget. Among the causes are weak management, unrealistic project selection, poor-quality staff, and inadequate financing.

- Korean university scientists and technologists have relatively few contacts with their counterparts in more advanced countries. For this reason, in part, their modest research activities lack competence and relevance.

*Evaluation Report of the Second Year Program, 1968. The Second Five Year Economic Development Plan. Office of Planning and Coordination for the Prime Minister, ROKG, June 1969.

Long Term Manpower Forecast and Development Policy, 1967-1968. MOST, ROKG December 1968.

- Equipment and facilities available for the teaching of science and technology at all levels of the educational system meet only a small fraction of the estimated requirements.

Many of these problems can be remedied only by the allocation of substantially greater resources by the Korean Government. The situation of certain selected establishments might be further aided through institutional development grants referred to earlier.

As part of a total approach to these problems we call attention to important opportunities for promoting the development of Korean science and technology via organized bi-national cooperative projects. These might take the form of workshops exposing top-level officials from various Korean ministries, plus leading individuals in the private sector, to the experience and ideas of informed American counterpart groups in broad areas related to the application of science and technology to economic development. Such workshops should serve to heighten awareness of key policy problems, promote inter-agency formulation of recommendations entailing coordinated effort and commitment, and motivate appropriate action. Current programs of the National Academy of Sciences in eight countries of Asia and Latin America suggest the effectiveness of this approach.

The performance of the national laboratories might benefit appreciably from periodic consultations with visiting committees or individuals drawn from counterpart institutions in the United States, and by the establishment of direct channels to foster exchange of research personnel and information. Further, the capacities of individual researchers, research institutes, and educational institutions might be considerably enhanced by the undertaking of joint research projects with cooperating units in the United States. The U.S.-Japan Program for Scientific Cooperation offers a particularly relevant model, though its emphasis is on collaborative research activity conducted mostly in Japan by individual American and Japanese scientists.

Scientific and Technical Information. The Korean Science and Technology Information Center (KORSTIC) has made promising beginnings in systematizing the inflow and diffusion of information on scientific and technical developments published in Korean and foreign journals. With its forthcoming relocation in a new, specially designed and equipped building, its projected shift in the early 1970's to electronic data processing and advanced distribution techniques (teletypewriters, etc.), and its intended greatly enlarged canvass of foreign titles, KORSTIC has the opportunity to pioneer in a field in which few developing countries have made significant headway.

KORSTIC's services are at present limited to the processing of periodical literature. It has not established liaison with the important

data banks of international organizations (the U.N.'s Food and Agriculture Organization, Industrial Development Organization, for instance), or of national agencies in the United States and Western Europe. (The Clearing House for Federal Scientific and Technical Information, a unit of the U.S. Department of Commerce, is one of a number of major American information sources KORSTIC could tap.)

As Korea's central channel for the procurement of foreign scientific and technical information, KORSTIC warrants continuing attention. In particular, it should be helped to take advantage of freely available information services abroad, and to orient itself to the rapidly changing information technology and international information-exchange systems of this era.

Social and Civic Modernization

We propose to use the term "social and civic modernization" as a unifying concept for a variety of problem areas that are predominantly social and political in character. Some of these fit logically under this heading by virtue of conventional definition; others do so conveniently by virtue of Title IX considerations. Most of these problem areas bear close relation to higher education since they require enhanced indigenous capability in various types of advanced training and research. Among these the social science disciplines are particularly relevant to social and civic modernization and provide exceptional opportunities for genuinely cooperative and mutually beneficial activities by Korean and American professionals.

We consider here only a few, more visible problem areas, primarily to illustrate the crucial relevance of social and civic modernization to the future development of Korea. We are mindful of the fact that in a situation of dynamic growth, problems infringe upon each other and are not easily categorized or treated under separate headings.

Although we mention such matters as law and legal institutions, labor and legislative processes, etc., we wish to emphasize that we have not had an opportunity to study these aspects in depth, nor to consider adequately new ways of bringing technical cooperation to bear upon them. Our analyses and prescriptions make no attempt at originality. They are intended rather to convey the importance of these problem areas, and the need for a new organization, KADI, to devote sustained attention and study to them in coming years.

Special note needs to be made of The Asia Foundation, in Korea, which, through its manner of operation and its program emphasis, serves as an important instrument to achieve Title IX objectives. Nearly all the problem areas upon which it has focused its very modest resources will, under one guise or another, deserve long-term application and support.

We recognize that, at the level of national policy-making, the termination of the U.S. capital-assistance program may greatly reduce whatever opportunity we may have had to influence the Korean Government toward fulfillment of Title IX objectives. However, we see alternative possibilities for the future through the use of technical cooperation resources planned and applied in combination with external loans.

We also sense significant possibilities of enlarging government awareness of social problems and of influencing official policy through sponsorship of independent policy-oriented studies prepared by Korean academic and other qualified groups.

Urban and Regional Development. Unprecedented industrial growth, labor migration, and urbanization present Korea with vast new problems: sharp regional disparities; widened gaps in welfare between city and country, and between new migrants and established city-dwellers; and inadequacy of urban facilities and services. Urban conditions will worsen considerably in the coming decade as the population continues to shift from the countryside to the cities.

The Korean Government has indicated its intent to make regional planning an integral part of national planning, in the formulation of its Third Five-Year Plan, in order to obtain a more balanced distribution of national investments among the provinces and regions. It hopes that among other measures a policy of industrial dispersion will produce a more equitable spread of the benefits of economic growth, as well as a reduction of population pressure on the principal urban centers. Concurrently, the government and city administrations (with Seoul impressively in the lead) will turn to the enormous problems of the cities themselves, developing long-term programs in housing, transportation, utilities, etc.

The tasks of regional and urban planning call for a vast array of skills from virtually all the applied disciplines and professions. The scope and irrevocability of many regional and urban planning decisions make it mandatory that Korea have highly qualified personnel with substantial experience, yet such personnel are in short supply in Korea. This will make her dependent on foreign advisors and technicians in the years immediately ahead. Korea has already applied to the United Nations Development Program for a team of specialists in physical regional planning, and to the United States for the long-term services of an expert experienced in coordinating the work of regional planning at the national level. She has also requested other planning and technical experts, including an urbanologist, for shorter-term assignments.

These are initial needs, occasioned by the preparation of the Third Five-Year Plan. Others, of a perhaps more diversified character, can be

expected to materialize as Korea moves from overall planning to implementation, and formulates more systematic and comprehensive programs to alleviate the plight of her cities.

We believe that Korean higher education will have a key role to play in developing Korean competence in urban and regional planning and research. A promising program, now in its second year, is the multidisciplinary Department of Urban and Regional Planning of the SNU Graduate School of Public Administration. This year, Yonsei University established the Institute of Urban Problems. Both of these centers deserve attention and support.

The United States is, of course, beset with grave urban development problems of its own. In responding to Korea's needs for experts in this and related fields, it may be that our country can gain as much from this type of technical cooperation as can Korea itself.

Law and Legal Institutions. The modernization of Korean law and legal institutions confronts the nation with one of its most challenging tasks. In the midst of great social and economic change Korea continues to make do with what appears to be an archaic, rudimentary legal system increasingly irrelevant to the realities of present-day life. The rule of law has not been a central concept in Korean political and cultural tradition. Law has served neither for the protection and advancement of human rights or commercial property rights, nor as a vehicle for orderly social and political change. Rather, it has been viewed more commonly as the personal instrument of those in power and, not infrequently, as a support of governmental oppression. Such attitudes have important consequences for Korea's democratization process as well as for her industrial growth and commerce.

The Asia Foundation initially, then the Fulbright Program and more recently AID/Korea, have recognized the implications of this evolutionary lag. They have supported projects along a broad front designed to stimulate modernization of Korea's legal education and research, legal institutions and judicial practice, as well as the competence of members of the various branches of the legal profession.

These efforts are beginning to show positive effects and should in time produce at least one major institution, the SNU Graduate School of Law, and perhaps a secondary one, the Korea Legal Center, committed to change and capable of providing effective leadership. But change in so complex and deep-rooted a system as law is a function of time and lateral exposure. The International Legal Center is now engaged in a three-year, AID-funded project in collaboration with the above-mentioned institutions. It involves the exchange of legal scholars, jurists, and practicing lawyers, academic and informational programs, and other activities. Subject to satisfactory progress, this project warrants continuation and perhaps expansion over a longer period.

Public Administration. In Korea, as in many other developing countries, the effectiveness of a wide array of government-supported programs is gravely hampered by inadequacies of administration. The constraint of administrative feasibility is no less serious a problem for development programs than are shortages of raw materials, human resources, and capital funds.

With the assistance of AID, much has already been done to strengthen the administrative capabilities of the Korean Government. This is evidenced, for example, in the work of the Economic Planning Board, the Ministry of Science and Technology, and the Ministry of Government Administration. In addition, a first-class center for advanced education and research has been created in the SNU Graduate School of Public Administration. In-service training of public officials has been carried out on a large-scale through the National and Local Officials Training Institutes.

Despite these advances, further progress can be achieved through new approaches. One approach is the application of systems analysis to programs carried out through two or more governmental agencies, and frequently also involving one or more nongovernmental institutions. A useful illustration is the situation of the Ministry of Education's SNU College of Agriculture and the Ministry of Agriculture's Experiment Station, which, though neighbors, do not function together. A technical cooperation program might provide stimulus, sanction, and expertise for studies of the administrative component in every program effort, particularly from the standpoint of its relation to the overlapping activities of other government agencies. Such studies should be linked with academic research, on the one hand, and the leading centers of power and decision-making on the other.

Another administrative development approach would look beyond the formal structures of the executive departments of government to the roles that extra-governmental institutions can play in the implementation of official policies and programs. Government should be able to rely increasingly on private agencies, corporations, associations, local and regional authorities, and other entities for assistance and cooperation in carrying out its goals. This would lighten the burden carried by government units and allow them to perform their non-transferable tasks with greater efficiency and effectiveness. The strengthening of selected nongovernmental institutions and the devolution of various responsibilities to them opens a new range of problems in developmental public administration. These offer a fertile field for professional cooperation and research along both interdisciplinary and comparative lines.

The improvement of information systems in support of developmental objectives provides a third area of opportunity. Korea's government agencies, legislative and judicial bodies, universities and technical institutes, and the private sector generally have rapidly growing information requirements. The function of KORSTIC with respect to current scientific and technical publications has already been noted. Analogous services are required in other fields related to social and civic modernization and the social sciences. Government archive facilities are utterly inadequate to meet the demands of effective administration. There is urgent need to improve the National and Diet Libraries and to devise means to link the many separate and autonomous libraries now found in Korea so as to optimize their effectiveness and utility. Many other measures - from union cataloguing and the automation of bibliographic control to the establishment of national councils and associations in related professional fields - are needed to promote and coordinate the information effort, to create a useful internal data network and to facilitate linkage with external systems. (The automated bibliographic system relating to Korea, sponsored by the Human Relations Area Files in New Haven, Connecticut, is an obvious example.) U.S.-Korean cooperation in academic and technical spheres could make a decisive contribution toward providing Korea with an information system more adequate for her needs.

Labor. Korea has an embryonic labor union movement in the Federation of Korean Trade Unions and its 16 constituent unions (with a nominal membership of over 400,000). With continued industrialization, Korea's workers can be expected to become an important social force. Their unions may well become an effective potential vehicle for promoting worker welfare, self-help initiative, and participation in political life.

At present, however, it appears that the government's attitude toward labor is one of suspicion and restriction. Labor leadership serves as an instrument of government to control the trade union movement, rather than as a spokesman and guardian of labor interests. The attitude of government is dictated perhaps as much by the need to maintain a low-wages policy (to preserve Korea's competitive advantage over neighboring countries) as by fear of labor acquiring independent political strength and becoming a disruptive force.

Despite the political sensitivities and economic dangers that may attach to development of trade union activity, we feel it is important to promote a constructive and responsible Korean labor movement. This will depend as much on the policies of government - to obtain a more liberal and enlightened view of labor and labor problems - as on the management cadres of industry and the trade union leadership.

We believe that various approaches already considered by AID deserve implementation and long-term support. These include the use of American labor unions to conduct training programs in trade union leadership, skills development, organization and management of cooperatives, housing and social welfare schemes; training of labor leaders at the Asian Labor Education Center of the University of the Philippines; support for the Sogang Labor Management Institute for its management-labor training and research programs in cooperation with trade unions, employer groups, and other universities; U.S. training programs in worker-education techniques and labor-management relations; and assistance to the Korean Federation of Trade Unions for improving union information activities.

The Legislature. Korea's evolution toward modern democratic government will be aided in good measure by the ability of the National Assembly to exercise more effectively and constructively the powers given to it under Korea's constitution. It appears the Assembly has not managed to do so till now, for a variety of reasons not wholly related to the authoritarian character of the executive branch. Weaknesses in party organization, as well as lack of coordination (and often open competition) between the government party and the President's Office have frequently handicapped the operation of the Assembly. Ambiguity regarding the Assembly's role vis-a-vis the executive, and the feebleness of the opposition party and its lack of a distinctive program of its own, are among the many other factors that account for the Assembly's present ineffectiveness.

While we recognize that the character and productiveness of a legislative assembly are determined by complex, largely external circumstances, the operational efficiency of the institution remains susceptible to improvement by internal action. Several technical cooperation activities are available, some of which have already been used by The Asia Foundation. For instance, under the auspices of the

American Political Science Association, Korean legislative staff members have participated in our Congressional Intern Program.

Similar programs might be developed jointly for staff members and legislators, especially those associated with important Assembly committees. University law and political science teaching and research programs which emphasize the improvement and professionalization of law-making functions might be developed. In-service training programs, seminars, and conferences for legislators and their staffs might serve a similar purpose. All these approaches might derive added potency and interest from the participation of American political scientists versed in comparative legislative procedure, and from U.S. professional federal and state legislative staff members.

Social Welfare, Health, and Family Planning. The first two Five-Year Plans paid little attention to the social aspects of industrialization and development. Serious social problems caused by migration, occupational dislocation, breakdown of the traditional extended family system and urban crowding, are expected to become even more acute in the next decade as rapid industrialization continues.

Although it is still uncertain whether the Korean Government will attack these problems in earnest, concern is now emerging in various government quarters as it becomes more apparent that these problems pose a threat to stable economic growth. To undertake effective social action, the Korean Government will surely have to enlarge its competence in a broad range of planning, management, research, and training functions related to labor and wage policies, social security, health programs, and other social areas in which it has little or no prior experience. It is thus possible to forecast a variety of urgent needs for advisory services for the training of Koreans abroad, and for the strengthening of indigenous training facilities in these social-problem fields.

Substantial efforts have been devoted to family planning but Korea's public health programs remain rudimentary. Rural areas particularly need health services and better coverage by family planning programs. In the formulation of new or expanded health programs there appears to be an unusual opportunity for experimenting with comprehensive delivery systems which combine family planning and preventive medicine, while emphasizing hygiene, improved sanitation, and better water supply and food sources.

We assume the United States' commitment to the resolution of the world population problem will persist into an indefinite future, and that substantial funds will continue to be available in Washington for this purpose. A number of well-established instrumentalities -

the Population Council, International Planned Parenthood Federation, for example - are already receiving major support from AID, and are engaged in operations in Korea. We believe that, within the framework of their contracts with AID, these organizations should continue in the future to serve as the principal channels for U.S. resources intended to help Korea in this problem area.

Public Safety. The problem of internal security is likely to persist as long as the two Koreas remain in hostile confrontation. It is possible that future circumstances will call for further U.S. assistance in this area. Because of its sensitive character, we feel that such assistance should continue to be handled on a direct government-to-government basis, independent of the channels for technical cooperation we advocate in this report.

The Elements of Technical Cooperation

Having indicated the areas which we deem appropriate to a continuing technical cooperation program, we now turn to the activities, techniques, and instrumentalities that should compose it. These elements are actually complementary devices. They may be used in varying combinations in different problem areas and fields of endeavor, according to circumstances.

Facilitative and Referral Services. As already noted, it is expected that Korean Government agencies will be able increasingly to assume the burden of paying for the technical services they wish to obtain from the United States. Such financing can come from their own resources, or from project and sector loans secured from the United States, or from international lending institutions. Loan agreements normally provide for the technical aspects of the project or program being funded, but they leave responsibility for the procurement of experts, commodities, etc. to the borrower. AID has furnished various types of procurement assistance to the Korean Government, either as an integral part of a loan-funded or concessional technical cooperation project, or as a courtesy in the normal course of intergovernmental business. Such assistance has included contractual negotiations with U.S. firms, institutions, and organizations; liaison with U.S. federal agencies for the supply of technicians; and identification of potential suppliers of services, commodities, and training. Need for these and other types of assistance will persist, and should be seen as an important aspect of a continued technical cooperation program.

Institutional Grants. We believe that institutional grants constitute a flexible instrument adaptable to a wide range of purposes. Subject to appropriate conditions and accountability, such grants have the merit of placing on the grantee the burden of initiative and responsibility for project implementation. Institutional grants should be made at first to graduate or advanced-level educational, research

and training institutions in Korea, on a limited and selective basis, in order to develop the essential "breeder" establishments Korea requires at the core of its educational, research, and training system. Grants for this purpose might be administered wholly by Korean institutions, or jointly by Korean and American institutions, possibly through university-to-university contracts. Grants might also be made to certain lower-level educational and training institutions to stimulate the introduction of educational innovations, new disciplines, and new training capabilities.

Recipients of institutional grants might also include intermediate organizations, such as the proposed Korean social science research council, and other academic and intellectual bodies charged with promoting the coordination of effort, exchange of information, and maintenance of professional standards. Two established organizations - the Asia Foundation in Korea and the U.S. Educational Exchange (Fulbright) Commission - which already serve as important channels for technical cooperation, and whose concerns relate to many of the problem areas we have identified, should also be assisted, via general-purpose or specific-purpose grants.

Individual Fellowships, Training Grants, etc. A program of fellowships would permit individual Koreans of exceptional promise or achievement to undertake study and research at the graduate and post-doctoral levels, or to attend institutions for non-degree career-development purposes, in the United States or third countries. This activity should be supported as an essential ingredient of any sound program for professional cooperation. It should be directed largely toward enhancing and maintaining the competence of high-quality people already employed by private and public institutions in Korea. Fellowships should be fully funded for the anticipated duration of the sojourn abroad and should include provision for the fellow's family to accompany him.*

Continued support also should be given the Korean-American Technical Cooperation Association (KATCA) to help it develop as a major liaison and processing agency providing the Korean Government and its public agencies access to short-term, specialized training opportunities to the United States and third countries. Such support should include funds to allow KATCA in certain circumstances to supplement or match Korean contributions toward training expenses.

*Present AID regulations, which make no such provisions, inhibit sponsorship of foreign students for advanced graduate and post-doctoral work in American institutions.

Advisors, Specialists, and Visiting Professors. A broad-gauge flexible program is needed to help important institutions - especially government agencies, industrial firms, universities, and research organizations - obtain from the United States and third countries the services of advisors, specialists, and visiting professors who can make a significant contribution to Korea. It is our assumption that much of the professional and technical advice needed by Korean institutions can be financed either by their own funds, through the institutional grants discussed above, or from other sources. However, a means is required to help identify sources of competent advice, to "top-up" Korean financial resources when needed, and occasionally to provide the entire cost of individual or teams, if this is essential to obtain high-quality talent.

U.S.-Korean Collaborative Research and Institutional Linkages. A major effort is needed to stimulate and support professional collaboration in a variety of forms between Koreans and Americans. Such collaboration has a two-fold purpose: to upgrade Korean competences rapidly in selected fields, and to create effective and lasting linkages between opposite-number institutions and individuals in the two countries. Useful examples of this include the Japan-United States Program for Scientific Cooperation, administered by the National Science Foundation; the Sino-American Science Cooperation Program of the National Academy of Sciences; the Sino-American Program for Cooperation in the Humanities and Social Sciences of the American Council of Learned Societies and the Social Science Research Council; and the International Liaison Committee for Research on Korea (ILCORK). These and other arrangements, such as collaboration between scholarly and professional associations in Korea and the United States, and ad hoc seminars and conferences, can be expected to yield clear dividends in such areas as joint study and research, policy formulation, research design, and publications.

Sponsorship of Research and Innovative Projects. A fund should be available to permit commissioned studies and sponsorship of Korean research oriented to issues of wide public or governmental interest. This program would extend the valuable work of the Trust Fund in promoting the development of social science research in Korea but would have more latitude with respect to the use of funds and selection of research problems. The latter might include multi-disciplinary and technical-feasibility studies designed to acquaint the government with emerging problems and alternative courses of action.

Creativity and innovation in technical cooperation entails a capacity to experiment, i.e., to risk funds on new approaches the outcome of which is not easily predictable. We consider it highly important that a continued technical cooperation program include the provision of reasonable funds that can be used with flexibility and dispatch to support exceptionally promising projects or ideas. It is

precisely in its ability to support such innovative and experimental activities that a program of professional and technical cooperation differs most conspicuously from older and more conventional programs of technical assistance.

PART III. IMPLEMENTATION

Organization

In addition to formulating the various needs and lines of action that the panel feels to be important to the continuing progress of Korea's development, we have given serious consideration to the matter of implementing these recommendations. In broad terms we have considered the following issues:

1. How Korean and U.S. interests should be balanced
2. How governmental and private interests within both countries should be balanced
3. Whether existing machinery is adequate or new machinery desirable

Our conclusion is that a new institutional mechanism is required, charged with sponsorship, promotion, and (to a limited degree) administration of the various activities detailed in the previous part of this report. We have examined five alternative approaches to the implementation of our recommendations, as described below. The fifth of these options appears to be the best choice, to most of the members of the panel, and comprises our main recommendation. To facilitate an understanding of the discussion that follows, we set forth immediately the operational characteristics of the new organization that appear necessary:

- (1) Freedom, within the limits of its charter, to apply its resources to priority objectives determined on the basis of its own continuing study of Korean society and of the country's developmental needs;
- (2) Responsiveness to project proposals formulated and presented by Koreans, without excluding the institution's own exercise of initiative in stimulating requests for proposals;
- (3) Capacity to respond to nongovernmental as well as governmental requests;
- (4) Maintenance of clear-cut separation between grant-making processes and advisory functions;
- (5) Commitment to innovation and the support of experimental and creative forms of technical cooperation;
- (6) Procedures favoring prompt response to requests; and

- (7) Minimal operating functions, small administrative staff, and low overhead.

Of the various institutional and administrative approaches that occurred to us, we concluded that an autonomous, nongovernmental organization with the characteristics outlined above would provide the most suitable mechanism for the purposes we have recognized. Its name might be the Korean-American Development Institution (KADI). KADI could be a bilateral organization, with joint funding and management, or it could be a purely American organization, aided by a strong Korean advisory board.

We prefer the first of these alternatives - a bilateral organization - assuming as a necessary pre-condition that Korea would undertake to contribute part of KADI's core budget on a regular basis. Bilateral or not, KADI would operate via grants and contracts, generally on a matching, topping-up, or joint-participation basis with Korean recipient agencies. The structural and operational characteristics of the various options considered by our panel are examined in greater detail below.

1. Continued administration of technical cooperation in Korea via AID/Korea. This alternative has the advantage of enabling the U.S. government to pursue existing and new technical cooperation activities within existing machinery without the necessity of securing new legislative and executive sanctions. This course appears to suffer from the following disadvantages, however.

- a) It keeps technical cooperation largely within a government-to-government context.
- b) It maintains the complexity of legislative and administrative restrictions that characterize direct operations of AID at present.
- c) It continues certain disadvantageous modes of operation and conventions of administration that have become deeply rooted in the agency during the last 20 years.
- d) It maintains the fusion of advisory and fund-allocating functions exercised by AID staff that has frequently been the cause of ambivalence and cross-pressures among the staff and clientele groups.

Moreover, it is probably correct to say that, given the limitations under which it now operates, AID is at a considerable disadvantage in the market competition for the kinds of professional, scientific, and intellectual talent that need to be mobilized for a new pattern of technical cooperation in Korea.

2. United States financial contributions administered through a Korean governmental technical cooperation agency. This alternative would have the advantage of placing initiative and responsibility almost wholly in Korean hands. However, we consider this alternative undesirable because:

- a) In view of the centralization of decision-making in the executive branch of the Korean Government, it would not promote the emergence of pluralistic forces and institutions.
- b) It would not serve the interests of the United States well in the event of a significant difference over priorities arising between the two countries.

For these reasons we think it unwise to relinquish to any instrumentality of the Korean Government all but financial control for a technical cooperation program.

3. United States financial contribution administered through a Korean nongovernmental organization. We did not give serious consideration to this possibility because no existing agency appeared capable of assuming this role; nor did we think the Korean Government would endorse efforts to set up or work through such an instrumentality. In any event, such an instrumentality would be unlikely to preserve for long its independent character.

4. Sponsorship of technical cooperation through a new American nongovernmental or quasi-governmental organization. Such an organization, wholly U.S.-funded and controlled, would offer the following advantages:

- a) It would enable the United States to work more freely than does AID in nongovernmental sectors of Korean society and in problem areas to which the Korean Government does not currently assign high priority.
- b) It would free technical cooperation from some of the undesirable constraints that now handicap AID in the achievement of its major objectives.
- c) It might help to attract well-qualified individuals and institutions, both in Korea and the United States, that are reluctant to become involved with direct U.S. Government operations, at least under existing rules and restrictions applicable to AID.

Such an organization would make a clear-cut demarcation between

its grant-making and advisory functions. An advisory body of Koreans could play an important role in shaping its programs. The organization would, of course, operate in response to Korean-initiated proposals. It appears to us, nonetheless, that in excluding Koreans from the processes of policy formulation and management, such an organization could not give adequate recognition to the new relationship which should be established between Korea and the United States, and to the principle of cooperation itself.

5. Sponsorship of technical cooperation through a bilateral nongovernmental Korean-American organization. This alternative, providing for joint financing and management, appears to have most of the advantages of the last-cited option and yet avoids the disadvantage of indirect, or nonexistent, Korean participation in policy formulation and administration. It does, however, open the door to stronger intervention by the Korean Government.

It seems clear that no practicable alternative ideally combines all the advantages and eliminates all the disadvantages. Most members of the panel feel that the fifth alternative cited is the most promising, on the assumption that the Korean Government would regularly contribute a significant portion of KADI's core budget. We are confident that certain structural safeguards can be given KADI that will afford reasonable protection against Korean Government pressures that might limit the independence of judgment and action we deem essential for the proposed organization.

We proceed, therefore, with an elaboration of this first-choice alternative. Later in this report we also indicate the various changes that would be necessary for our second-choice alternative, namely a wholly American organization, which we recommend in the event the Korean Government is unwilling to contribute a significant portion of KADI's core budget.

The Korean-American Development Institution (KADI) - (Bilateral Organization)

The following steps and provisions appear to us appropriate for the establishment of KADI as a bilateral organization for the promotion and sponsorship of technical cooperation programs between the United States and Korea:

- (1) KADI, by official agreement between the Governments of Korea and the United States, should be established as a non-profit corporation authorized to receive funds in both countries and to make grants in Korea (or the United States) for purposes sought by Koreans.

- (2) The purposes of KADI and its general structure and financing should be spelled out in a note or agreement subscribed by the U.S. and Korean Governments. This, in effect, would be KADI's charter.
- (3) The two governments should empower KADI to conduct its business and use its funds as an autonomous organization not subject to the internal procedures of either government, save that KADI's programs and financial operations would be subject to annual review by these governments.
- (4) Responsibility for policy, budget, and management should be vested in a bi-national board of trustees, which would formulate a set of bylaws to be filed with both governments. In developing its bylaws the board should consult informally with the two governments.
 - (a) The board of trustees should be composed of an equal number of Korean and American members, perhaps five of each nationality.
 - (b) A majority of the members from each country should be drawn from the nongovernmental sector, e.g., development organizations, professional associations, universities, scientific bodies, business, industry, and other appropriate bodies.*

* Selection of trustees for an organization such as KADI will, of course, require skill and sensitivity on the part of both governments. For the United States, we suggest as a model the procedures used for the appointment of members of the National Science Board of the National Science Foundation, i.e., selection on the basis of nominations from interested professional associations and other groups. Such groups might include, for instance, the Society for International Development, the Committee for Economic Development, the Agricultural Development Council, the National Academies of Sciences and Engineering, the Overseas Development Council, the American component of the International Liaison Committee for Research on Korea, the Social Science Research Council, American Council of Learned Societies, the Association for Asian Studies, foundations, and other bodies with interests in Korea and development. While similar organizations are not plentiful in Korea, the Korean authorities should be encouraged to use a roughly analogous selection procedure. Whatever procedures are used for selection, it is of the utmost importance that trustees have strong individual competence in activities which KADI would pursue and (in the case of American trustees) knowledge of developing nations such as Korea. The American trustees should be prepared to participate actively in the affairs of KADI and to consider themselves essential links between KADI and diverse resources in the United States.

- (c) The American members should be named by the U.S. Government after consultations with the Korean Government. Similarly, Korean members should be named after consultations with the U.S. Government.
 - (d) Members of the board should serve five-year terms, on rotation, and staggered so that at least one new member would be named each year from each country.
 - (e) Trustees should be bound by conflict-of-interest prohibitions while serving on the board.
 - (f) The board should meet at least once a year, in Korea.
 - (g) The board should choose two co-chairmen from among its members, one from each country. They should preside over board meetings in rotation. Alternatively, the board might choose a single chairman who would serve a term of two years.
 - (h) The board should appoint KADI's director and other core professional staff. The director should be an ex-officio member of the board, without a vote. He should not be able to substitute for any other trustee at board meetings.
 - (i) The board should commission an annual audit of KADI's financial affairs by an international accounting firm. It should also appoint visiting committees to review the substance and administration of KADI's activities.
 - (k) The board should approve the annual substantive and financial reports to be presented by the director to the two governments and other contributors.
- (5) Within the general policies, programs, and budgets approved by the board of trustees, the director should have full authority and responsibility to administer KADI and develop its activities. The director's salary should be set at a level fully competitive with that of comparable positions in the United States, to ensure that KADI obtains a person of stature and experience. At the outset, and for an indeterminate period, the director should be an American; the deputy director, a Korean. The director should appoint auxiliary staff, all other specialists, consultants, and the like. Such staff

should be appointed on term contracts and could be payrollled through an appropriate existing organization in the United States, in order; inter alia, to provide retirement and insurance benefits.

- (6) Subject to programs and budgets approved by its board of trustees, the bulk of KADI's activities would be accomplished through grants to Korean organizations, to American organizations which would provide services to Korea, and to private professional or other associations which involve Koreans and Americans. KADI would provide professional and technical services to Korea by contracting with organizations or individuals in the United States. KADI would also provide individual grants in the form of fellowships to Koreans for advanced training, academic study, or research in the United States. The director would execute all contracts and approve all grants.

In addition to bringing consultants to Korea for specific projects, KADI should obtain general-purpose advisers on relatively long-term contracts. Such advisers would become expert on a range of development problems in Korea, and could be made available on loan as consultants to various Korean institutions, public and private. These advisers would not have authority to allocate KADI's funds. KADI also might employ young Americans as interns.

- (7) KADI should have a very small, high-quality professional and clerical staff, and avoid building up an extensive administrative superstructure. To the maximum possible extent, KADI should contract with other organizations to provide certain auxiliary services entailed by its operations, such as the preparation, orientation, and placement of fellows and participants for training abroad, the recruitment of experts, the procurement of certain contract services for Korea, and routine logistical supporting facilities.

KADI could use the services of the U.S. Educational Exchange (Fulbright) Commission and KATCA in Korea, the Institute of International Education (IIE) and the Governmental Affairs Institute, and other relevant agencies in the United States to administer fellowships and training grants for Koreans going to the United States. Similarly, various service organizations in the United States could be used to administer contracts, salaries, and logistics for Americans going to Korea.

KADI also could tap U.S. Government agencies, the Overseas Educational Service, the Society for International Development, foundations, and other established sources for help in placing Koreans in the United States and recruiting Americans for work in Korea. Should circumstances require it, KADI could establish a small office in the United States, headed by a person with the rank of deputy director, to facilitate liaison with American resource and supporting institutions, organizations, and other appropriate entities.

KADI - (A Wholly American Technical Cooperation Institution)

The second alternative is a U.S.-controlled organization, identified in option 4 (page 37). If this alternative were adopted, assuming that the Korean Government would make no contribution to KADI's core budget, the following changes from the structure just outlined for KADI would be desirable:

- (1) KADI probably could and should be registered as a non-profit corporation in Korea and the United States, rather than involving an official agreement between the two governments.
- (2) The board of trustees would be wholly American; Koreans would not participate in the policy, budget, and management decisions of the organization.
- (3) A strong Korean advisory committee should be established, in parallel with the American board of trustees. This committee should be used continually by the American director of the organization, and the American board of trustees should meet with it at least once a year. The Korean advisory committee would have no vote or power of decision, however.
- (4) Core financing for the organization should be provided entirely by the U.S. Government, and would not involve mixed U.S. and Korean contributions. However, the organization would elicit matching funds from Korean public and private sources in its grants program.

Otherwise, the operations of the two organizations under alternatives 4 and 5 would be the same.

Financing

1. We consider it of first importance that KADI be given reasonable assurance of adequate and continuing funding to enable it to pursue activities of high quality and performance. Inadequate or uncertain funding would, inter alia, make it impossible to obtain highly

competent staff. We suggest that a core budget for KADI be assured for at least five years and preferably ten years, i.e., the decade of the 1970's.

2. We recommend that KADI's core budget, after an initial growth period, of say, two years, be set at a plateau of \$5 million per year. We arrive at this estimate on the basis of present and foreseeable needs in Korea, and of the managerial capacities of the small administrative organization we envisage for KADI. An illustrative budget for categories of activity follows:

	(\$000)
Professional and technical services	700
Collaborative research and policy formulation	300
Grants to individuals for advanced training and research	1,000
Institutional development	2,500
Administration (c.10%)	<u>500</u>
TOTAL	\$5,000

3. We believe that 60 to 80 percent of KADI's expenditures would be in dollars, and the balance in won. The reason for the higher proportion of dollars is that we assume the major share of KADI's funds would be used for international travel, tuition fees, and living expenses for Koreans studying and doing research in the United States, for salaries of Americans working in Korea, and for purchase of equipment and books made in the United States for Korean institutions.

4. Funding of KADI's core budget should be provided by the U.S. and Korean Governments in a ratio to be established in the basic agreement. We believe that the United States should provide not more than 80 percent of the proposed KADI annual core budget and Korea the balance, on the assumption that our first preference - a bilateral organization - proves feasible. We suggest here only the salient characteristics this should attach to this financing:

- a) An initial sum of, say, \$2 million should be held as a reserve fund for payment of salaries of core staff of KADI and for orderly completion of activities in progress should KADI cease to operate for any reason. The purpose of this fund would be to assure that KADI can appoint staff of high quality and can undertake continuing activities with the assurance they will not be subject to sudden termination.
- b) Annual sustaining funds equivalent to \$5 million should be given to KADI as unrestricted grants. The U.S. contribution

(the \$4 million in foreign exchange needed annually) might be made available by special appropriation channeled through the Agency for International Development, the National Science Foundation, or the Department of State; through legislative authorization to use repayments from hard-currency commodity sales or development loans; or by a combination of these sources. Whatever the sources of funds, we feel it is crucial to the effective operation of KADI that its funds not be subject to the manifold restrictions that now apply to regular AID funds. These restrictions would be inimical to the characteristics (pages 35-36) and the mode of operation (pages 38-42) we prescribe for KADI. We consider the critical requirements that would permit KADI to function in the manner we intend to be as follows: (1) assured long-term support, at least for five years and preferably ten years, to allow KADI, inter alia, to recruit staff of high competence and to undertake tasks requiring long-term commitment, (2) freedom to operate as a self-governing quasi-private institution.

5. We believe there is no realistic prospect that private sources in Korea or the United States would provide adequate and continuing support for KADI's core budget. Private sources could provide important supplements for individual activities or projects, however. In the event KADI is established by agreement between the two governments, we feel it would be desirable for the Korean Government to consider legislation that would grant tax exemption to private persons and corporations which contribute to KADI, and to other non-profit scientific and educational institutions operating in Korea in the public interest.

6. We suggest that grants and other support by KADI to Korean organizations be provided on a matching, topping-up, or joint-participation basis. The purpose of this would be to assure commitment by recipient organizations and to multiply KADI's resources. It is reasonable to expect that KADI's funds would, overall, be matched by Korean recipient organizations.

7. We suggest that the Korean Government provide housing for KADI, preferably in a building of its own, to be donated by the Korean Government. The Korean Government should also be expected to exempt KADI's American personnel (staff, resident advisors, consultants, etc.) from local income taxes; and to waive duties on all commodities imported for KADI's own use or in conjunction with technical cooperation projects.

Interim Measures

We are strongly convinced that no steps should be taken to establish

KADI, whether as a bilateral or an American organization, until conditions essential for its effective operation can be fully assured. In our judgment, these essential conditions are (1) stability of financial support and (2) autonomy of operation. To establish KADI without meeting these conditions - that is, to subject KADI to the procedure of annual budget submission, the vagaries of the legislative appropriations process, and the constraints and controls on expenditures and activities of one or both governments - would be tantamount to continuing technical cooperation in its present form under a different label. Such a premature move would immediately vitiate KADI's fundamental character and purpose as we conceive them.

We appreciate the fact that it may require considerable time to obtain the necessary statutory changes which would permit KADI to be set up on a proper basis. Meanwhile, we understand, AID wishes to provide for the continuity of a technical cooperation program in Korea by appropriate action on some of the problem areas identified in this report. We assume this would allow certain current programs to continue and others to be initiated pending their eventual transfer to KADI sponsorship when it comes into being, if desired at the time.

So long as its technical assistance machinery remains in operation in Korea, AID should, of course, be able to sustain programs in a number of fields. It can do so directly or through other instrumentalities, though in either case it would be subject to the limitations we described in our analysis of alternative 1. (page 36).

There are at present two other American agencies engaged in technical cooperation in Korea which are concerned to a greater or lesser extent with the problem areas we have identified. These are The Asia Foundation and the U.S. Educational Exchange Commission. They are supported in whole or in part by the U.S. Government. There are, of course, many other organizations and institutions in the United States which could undertake specific projects, under contract in Korea.

We recommend that, in the immediate future, AID makes maximum use of available Korea-based and U.S.-based instrumentalities to carry forward the program suggestions advocated in this report that have immediate priority interest, and for which these instrumentalities are peculiarly suited by virtue of their competence and modes of operation.

For example, The Asia Foundation in Korea, if provided with additional funding, could enlarge the scope of its work in the areas of social modernization in which it is already engaged. The U.S. Educational Exchange Commission, which has recently reoriented its purpose from the promotion of general cultural interchange to the

strengthening of national development, could also be used to administer an expanded program of fellowships and advanced training grants.

There is substantial merit to the idea of strengthening the work of these agencies, and also of obtaining the participation of other organizations not yet engaged in Korea. This approach is in line with the intent of this report. It would have the further advantage of facilitating KADI's transition to full-scale operation without imposing an excessive burden on it prematurely. KADI will need time to organize itself. It should launch its activities on a modest scale, gradually enlarging their scope. As AID's grants and service contracts with these agencies expired, KADI would be able to access their programs and to consider their requests for further general or project support.

Annex A

INSTITUTIONS VISITED AND PERSONS CONSULTED

KOREAN MINISTRIES

Economic Planning Board

Kim Hak Yul, Deputy Prime Minister

Kim Joo Nam, Director, Bureau of the Budget

Agriculture and Fisheries

Cho Si Hyoung, Minister

Hahn Bong Soo, Planning Coordinator

Institute of Forest Genetics, Seoul

Office of Rural Development, Suwon

Education

Hong Jong Chul, Minister

Paik Hyun Ki, Director, Central Education Research Institute

T. J. Song, Superintendent of Education, Chollo Namdo Province

Government Administration

Lee Souck Jae, Minister

Dong Hong Wook, Director, Administrative Management Bureau

Chung Se Woong, Director-General, Central Officials Training Institute

Health and Social Affairs

Kim Won Kyu, Planning Coordinator

Home Affairs

Park Kyung Won, Minister

Kim Bong Kyun, Superintendent General, Chief of Foreign Affairs

Division, Korea National Police

Science and Technology

Kim Kee Hyoung, Minister

Moon Young Chul, Director, Technical Cooperation Bureau

Lee Man Yong, Chief, Bilateral Cooperation Division

Lee Eung Sun, Director, Policy and Development Bureau

Hong Min Loo, Director, Research Coordination Office

OTHER SENIOR OFFICIALS

Shin Dong Shik, Senior Economic Secretary to the President of the
Republic of Korea

Kim Hyung Ki, Economic and Scientific Council

General Lee Honkon, Chairman, President's Advisory Commission on
Government Administration
Kim Hyun Ok, Mayor of Seoul

PROMINENT KOREANS

Lee Hahn Been, Dean, School of Public Administration, Seoul National
University
Yu Chin O, Leader of National Democratic Party
Chang Key Young, Publisher, Korean Times
Song In Sang, President, Korean Development Association
Paik Seung Gil, Editor, Korea Journal
Kim Young Goo, Editorial Writer, Hanguk Ilbo
Lim Bang Hyun, Editorial Writer, Hanguk Ilbo
Nam Jae Hee, Chief, Editorial Writer, Chosun Ilbo

ACADEMIC INSTITUTIONS AND INDIVIDUAL FACULTY MEMBERS

Seoul National University

Choe Mun Whan, President
Pyo Hyun Koo, Dean, College of Agriculture
Paul Ryu, Dean, Graduate School of Law
Deans of Faculties of Arts and Sciences, Technology, Medicine
Education, Pharmacy

Korea University

Lee Choong Woo, President
Kim Yong Choon, Department of Chemical Engineering
Kim Kak Choong, Professor of Physical Chemistry
Kim Chang Whan, Dean, College of Science and Engineering, Entomological
Institute
Kim Jun Yop, Professor of History; Associate Director, Asiatic
Research Center

Chosun University

Dean of Students
Registrar

Han Yang University

Joseph Hainam Lee, Dean, Academic Affairs
Kim Kyu Tai, Department of Civil Engineering
Yeong Il Seo, Department of Mechanical Engineering

Chun Nam University

K. G. Kim, Dean, College of Agriculture

Yonsei University

Han Man Choon, Dean, College of Science and Engineering; Director,
Yonsei Engineering Research Center
Kim Kun Duk, Department of Architectural Engineering
Lee Hyun Sik, Department of Mechanical Engineering
Byun Keun Joo, Department of Civil Engineering
Hahn Pyong Choon, Professor of Law

Lee Ki Baik, Professor of Korean History, Sogang College
Nam Duck Woo, Professor of Economics, Sogang College
Moon Seung Kyu, Professor of Rural Sociology, Chonpuk University

OTHER KOREAN ORGANIZATIONS

National Agricultural Cooperative Federation

Mr. Suh, President
Hyu Chul Ahn, Manager, Research Department

Korean Institute for Research in Behavioral Sciences: Chung Bum Mo,
President

Korean Productivity Center: Lee Byun Wook, Managing Director

Agriculture and Fishery Development Corporation

Tchah Kyun Hi, President
Lee Duck Soo, Vice President

Korean Federation of Industries

W. H. Kim, President
Kim Ip Lam, Director-General

Korean Shipping Corporation: Chu Yo Han, President

Korea Scientific and Technological Information Center (KORSTIC)

Kim Chong Hwae, Head, Division of Resources
Kim Doo Hong, Secretary General
Lee Chang Kyo, Chief, Documentation Division

Korean-American Technical Cooperation Association (KATCA)

Korea Institute of Science and Technology (KIST)

Choi Hyung Sup, President
Shin Eun Gun, Vice President, Administration
Shim Mum Taik, Vice President, Research
Wun Jung, Principal Investigator, Solid State Physics Lab.
Sung Ki Soo, Manager, EDP Department
Choi Ki Sang, Chief, Public Relations Division

Dong Yang Machinery Works, Ltd.

Kim Doo Hoon, Director
Kim Ryang Bak, Managing Director

The Central National Library: Chang Il Se, Chief Librarian, Technical
Services Department
National Assembly Library: Kang Chu Chin, Director

U.N. AGENCIES

Hans W. Kamberg, Resident Representative, UNDP
Ma Chia chi, Representative, WHO

U.S. GOVERNMENT

His Excellency William J. Porter, U.S. Ambassador

USOM

Henry J. Costanzo, Director
Thomas F. Olmstead, Assistant Director, Program
Bascom H. Story, Public Services Advisor
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Laverne E. Wakefield, Fisheries Advisor
Kenneth B. Platt, Agriculture Education
Bruce Johnson, Industrial Development Advisor
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U.S. FOUNDATIONS AND ORGANIZATIONS

Asia Foundation

John Bannigan, Representative
Cho Tong Jae, Program Advisor

American-Korean Foundation: Dorothy M. Frost, Vice President for
Operations in Korea

U. S. Educational Commission in Korea: Edward R. Wright, Jr., Executive
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Population Council: Mr. Finnegan, Representative

International Legal Center: Mr. Phillips, Representative
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