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THE ROCKEFELLER FOUNDATION

Program Dynamics

Private philanthropic foundations have relatively modest resources to invest, and these they seek to direct toward efforts of fundamental significance to human welfare. Because of the flexibility with which they can deploy their resources, private foundations are often able to initiate new ventures and develop them to a point where other agencies with greater resources may continue and expand them.

The Rockefeller Foundation, in its programs, seeks a continuous but changing balance in response to social evolution and the emergence of new challenges. Officers of The Rockefeller Foundation try to be alert to situations which offer long-range possibilities for the advancement of knowledge and its effective application to social problems, and which are feasible in terms of limited resources. During much of the Foundation's early history,

these opportunities were chiefly encountered in the United States. However, the Foundation's charter, by deliberate intent, had denned its sphere as world-wide and from the first the International Health Division undertook fundamental studies and action programs in public health in many parts of the world. The Foundation has ever since retained its deep interest in the welfare of the people in countries where development has progressed less rapidly than in the industrialized nations.

Supplementing the action programs, and partially in support of them, is the increased emphasis on the training of individuals from many countries for leadership in national and international development. Training is now a major sector of the Foundation's total program and is strongly oriented toward the less developed countries. Fellowships are awarded to strengthen institutional faculties by enriching the experience of investigators and teachers. (…)

Grants are by no means limited, however, to support of operating and training programs. Each year, the major number of grants are made to institutions, departments, and projects here and abroad which give promise of increasing, excellence. The fields in which grants are made are highly diversified and include linguistics, economics, population studies, molecular biology, and genetics—to name only a few. The objective of each grant is to increase knowledge, and excellence in its application for the benefit of mankind.

In many countries the most urgent needs are for a steady rise in standards of living and for the broadening of scholastic, intellectual, and creative opportunities. In some, early priority

must be given to improvements in sanitation, public health, and medical care, and to increased production of food supplies as the basis for an adequate diet. Until these requirements are satisfied, real progress cannot be made in such areas as housing, transportation, communications, and the other technologies. Obviously, scholarly activities and the creative arts are unlikely to flourish among ill or underfed populations.

The most important single element in the forward progress of the less developed or emerging states is leadership. The need for a larger number of qualified individuals to take major responsibilities in government, education, science, the technologies, and economic and social development, is everywhere manifest.

Efforts to resolve this situation must clearly focus on rapid progress in the enlargement and reinforcement of local educational systems. Both the quality of training and the number trained are important, and at best there will be a lag between the initiation of efforts to intensify and expand the educational patterns and the time that these become productive.

The education of the citizens of a nation is in the first instance a national responsibility; philanthropic and other foreign agencies can at most be helpful only in providing support at critical points, especially at the more advanced educational levels. To send nationals overseas for training is a valuable technique when applied on a selective basis, and is one which offers appealing opportunities for assistance. Important though fellowships and other training awards for foreign study may be, they can be fully effective only when used in conjunction with sound progress in developing education at home.

(…)

The urgent and growing demands being made upon scientists, scholars, and practitioners of the professions and technologies make it each day more important that manpower and resources, always in short supply, be used with skill and perception. Private foundations operating overseas have a unique opportunity to help create patterns by which the limited numbers of highly trained individuals in less developed countries can most effectively contribute to research and to the training of younger people. Properly situated, properly supported, and properly encouraged, these leaders can create islands of excellence which, as their numbers increase, may grow and coalesce into a firm base for genuine progress toward national and international goals.

The Local relevance of learning

The events of the last few years must have made it clear to almost everyone that rising expectations in many parts of the world cannot be more than temporarily met unless those affected are trained to understand and to solve their own problems.

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A Foundation which consistently devotes well over ten per cent of its resources to fellowships for advanced training abroad would be the last to deny the importance of an intellectual experience away from home. But foreign training is looked upon as a supplement to and not as an appropriate substitute for a satisfactory university education in the home country. In the first place, experience has demonstrated conclusively that few students of university age can remain away from home for more than a year or two without losing effective emotional contact with their own culture. Those who can withstand the material and novel blandishments of an affluent society survive in most cases only to succumb to more austere temptations.

Even if internal scruples or external legal devices assured the return to their native countries of all foreign students, it cannot be argued that university training away from home is a suitable substitute for local education. Although knowledge is in an important sense universal, and the laws of motion or of biological evolution are the same in Africa as they are in the United States, the relevance of knowledge differs markedly from place to place.

Not only are universities needed to train students in the aspects of knowledge more applicable to their experience and later careers, they are equally needed to establish solid

research on local problems. There is certainly a place for the detached scholarship that has long characterized Western institutes of oriental culture or other area studies groups established in countries remote from the region concerned. But institutions which will conduct such studies "on location" have at least a like value. Both detachment and involvement are crucial for complete understanding.

Finally, although the initial outlays necessary to establish advanced educational research institutions in new areas loom large, in the long run this type of effort is less expensive

than reliance on importation of knowledge and export of students.

The history of the Foundation's interest in the medical and natural sciences overseas reveals increasing attention to the development of appropriate indigenous institutions. In the very early days attention was directed to the control or elimination of certain specific diseases which appeared to account for a large proportion of the disability in given areas. (…) By and large, persons who escaped the ravages of the primary plagues merely survived to succumb to something else. Clearly the health problem had to be attacked as a whole, and for this large numbers of well-rounded personnel were obviously necessary. This realization led to a program of support that began in the 'twenties for schools of public health and, slightly later, for schools of medical science. Progress was slow at first largely because of the lack of any but a handful of well-trained, capable people around whom institutional programs could be developed. Much attention, therefore, had to be given to the award of fellowships and training grants for study abroad. Upon their return, the most promising fellows were provided with equipment and other forms of assistance. As they gradually rose to positions of faculty leadership, they began to institute broad programs of reform.

Some of the most promising opportunities have arisen in institutions established since the second World War. Unconfmed by long-established and cumbersome traditional ways of doing things which often hamper some older institutions, and free to build from the ground up in response to the challenges of modern problems and concepts, these newly formed schools were able to make rapid progress with relatively modest amounts of financial support from the Foundation and other outside sources.

In almost all cases the Foundation's funds have been used to enable particularly enterprising individuals to do a better job of teaching or research or both.

The considerations conditioning these choices are numerous: the geographical location; the probability that a good example set in one place will have a broad influence on other institutions in the same or neighboring areas; and the probability that local financial resources

will be sufficient to maintain the new developments once they are satisfactorily in operation. The overriding consideration in all cases, however, is the presence on the ground of at least one individual, or more usually a group, with the vision to see what can be done and the will and capacity to do it.

Such individuals or groups must be the "point of strength" from which growth begins. Unfortunately, this is not always recognized in the concept that funds are of primary importance. The wise application of private philanthropy dictates the necessity of focusing attention not on money but on people of competence and vision. Large amounts of money are increasingly becoming available for technical assistance abroad. These can be a valuable supplement but not a substitute for the services of trained and capable local people. Important though the timely availability of funds may be in strategic places, real accomplishment depends upon individual performances and to these key people the credit is due.

Although the Foundation's interest in programs for the control of specific diseases has almost entirely given place to the program of institutional development described above, one specific condition still commands its attention, This is the virtually world-wide problem of malnutrition. Food provides the building blocks and energy sources of the human body. Without supplies of the appropriate constituents, the shape and function of the body become deformed in countless different ways. Many conditions that emerge in the clinic as specific diseases are, in fact, merely symptoms of a single underlying condition—a disordered food supply.

For the past ao years the Foundation has been attacking this problem at what might be regarded as its source—in-adequately developed agricultural practices. Additional attention has been given to the science of adapting the avail- able food supply to biological needs. This science of nutrition involves in the first instance careful analysis of the materials that exist in the standard food substances and the particular roles these materials play in the internal economy of the body. A given food such as corn or wheat, for example, is not a single homogeneous entity. It is now known that different varieties differ widely in the content of proteins, minerals, and vitamins necessary for optimum nutrition. It is, therefore, most important that in efforts to increase the total food supply, appropriate attention be given to the quality of the materials produced.

Experience has proven over and over again that basic knowledge of food requirements and the ready availability of adequate food do not inevitably ensure good nutrition. The deeply rutted road of custom frequently prevents a large portion of the population from learning new food habits that would be in the best interests of their health. Much thought and attention must, therefore, be given to helping people develop new ways of cooking and eating. A well-developed department of nutrition, consequently, presents the best features of a scientific research institute, an epidemiological survey team, a clinical ward, a cooking school, a Parent-Teachers' Association, and a women's magazine.

It is now widely recognized that progress in nutrition and in the medical sciences generally is bound to lead to an ultimately intolerable increase in the population of the world unless automatic or consciously directed compensatory measures are developed. The classical automatic checks represented by the Four Horsemen are unacceptable to the modern conscience. But the only other visible alternative, consciously restricting reproduction, is either not understood or is actively opposed. As is usually true, lack of understanding is likely in the long run to be the more formidable obstacle.

The agricultural development of Africa

The areas of Africa under the influence of England, France, and Belgium have depended almost exclusively during the past ten years upon these countries for assistance in building and staffing their institutions of higher learning and their teaching, research, and extension facilities in agriculture. Men, materials, and operating funds from Europe made possible the agricultural programs from which the newly independent and emergent nations currently benefit and

which, in the future, it will be chiefly their responsibility to maintain and to improve.

The Foundation's growing interest in the agricultural institutions of Africa comes at a particularly opportune time. Drastic reorientation is now taking place among the African states with respect to the kind of European technical assistance they have received in the past and may be able to seek in the future. The needs and the opportunities are infinite for helping the African people to develop their own institutions successfully on a wide base of assistance from abroad and of solid local support at home.

Viewed collectively, Africa's existing agricultural institutions display a complete spectrum of research from the basic to the applied and of teaching from the elementary to the highly advanced. Examined individually, however, each institution has active, growing programs in only certain areas of research and teaching. The further development of such nuclei of excellence into well-rounded organic programs of agricultural education and research is an objective that the Foundation can help these institutions achieve.

In keeping with its long-standing emphasis on food crop improvement, the Foundation also made awards to several experiment stations located in East Africa for the advancement of research on cereal crops. Studies of livestock physiology in East Africa also received a grant from the Foundation.

(…)

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These eight institutions received a total of $405,350 in Foundation appropriations during 1960. They are repretentative of a much larger group whose programs in agriculture have similar goals—notably, improvement of teaching and research in the basic sciences, coordination of fundamental and applied research in agriculture, development of veterinary science, and advances in cereal crop and livestock production. From among them key institutions will emerge whose efforts, supported by the Foundation, will lead to removal of some of the critical obstacles now impeding agricultural development in Africa. The faculties of these institutions will increasingly provide qualified young scientists who, after advanced and specialized training abroad, can return home to exercise leadership in improving the agricultural economy of their people.

They only talk about physical obstacles, but not social resistances,opposition from the local communities.

Training in International Affairs

When the Trustees and officers of the Foundation decided to embark on an expanded program of aid to the developing countries of the world, support of the social sciences, including international relations, diplomacy, and related subjects, formed a part of the program.

The question was how a private foundation, with experience m developing training programs

in medicine, public health, and agriculture, could lend assistance to the newer members of the family of nations in the general area of the social sciences.

The responsibilities which the newer states must carry as the inescapable price of independence, of self-determination, are many and varied. Not the least of them is the obli-

gation to shape their own foreign policies, to execute them through traditional diplomatic channels and through their membership in the United Nations, and to do so effectively

and responsibly. At this point, as is so often true, the most pressing problem is the dearth of trained men. Everywhere in the world there is a conspicuous shortage of men with the

high degree of knowledge, perception, and judgment required in dealing with the uncertainties of foreign relations.

In few if any of the new nations are there sufficient numbers of well-trained diplomats to carry out foreign policy in ministries at home and effectively represent their nations' interests abroad.

Since 1955 the Foundation, through its officers, has been exploring possible ways of contributing toward the solution of this problem. In every area in which it has worked, the Foundation's primary concern has been with the importance of well-qualified leaders, and its experience in assisting the training of people in other fields has furnished a valuable background. But aid to a government, particularly in the sensitive field of foreign relations, is far more complex than support of a university or a research institute. Issues of independence, prestige, and pride are directly engaged.

As it surveyed possible appropriate forms of assistance, the Foundation was helped by a suggestion offered by the representative of a South Asian country. He proposed that the Foundation help to strengthen the library of his Ministry of Foreign Affairs which, he said, was woefully inadequate to present-day needs.

Representatives of more than 20 countries took the initiative in asking further aid and counsel in the training of their young diplomats. Many of them pointed out that most of their training programs for foreign-office personnel were in a formative stage either because they had only recently started to build diplomatic services or because traditional arrangements with Western countries had been terminated or greatly curtailed. Furthermore, they felt a need for greater diversity in the educational experience of their diplomats, including training in such countries as Canada, Switzerland, and the United States.

On the assumption that a better informed cadre of people in the newer foreign ministries could contribute as much to the welfare of mankind as better trained doctors, engineers, and professors can, Foundation officers consulted with various officials and scholars at leading American centers and universities. At this point the leaders of the Carnegie Endowment for International Peace put forward an impressive plan directed at this end. They set themselves the goal of creating a program under which a corps of diplomats could become thoroughly conversant with the practices and procedures of modern international relations.

A second training and study program at a somewhat more advanced level has been carried on at Harvard University. Under the auspices of the Center for International Affairs, public officials from foreign ministries and other agencies come together for a year of intensive study. They work and live together with scholars from the Harvard faculty and visiting scholars at the center. The program rests on the assumption that the joint efforts of productive scholars and mature officials form the best avenue for the deepening of mutual understanding. The permanent faculty of the center conduct seminars which the visiting officials may attend.

The Foundation has contributed $668,200 toward the Harvard and Carnegie Endowment programs. Taken together they represent a carefully designed attempt to solve a difficult problem. They are intended primarily to help meet the urgent needs of countries that overnight must develop an over-all structure of government that includes competent and qualified foreign service personnel. They may also prove a means of widening the horizons of research and study, and of stimulating more valuable writing. In the end the purpose, as with most Foundation programs, is to help other organizations train more competent and imaginative leaders who must carry awesome responsibility for life and death decisions in the months and years ahead.

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Language: Barrier or Bridge?

Officials of developing nations everywhere are trying to meet the growing economic and political demands of large and often underprivileged sectors of the population through evolutionary means before the government and the society that supports it are overthrown by violent social revolution.

Many of these nations, usually working with inadequate budgets, are faced even in the best of circumstances with a major problem countries like the United States seldom appreciate—the necessity of developing educational facilities for a population consisting of sizable groups that speak different languages and that are, therefore, unable to communicate with one another. If the expensive and politically undesirable solution of separate school systems for the various language groups is to be avoided, then one language must be selected as the medium for public instruction, and techniques devised for teaching this language to those who speak another one

| at home. This problem is most prevalent in Asian countries, but also exists in the Western Hemisphere where it is most « acute in the Andean countries of Peru and Bolivia.

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Communication in the Americas

Today, when technical means of communication have been so vastly extended that scientists can bounce signal waves off objects in outer space, the nations on this planet are confronted by an apparent paradox of increasing intellectual isolation. In an age when new sovereign states are being created at a rate to which most individuals are unable to accommodate themselves, when a common forum for the expression of group aspirations is available to all, and when international organizations capable of social, economic, and even political action are operating at multiple levels in many parts of the world, it is probable that cultural identity has assumed a new importance. But the conditions created by rapid communication and transportation and by the existence of a world forum have also created the means by which the values underlying national and regional aspirations can be made a force for social and political action. What once was only the subject of scholarly curiosity has suddenly become significant to our very survival. What is important to different societies, and why, must be understood, if not by every-

one, then at least by specialists who can inform and advise those responsible for major decisions in government and private agencies

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An International Study Center for Modern Art

Organized in 1929 to bring new developments in modern and contemporary art to the attention of the American public, the Museum of Modern Art has since become the leading institution of its kind in the world. Its permanent collections of painting, sculpture, prints, photographs, and films are the most representative of the artistic work of the last 75 years to be found anywhere. These riches, and the outstanding loan exhibitions it has brought to New York or sent to other museums, are well known.

To a remarkable degree, the Museum of Modern Art represents the dual interests of The Rockefeller Foundation n humanistic research and in the vitality of contemporary creative activity.

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The Art of the American Indian

The Indian artist-craftsman, living as he usually does within a relatively closed society strongly dominated by traditional values, is far more isolated than his counterpart who lives and works in the mainstream of an open society with its wide variety of styles, techniques, and values. The reservation system, which tends to keep the Indian in a de pendent position as a ward of the state, has been more rigid and has affected a greater number of Indians in the Southwest than elsewhere in the United States. It is also in this region that art has been the most persistent expression of tribal values.

To overcome his cultural and technical isolation the Indian needs a new type of educational opportunity. The University of Arizona at Tucson has increasingly regarded the economic and cultural development of the Indian population of the Southwest as both an opportunity and a responsibility.

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ROCKEFELLER FOUNDATION'S program in the social sciences in recent years has consistently stressed three long-term objectives. The first is to support research in the basic social science disciplines likely to extend the frontiers of knowledge. The second is to assist development in emerging societies through aid to promising centers of

social science research and training, through support of

Western centers conducting research on development prob-

lems, and through help to training programs for economists,

central bankers, and diplomats destined to play a key role

in the development process.

Support and encouragement of research in the basic fields of the social sciences is not a task for those who yearn for quick achievements or constant novelty in program. The research program in international economics of the National Bureau of Economic Research, for example, draws on a well established tradition of approaching economic problems by tracing their statistical history and charting alternative courses of action with their possible consequences. structure of world trade and cyclical fluctuation in trade. Research on voting behavior.

The quest for rapid political and economic development has become the dominant purpose of nearly two-thirds of the world's people. (…) The Foundation enjoys an opportunity to contribute to the fulfillment and enrichment of this historical movement. It may do so, for instance, by providing library resources for countries struggling to develop qualified leaders in important professional fields. The assistance may, in one case, take the form of a grant to enable the International Bank for Reconstruction and Development to furnish basic working libraries

on economic development to ministries of finance or economic 'affairs, development corporations, or central banks in emer- gent nations. In another instance, foreign ministries of recently independent states have requested help toward the costs of their libraries, and 21 small grants have been made for this purpose. A yet more urgent need may be direct assistance in the training of responsible leaders.

Research on problems of economic, political, and social development continues to have importance within the social sciences program. Studies of economic growth, (…) contribute to economic theory and to a better understanding of the development process. Fiscal administration and the role of government corporations are important factors in economic development.

(…)

development administration in Brazil, India, Pakistan, South Viet Nam, and southern Italv is intended to contribute to and southern Italv is intended to contribute to v is intended to contribute to basic knowledge of this aspect of development. Programs of research and advanced training in economics at the University of Rio Grande do Sul, (…) are expected to add to understanding of economic development in Latin America. These examples suggest that the Foundation, while giving increased attention to the need for training leaders in developing countries, has not slackened its interest in the support of responsible and objective research.

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The third aim in the social sciences program has been to encourage study of fundamental problems of contemporary society. In Europe the trend toward European unification with its implications for national economic policies has enlisted the attention of a group of outstanding economists at the Free University of Brussels.

While study of complex and challenging problems does not assure their solution, responsible leaders attest to the value of careful analysis and evaluation by outstanding scholars.

The Social Sciences as Basic Disciplines

NATIONAL BUREAU OF ECONOMIC RESEARCH

RESEARCH IN INTERNATIONAL ECONOMICS

An autonomous research body serving both public and private groups, the National Bureau of Economic Research, New York, is distinctive in its approach in that it presents the statistical history of economic problems and traces alternative courses of action and their possible consequences without emphasizing explicit policy conclusions. During the 40 years since its founding, the bureau has investigated most of the major recurrent economic problems of the century with help totaling more than $7,000,000 from The Rockefeller Foundation and associated boards, One subject of special interest to economists, businessmen, and, increasingly, private citizens throughout the world—the international balance of trade—has been the topic of several studies conducted by the bureau's members.

Among related investigations nearly completed is one on the structure of world trade and payments and another on the cyclical fluctuation in foreign trade. A historical survey of the volume, price, and value of United States exports and imports is under way, and several years ago the bureau published the definitive International Transactions and Business Cycles.

UNIVERSITY OF WASHINGTON

RESEARCH ON ECONOMIC HISTORY

To bridge the gap between studies of economic history and economic growth, Professors Douglass C. North and Morris D. Morris are doing cooperative research in the field of economic history, based on the conviction, a growing one in the profession, that the problem of economic development is the central theme of economic history, especially in the underdeveloped areas.

Supported through the Institute of Economic Research at the University of Washington, Seattle, both men have investigated different phases of economic history. Professor North recently completed a study of United States economic growth from 1790 to 1860 and will now study developments from 1860 to World War I and the economic history of the colonial period. Professor Morris, who has done research on the history of the Indian labor force, will direct his attention to other aspects of the economic history of India. He hopes to uncover data that will help determine whether the Indian economy since 1860 has grown, remained static, or even declined in its economic capacity.

The two economic historians will work together on seminars and research activities with occasional assistance from other specialists in the related fields of economic history and economic development.

COLUMBIA UNIVERSITY

STUDY OF AMERICAN FOREIGN AID

Dr. Herbert Feis, a former economic advisor and member of the Policy Planning Staff of the Department of State, is conducting an analytical study at Columbia University, New York, of United States foreign aid since World War II.

He will examine the link between United States nonmilitary foreign aid in the postwar period and the success of the country's foreign policy in achieving its external political and economic objectives. Although the study will be focused on American foreign aid policies, Dr. Feis1 intent is to mark out lines of analysis relevant to aid programs in other lands.

Dr. Feis will present a historical account of the role of United States foreign aid since 1945 and discuss how this aid may both have served and impeded foreign policy. Some attention will be given to the obstacles and problems existing in foreign countries where the aid and support were extended. Dr. Feis will consider assistance provided through national and international agencies by both government and private industry.

HARVARD UNIVERSITY

CONFERENCE ON INPUT-OUTPUT TECHNIQUES

Input-output analysis has been increasingly used in both theoretical and practical economic studies since the end of World War II. Economists in government bureaus, universities, and research institutes in a growing number of countries throughout the world are using input-output techniques to examine relationships in the economy as a whole and within its various sectors.

The increasing application of input-output analysis in both developed and underdeveloped countries has created a need for economists to meet together to discuss theoretical and empirical problems, newly developed methods of application and their results, and possibilities for international collaboration. In association with the United Nations Secretariat, Harvard University's Economic Research Project is developing plans for a conference to be held in 1961 in which researchers from many countries, including the Soviet Union, where input-output analysis is under way will participate.

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The Quest for Development

CARNEGIE ENDOWMENT FOR INTERNATIONAL PEACE

DIPLOMATIC TRAINING PROGRAM

Among the problems confronting the new nations of Africa and Asia as they assume responsibility for their own affairs, one of the most urgent is their need to create rapidly a machinery for the formulation and conduct of foreign policy. In few if any of these countries are there sufficient numbers of well-trained diplomats to develop and carry out foreign policy in ministries at home and effectively represent their nations' interests abroad.

Several years ago, in response to the interest expressed by representatives of these countries, the Carnegie Endowment for International Peace, New York, began to explore opportunities for assisting Asian and African nations in their efforts to build up a corps of diplomats thoroughly conversant with the practices and procedures of modern international relations. The advanced training program that has been devised by the endowment consists of two different activities.

The first training scheme provides fellowships that enable foreign service officers from recently independent countries to undertake advanced study in international affairs and diplomatic practice at universities and institutes in the United States and Europe. At present 16 Fellows are engaged in special studies at Columbia University's School of International Affairs in New York and at the Geneva Graduate Institute of International Studies, Switzerland.

For young diplomats serving in embassies in Washington and in delegations to the United Nations in New York, the endowment has organized a second program of part-time in service seminars on foreign policy formation and the procedures of multilateral diplomacy. In Washington the Johns Hopkins University School of Advanced International Studies has initiated two series of seminars relating primarily to economic development and to international relations in Asia and Africa. The endowment, in New York, hopes to conduct seminars at the United Nations on United Nations issues and procedures.

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INTERNATIONAL BANK FOR RECONSTRUCTION

AND DEVELOPMENT

LIBRARIES ON ECONOMIC DEVELOPMENT

Established to help finance the economic projects of its member countries, the International Bank for Reconstruction and Development, Washington, D.C., has operated an Economic Development Institute since 1955 to train officials charged with development responsibilities in their own nations. Personnel of ministries of finance or economic affairs, central banks, programming offices, and development corporations, whose work concerns the planning and execution of development policies, have been invited to Washington to participate in the institute program.

To reinforce and extend the training it has provided through the Economic Development Institute, the International Bank now plans to supply selected institutions in the countries where former Fellows are working with basic libraries on problems of economic development. The collections, which will be available to other officials as well, will be sent to at least one institution in each major center.

The library consists of a total of 412 items, including books, journals, pamphlets, and miscellaneous documents, on such subjects as growth theory, planning and administration, statistical methods, land and agriculture, labor, industrial development, and international trade. Studies of individual countries and of special political, geographic} or cultural factors, as well as general reference works, are included.

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HITOTSUBASHI UNIVERSITY

STUDY OF ECONOMIC GROWTH IN JAPAN

In 1951 a group of economists at Hitotsubashi University in Tokyo undertook an empirical study of Japanese economic growth since the Meiji Restoration of 1868. The work emphasized capital formation as a critical correlate of economic development.

The study, which filled an urgent need of the Japanese Economic Planning Board, also involved exploration of complex new approaches to national income estimation.

Thirty-eight volumes of statistics were compiled and issued as preliminary reports in the course of the research.

In undertaking these investigations the scholars had access to volumes of statistics, one for each prefecture, which have been compiled for the period 1868 to 1926.

Since for each year during this time there are 46 such year-books, the statisticians have still to complete the task of systematically analyzing these materials. In addition to verifying or revising components of their aggregated national income series, the group will use the materials to disaggregate the series by prefecture. As in many other countries, economic development has not proceeded at the same pace within all regions of Japan.

COMMITTEE FOR ECONOMIC DEVELOPMENT

INTERNATIONAL ECONOMIC PROBLEMS AND POLICIES

The Committee for Economic Development, New York, initiates studies into economic problems of current importance and, on the basis of research, formulates recommendations which are later publicized. Founded in 1942 by a group of businessmen, the committee in the past confined its studies almost wholly to the economy of the United States. Recently, however, its program has been expanded to include problems in international economics with major emphasis on the economy of Europe.

The committee has now turned its attention to studies of the economic development of Latin America, and is also initiating researches on the international economic position of the United States, the economic activity of the Soviet bloc in the free world, and commercial relations in the Atlantic region. This expanded international program is under the direction of William C. Foster, vice-president of the Olin Mathieson Chemical Corporation, who will head a distinguished group of businessmen and educators well acquainted with international economics.

UNIVERSITY OF RIO GRANDE DO SUL

ADVANCED TRAINING IN ECONOMICS

Brazil, currently undergoing rapid economic growth, needs many more well-trained economists than are now available to staff public and private development agencies and to fill posts on the faculties of economics that must play the major role in preparing these specialists. Partly with this need in mind, the University of Rio Grande do Sul, Porto Alegre, has been developing an exceptionally strong program in economics in its Faculty of Economic Sciences and related Institute of Economic Studies and Research. Full-time participation by both faculty and students is required, teaching and research are closely integrated, and library resources are ample. Postgraduate instruction is offered in agricultural economics, statistics and economic analysis, economic development, and economic theory, and the research activities of the institute focus primarily on the economic development of the State of Rio Grande do SuL.

UNIVERSITY OF THE ANDES

CENTER FOR STUDIES IN ECONOMIC DEVELOPMENT

In 1958 the Center for Studies in Economic Development was founded at the University of the Andes, Bogota, Colombia, to undertake research on the economic problems facing the developing countries of Latin America. The center also provides advanced instruction for young graduates of the university's Faculty of Economics, Among the studies completed are an annotated bibliography of the literature of economic development, emphasizing that of Latin America; an analysis of the potato and rice markets in Bogotd; a work on legal barriers to domestic investment in Colombian industry; and a discussion of the teaching of economics in

Colombia.

During the next few years members of the center are planning to investigate agricultural requirements of the Colombian economy; estimates of the national product generated by the rural sector of the economy; and public control of the private business sectors.

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Fundamental Problems of Contemporary Society

FREE UNIVERSITY OF BRUSSELS

STUDY OF THE NATIONAL ECONOMIC POLICIES OF THE WEST

With economic well-being a paramount objective of the governments of the North Atlantic community, a group of scholars drawn from the member nations are planning a systematic, comparative study of their countries' national economic policies. Among the questions they will attempt to answer are these: To what extent do the governments of the community pursue compatible goals? Do they select the most efficient instruments for accomplishing these goals?

To what extent are the national economic policies of countries sharing common regional interests harmonious with one another? How aware are officials of the problems involved, and of alternative policies and instruments? How are decisions affecting national economic policy made and how can decision-making be improved? Answers to these questions should also be of interest to Latin American and African communities.

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Agricultural Sciences

The PROGRAM OF The Rockefeller Foundation in the agricultural sciences continues to be directed primarily toward improvement of food production in various parts of the world through advancement of research and education. The cooperative efforts in selected countries,

where Foundation scientists furnish guidance to local personnel in research and teaching programs leading toward agricultural improvement, serve as the central core of activity.

Although the operating programs have been expanded moderately during the past year, a concerted effort is being made by the Foundation and the cooperating governments to transfer increasing responsibility for leadership to able, trained local personnel. The decree of President Adolfo JL6pe2 Mateos of Mexico on December 5, 1960, establishing the National Institute of Agricultural Research, marks the culmination of the joint endeavor in Mexico to center leadership of the agricultural research work in a truly Mexican organization. The research contributions made by the cooperative Mexican program since 1943 have made it possible for the country to achieve self-sufficiency in the production of the major food grains, corn and wheat. Most important, the cooperative program has trained a corps of scientists capable of guiding the further development of agricultural science and technology in Mexico. It will soon be possible to implement the same procedure for transfer of leadership for selected projects to local personnel in the cooperative program in Colombia.

Foundation assistance to research and educational activities at institutions in the United States has shifted somewhat as funds from other domestic sources have been increased for fundamental studies and for programs of national concern. The Foundation has, however, continued to support selected research projects of broad potential interest and growing concern internationally, such as the studies of the nitrogen cycle in soils at Iowa State University and the research in maize genetics at North Carolina State College.

The North Carolina studies will be directly concerned with utilization of the abundant stocks of maize germ plasm available in Mexico, Colombia, and Brazil, and will also furnish training opportunities for Latin American students who are concentrating on maize improvement.

The need for increased attention to agricultural development in the emerging nations of Africa is widely recognized, and a growing number of Foundation grants have been made to research and educational institutions in African countries during the past year. The establishment of a sound basis for technological development in agriculture is essential to the economic and social advancement of these nations, Selected institutions in Africa are destined to play an increasingly important role in international agricultural progress. The cooperative support in Kenya for wheat disease investigations and in Uganda for sorghum improvement studies should help to bridge the gaps in present knowledge, and to produce new information and materials valuable in all the areas of the world where these two food grains are of major import-

ance to the diets of the people.

Coordination of the Foundation's program in the agricultural sciences with the activities of selected international organizations is receiving increased attention, and the Foundation is assisting the programs of a number of these agencies.

A grant to the Food and Agriculture Organization of the United Nations for the training in Mexico and Colombia of wheat and small-grain breeders from Middle Eastern countries should encourage interchange of ideas and of basic breeding materials among important research centers in the Western Hemisphere and the Middle East.

The results of continuing cooperative efforts in complex agricultural environments have made it apparent that the barriers to increased food production can be eliminated only through research conducted within those environments and directed at the solution of specific localized problems. The growing reservoir of information and materials accumulated through research in an increasing number of cropping zones around the world will be helpful in accelerating food production in many regions where diets are still deficient.

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UNIVERSITY OF THE PHILIPPINES

AND JAPAN WOMEN'S UNIVERSITY

HOME ECONOMICS

In the effort to bring to their people a higher standard o'f living, both Japan and the Philippines are currently faced with the problem of finding a sufficient number of trained home economists.

As the Philippine Republic continues to expand industrially and to develop its governmental agencies to serve the people, there is an increasing need for home economics extension workers, high school and college teachers of home economics, hospital and institutional dietitians, food technologists for industry, and research workers. The University of the Philippines, Quezon City, is assuming the major responsibility for training these specialists. The Department of Home Economics offers courses in nutrition and dietetics, clothing and related arts, family life and child development, home economics extension, food technology, and home arts. Two home economics courses are required of every woman student in the university, and approximately 400 students are majoring in the subject.

To build and equip additional classrooms and laboratories urgently needed by the department to carry on its present work, The Rockefeller Foundation has appropriated $150,000 for use over a three-year period. With expanded facilities it will be possible for the department to undertake cooperative research with the International Rice Research Institute, founded in 1959 at Los Banos, near the campus of the university's College of Agriculture, and jointly supported by the Philippine government and the Rockefeller and Ford Foundations.

In Japan, where the Ministry of Agriculture and Forestry is making a major effort to encourage the production of diversified crops, especially on upland soils, a well-trained corps of research scientists, teachers, and extension workers in home economics is vitally needed to educate the

people on the value of a balanced diet. To provide qualified home economists, Japan Women's University, Tokyo, offers thorough training in foods and nutrition, and nearly half of its 2,250 students are majoring in the field.

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IOWA STATE UNIVERSITY OF SCIENCE AND TECHNOLOGY

PLANT BREEDING FOR INSECT RESISTANCE

Of the various methods of protecting plants against disease and insect attack, the breeding of plant varieties with genetic resistance is, over the long run, the safest and cheapest. The increasing public concern over use of chemical insecticides of possible danger to human health has highlighted the importance of better crop protection methods.

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CONSERVATION FOUNDATION

USE OF CHEMICAL PESTICIDES

Because of the problems presented by the widespread aerial spraying of chemical pesticides in suburban and urban areas and its incidental harmful effects upon wildlife and, occasionally, people, the Conservation Foundation, New York, has undertaken studies to determine the compatibility of pest control methods with wildlife preservation.

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KANSAS STATE UNIVERSITY OF AGRICULTURE

AND APPLIED SCIENCE

RESEARCH ON STORED GRAIN

One of the world's greatest food problems is the deterioration of stored grain, of which ten per cent, or enough to supply the carbohydrate needs of 250 million people, is lost annually. In 1956 investigators at Kansas State University of Agriculture and Applied Science, Manhattan, initiated additional studies of the problem through analysis of the biochemical and physiological changes occurring in wheat during storage. These scientists, members of the Department of Flour and Feed Milling Industries, discovered an apparent relationship between the amount of gluten in wheat and its viability, which in turn has an important bearing on the

storage of the seed grain as well as the quality of the bread that can be made from it.

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OTHER APPROPRIATIONS

NTS WHICH FALL somewhat outside the specific programs, or which include elements relating to more than one aspect of the Foundation's work, are taken from general funds. In 1960 ten appropriations and 18 smaller grants were of this character.

THE ROCKEFELLER INSTITUTE

DEPARTMENTS OF MATHEMATICS AND PHILOSOPHY

Created over 50 years ago by John D. Rockefeller to carry on research in medicine and allied sciences. The Rockefeller Institute, New York, has through the years successively widened the scope of its activities in response to the advance of human knowledge and the development of higher education.

In the early years the institute added most of the biological fields to its research program. Later an extensive re-evaluation of its purpose and program by the Trustees culminated, in 1954-1955, in the establishment of a graduate school, empowered to grant the degrees of Doctor of Medicine and Doctor of Philosophy. In the graduate school an effort has been made to provide students with broad training in all scientific fields related to the life sciences as well as to encourage their interest in the humanities and the arts.

During the next ten years a further expansion of the curriculum is to take place through the addition of departments of philosophy, mathematics, and physics. Philosophy, which seeks unity and relationship among the sciences and attempts to determine their place in the development of society, is thought by the institute's directors to be increasingly important in the curriculum as science tends to become ever more fragmented and specialized. Mathematics has often been cited as "the mortar which binds together the building stones of science," and, the institute's administration believes, can be a powerful tool in the hands of a biologist. With an increasing amount of research being devoted to the physical properties of biological complexes, a grounding in physics also assumes great importance in the training of a biologist