

**AGENCY FOR  
INTERNATIONAL  
DEVELOPMENT**



**Development Support Bureau  
Program Strategy Statement  
1981 - 1985**

**DEPARTMENT  
OF  
STATE**

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Program Strategy Statement  
1981-1985

The era has passed in which AID's development assistance centered on large resource transfers. The success of the AID program is dependent upon our ability to transfer technological capability with concern for human welfare and within the limitations of the human and natural resource base, into relevant, cost-effective developing country programs. A unique asset AID brings to the challenge is the network of personnel and institutional relationships in developing countries, in the U. S. Government, with other donors and with the U. S. technological/research community. Traditional problems of development are being exacerbated by rising energy costs, rapid urbanization and unemployment, staggering debt burdens, increasingly rapid resource degradation, and the need to deal with an increasingly broad spectrum of technology -- from remote sensing and satellite communication to appropriate low capital technology. Limited financial and manpower resources both in AID and in the developing countries demand more efficient use of multidisciplinary approaches. Self-sustaining and equitably shared progress requires long-term commitments to institutionalize capacity in developing countries.

AID's major focus is on operational field programs and its resources should be allocated to increasing the effectiveness and efficiency of those programs. AID cannot assign to each Mission the range of technical resources needed to carry out a country program. Since Missions cannot be self-sufficient, there must be access to appropriate specialist skills. The role of Mission staff is to involve and to manage effectively the Agency's array of technical resources in carrying out a country program. DSB provides resources -- ideas, information, expertise, technologies -- which can be adapted and applied to particular problems in particular countries through collaboration with the technicians and program managers in the regional bureaus and Missions. DSB is a core staff of multi-disciplinary expertise with linkages both to the field programs and through contractual and professional relationships with the U. S. technological/research community. Given these dimensions, including the budgetary and personnel constraints that will characterize the early 1980s in AID, DSB proposes a strategy response which involves:

1. A centralized technical resource pool in the various sectors that places the widest available range of specialized technical competence at the service of country program needs, yet allows for maximum interaction among different technical areas and for the economies of scale provided by a critical mass.
2. Early and intensive involvement of Agency technical competence in the formulation of policy, program strategy, and evaluation.
3. A base within AID for identifying new technologies and developing them for application in Agency programs.

Many currently available technologies and methodologies are ready for direct developing country application. In general, the rate of development and the ability to manage change in most LDCs is considerably below the rate which the application of currently available technologies and methods would permit. In some instances, LDC relevant, cost-effective technologies and methods don't exist. There are currently available some methods of contraception, for example, which are accepted by significant numbers of couples within some LDCs; analysis of and experimentation with cost effective methods for delivering contraceptives, such as commercial and community-based distribution systems, will be pursued to ensure growth in contraceptive utilization. In the education and health fields, the balance between the potential for existing technology and need for new approaches is somewhat different; most experts agree that the formal systems for delivering these services in LDCs cannot reach the bulk of the population in a cost-effective manner. Thus, the emphasis of the Agency's programs will vary by sector reflecting, in part, the differing levels of the state-of-the-art -- in some, the bulk of our resources can be devoted to the application of known technology, in others a large portion must be invested in the adaptation and evaluation of new technologies.

Corresponding to this reality, the roles of DSB's technical offices vary. DSB resources will support operational field efforts, sometimes indirectly through adaptation and assessment of new technologies, sometimes directly through application of existing technologies. Research which is long-range or more basic and not readily adaptable to LDCs will not be financed by DSB. It will be a continuing DSB responsibility to maintain communications with the research community to monitor research results with particular attention to new techniques which may be adaptable to LDCs and to facilitate the recruitment of highly specialized talent to solve specific technical problems as they arise in AID programs or as requested by LDCs. This also enables AID's technicians to maintain their knowledge of the state-of-the-art and their access to professional communities. Thus, DSB experts allowing for variation by technical field, would be primarily concerned with technology application with an important corollary role for adaptation and assessment of new technologies.

DSB's primary role of support for operational field efforts takes different forms: Agency-wide service functions such as those of OIT and DIU; management of RSSA's and contracts for specialized services which Missions draw upo such as Ohio State for credit, Mississippi for seeds or Kansas State for grain storage; management of the population intermediary organizations; assistance to LDCs in shelter through the Housing Guaranty Program; access to TDY assistance through Indefinite Quantity Contracts and Cooperative Agreements; and the involvement of direct-hire DSB staff in assisting Missions in planning, implementing and evaluating field activities.

Making direct-hire staff available to Missions for TDY is a high priority for the Bureau; it must be balanced, however, with the realization that unless the direct-hire technicians multiply their technical expertise

through contracts, cooperative agreements or RSSAs, their numbers are far too small to meet the Agency's needs, particularly for highly specialized skills. Competition, therefore exists for technician time as a TDY resource and also as the manager of a broader pool of resources from outside the Agency. One forum in which judgments on budgeting the time of these scarce resources will be made is the technical working groups (such as the Rural Development Steering Committee, the Energy Steering Group, the Committee of Education Officers and the Technical Program Committee for Agriculture). In the work groups, regional bureaus, PPC and DS technicians jointly review activities in their shared specialty. There will continue to be a necessary balance between field time and DS project management time, with the recognition that direct TDY field time is essential to improving field projects and to maintaining the field relevance of DS technicians. Of the time in the field, a reasonable balance will be maintained between assistance to Missions on Mission projects along with the management responsibility for DS field activities. Some of the DS staff with scarce skills have demands for their services many times in excess of their availability (rural development planning, water management, remote sensing). Increasingly, the basis for choosing among the competing demands will be a judgment of the potential effect of the requested assistance on the Agency's program direction. Utilization of the technical working groups will also permit an early analysis of Mission program direction as reflected in CDSSs and PIDs to spot needs for experts which had not been foreseen by a Mission because it did not have a sufficiently specialized technical staff to diagnose the problem and recommend the specialist needed.

By its nature, adaptation and assessment of new technologies for use in operational field programs entail risk. The definition of technology adaptation is hazy and shifting -- it is not as long-range or risky as research but is not as proven and well-known as current methods. Adaptation is a transition phase -- a filtering-out process which takes research results and attempts to adapt and apply them to LDC circumstances; if successful, it results in new solutions ready for application. The proportion of DSB funds spent selectively on technology, adaptation and assessment will vary widely in the various technical areas; the determining considerations are the degree to which known technologies can solve the problems of the LDCs on the one hand, and the prospects for devising promising new approaches which may provide better or cheaper solutions if they can be adapted to the conditions of our LDC clients.

Recognizing the critical importance of research, AID must also recognize the limits of its resources and the division of responsibilities with other parts of the U. S. Government, the non-governmental research community and other donors. Blanket definitions and sharp distinctions are difficult, but a few examples illustrate: long-term basic research on disease vaccines would no longer be an AID budget item, but the effect of irrigation projects on the spread of water-borne disease in the tropics would be appropriate for our financing; bio-chemical research on nutrient absorption would not be AID financed, but monitoring the relative health and growth of infants on formula versus breast-feeding in LDCs could be; bio-medical research on new chemical contraceptives would not be, but

seek new products, technologies and methods which show promise for LDC adaptation. At the same time, the problems of LDCs requiring research need to be defined and conveyed to the research community. This role requires staff time -- although not significant financial resources. For example, DSB is giving high priority to the Office of Development Information and Utilization which leads the Agency's efforts to acquire and to make available for use current published, technical information.

Inter-agency policy groups and technical conferences sponsored by the United Nations and other international organizations are constant claims on the Agency's staff time. These events, stimulated from outside and demanding Agency attention, change regularly, but the effort required to formulate Agency positions on the issues never diminishes. Often the issues are matters of technical policy that have implications for future Agency programs; DSB has responsibility to organize and to lead the Agency's involvement in these efforts. During the past year for example, DSB has had to allocate staff effort to preparations for the U. N. Conferences on Science and Technology for Development and on Rural Development, to the continuing relationship with BIFAD, to the Inter-Agency Steering Groups on Energy and Remote Sensing. In coordination with PPC, DSB developed Agency positions on Presidential Review Memoranda for Science and Technology (PRM 33) and Communications (PRM 35), as well as an implementation of energy programs with State and DOE (PD 8). We anticipate that the level of effort required from DSB's central technical resources to participate in formulating Agency-wide positions for such events will not diminish. Common to these unpredictable demands is the need for considerable executive-level attention to handle fast-moving, policy level proposals -- to make sure Agency attention is mobilized in the right way at the right time.

DSB believes it can accomplish these objectives for FY 1985 within existing staff levels and the present proportion of the Agency's budget. We are reorienting and refining our roles within those parameters to direct our attention and effort to reinforce the high technical quality of the entire Agency's portfolio. The budget estimates for the Office of Population assume substantial growth in the budgets for bilateral population programs during the planning period; however, if Mission proposals do not materialize, centrally funded programs should be increased (in FY 85, up to \$335 million).

#### Directions for FY 1985

The agenda of critical development problems facing field Missions is increasingly being reflected in DSB's priorities. DSB's technical resources are being engaged in the mainstream of the Agency's program efforts. The greatest shifts have occurred and will continue in the former TAB offices where the creation of DSB in the reorganization of 1977 reinforced the shift away from the original TAB approach which focussed on research on "key problems", allowing only limited support for operational programs. The balance of effort in DSB is already predominantly field support. DSB estimates the proposed FY 1980 budget would finance about 1100 work-years of field services. Often, these services are unrecognized by the rest of the Agency because they have been primarily problem specific technical interventions. Henceforth, the most significant change will be in how field support occurs, rather than the proportion of effort devoted to field support. We think more benefit could be derived from DSB's technical resources by encouraging Missions to utilize DSB's

direct-hire specialists to assist Missions in the diagnosis of technical problems, the prescription of appropriate contract resources, and in the formulation of projects to deal with the problems. DSB wants to encourage Missions to more fully utilize DSB expertise in this manner. We need to continue to build stronger cooperation between the field staff and the technical resources in Washington. We believe these relationships are the key to both better use of the Agency's scarce technical resources and more effective, technically sound operational field programs.

The DSB program strategy and the operational changes we envision do not depend on the establishment of the proposed Institute for Scientific and Technological Cooperation. If the Institute is not established, the rate at which the DSB program can shift direction and the extent to which direct-hire staff can be primarily oriented to achievements in the context of country programs will be constrained by responsibility for research programs remaining in DSB. Nevertheless, DSB is committed to redirection and will work out less management-intensive methods to carry forward the research program required. The presentation of DSB's program in this strategy paper assumes the existence of ISTC.

In order to expand efforts in new program areas and increase involvement in country programs, DSB will be using a number of different management mechanisms. In some cases interdisciplinary groups from several offices may work on a problem area outside of the normal structure. In other cases offices with overlapping interests in a certain subject may need to agree that one of them will assume lead responsibility. For example, working groups on employment, delivery of services and technology transfer have been defining program objectives and relationships among offices concerned with these problems, whereas lead responsibility for operations research on delivery systems for integrated health, population, nutrition programs may be assigned to the Office of Population. We anticipate that the increased interdependence among offices for common program objectives will strengthen integration of programs. Other examples that exist in the program now are communications technologies important for nutrition, agriculture, health, population and education.

Protection of the environment, management of natural resources and production of energy are interlocking sets of problems of concern to experts in agriculture, science and technology, energy, health and development administration. Leadership roles to attack these sets of problems are evolving within the Bureau. The Science and Technology Office has outlined a leadership role in the assessment of natural resources (especially through the use of remote sensing techniques), and in the support of institutional mechanisms in LDCs to manage these resources. The Agriculture Office is developing expertise in the production of forest products. The Energy Office is concerned with increasing the sources of energy suitable for varying conditions and requirements in LDCs.

Employment problems are of growing concern in the Agency's programs. A number of DSB offices have been responding to demand for assistance from field Missions. The Urban Development Office is concerned with assessing the nature

of employment problems and enhancing employment and income producing capability. The Housing program offers obvious opportunities for employment. The RAD Office is developing expertise to design programs which increase off-farm employment. The Agriculture Office is using economic analysis techniques to assess rural employment and income on the farm. The Agriculture Office is also developing capability to promote agri-business and improved processing and marketing of food which will affect employment among the rural off-farm populations. The Office of Science and Technology has considerable experience with developing small industry which relates closely to their responsibility for appropriate technology programs.

Enhancing the role of women in development is an objective that crosses the entire spectrum of Bureau activities. To increase attention within the Bureau to the role of women and to focus Bureau programs on this objective, consultants have been engaged in the formulation of office strategies and are now being involved in the development of specific program activities. We are trying to address the role of women in practical, operational ways as part of our main program efforts. We do not want to isolate the issue of women's roles, to be treated apart from programs concerned with agricultural credit or employment or delivery of services. We intend that DSB direct-hire and contract experts will incorporate the means to enhance the role of women into the technologies and methodologies being introduced into operational field programs. One of the places to begin is with activities that collect information at the individual or household level that can reveal the differential effects of development programs on women. These activities will emerge in proposals for FY 1981, as the start of an effort which will increase during the strategy period.

OFFICE OF DEVELOPMENT INFORMATION AND UTILIZATION

Information, particularly as it serves to facilitate efficient transfer of technology, is being given steadily growing recognition as a key element in any development endeavor. The problem of efficient program and technical information management is of major concern to the Agency as it is worldwide. An effective technical information management program helps assure efficient application of research results, reduces duplication of effort, and generally increases and stretches the impact of Agency activities at marginal cost.

Both the increase of available information and the growth of automated information systems, particularly in the industrialized nations concerned with development, make information flow and exchange an often highly specialized technical and costly operation. The Office of Development Information and Utilization (DIU), strengthened and enlarged under the recent Agency reorganization, is charged not only with receiving, selecting, acquiring, and organizing available information (with priority to AID generated and sponsored information, including the AID activities "memory"), but, also, with arranging for the delivery of selected information in the most useful form to the appropriate users of the information.

In recognition of the complexities involved in the transfer of technical information and the key role of innovative information utilization in that process, DIU through targeting information to specific users, tailoring information to LDC end user needs, communicating through announcement publications with the field to create awareness of technical information sources, providing and arranging for quick response to field demand for specific information, and providing consultative assistance to all information activities connected with the Agency, will help support and expedite the transfer of technology.

In summary, DS/DIU's strategy objectives in 1980-1985 are the following:

1. To develop, maintain, manage and service the "Development Information Memory", which includes the "AID Memory" plus selected "memories" from other development assistance organizations.
2. To assist, review, and coordinate AID programs/project design, involving information activities, such as establishment of information centers and data banks, development of library services, etc.

3. To increase, by means of various publications, seminar training and briefing efforts, field and agency awareness and utilization of available development information resources.
4. To promote development of library/information institutional capabilities in LDCs.
5. Recognizing the critical role of information management in the transfer of technology, DIU will assist in developing new information communication techniques and identifying existing ones which will serve to facilitate technology transfer.
6. To maintain liaison, and close coordination with, counterpart technical information offices in private, governmental and international agencies.
7. To arrange direct access and SDI (Selective Dissemination of Information) services from government and private specialized information data bases for the Agency's technicians so that they can maintain currency with the state-of-the-art in their professional specialty.

April 4, 1979

FOOD AND NUTRITION CLUSTER

Office of Rural Development and Development Administration (DS/RAD)

DS/RAD brings to the Agency a social science staff with a wide range of development skills and experience. The office provides technical support to field Missions based on a multi-disciplinary approach to rural development and development administration. Its mission is to lead the development and application of analyses, design and implementation methods that help developing countries achieve growth with equity.

Specifically, DS/RAD direct-hire and contract resources help the Agency achieve its objectives of (1) equity of access to income-producing opportunities and social services, (2) widespread self-help participation in rural development activities, and (3) strengthened LDC management capability that reinforces growth-with-equity for the poor majority. The office's portfolio of projects has grown out of and reflects a continuing commitment to these objectives. Since these objectives are central to the Agency's development assistance strategy, we expect that the DS/RAD program will remain reasonably consistent with present objectives through 1985. Specific projects, however, will mature and new ones will be developed during the period ahead.

Examination of the causes of rural poverty and analysis of the demographic composition of the rural poor is a central theme in the RAD portfolio and its projects. Projects address the issues of varying and equitable access to resources, income distribution and participation rights among groups and between sexes. For example, one project emphasizes participation in terms of mobilization of rural people and resources for development purposes; another complementary one emphasizes the decentralization of public institutions so that the people can significantly influence and interact with the government agencies serving them. Missions and host countries are encouraged and assisted to take full account of the development roles and the resource needs of women and of those sub-groupings of the society addressed by AID projects.

Host country needs that Missions wish to address are carefully defined through long-term analyses or short-term studies. The needs are met by DS/RAD resources collected and deployed to directly address problems thus defined. Relevance, quality control and feedback are continuously emphasized in close working relations with Missions and key AID/W backstop people. Coordination of our efforts is achieved with the regional bureaus and PPC through regular meetings of the Rural Development and Management Assistance Steering Committees. Here, Bureau representatives review and comment on program and project ideas and offer suggestions on initiatives to be undertaken, Missions that might be served, and the operations of office-supported field consulting and applied research activities.

DS/RAD's portfolio stresses applied research through in-country data gathering and analysis, task oriented consultancies, state-of-the-art

surveys, and information dissemination. Portfolio resources can be applied to (1) program strategy development, (2) project identification, selection, and design, and (3) project implementation and evaluation. The activities can be carried out at the Mission level or, with Mission concurrence, directly with host country institutions. DS/RAD encourages Missions and host countries to build upon its activities by contracting supplementary or new services from our collaborating universities and firms. In this way, the Agency and host countries have continuing access to U. S. leaders in many areas of rural development and development administration.

All RAD projects combine Mission consulting with applied research and the dissemination of new information about specific aspects of rural development and development administration. The leaders of the applied research and consulting efforts are among the outstanding conceptualizers and students of rural development in the U. S. and the collaboration they achieve working within the DS/RAD program encourages exchange of ideas and experiences which make each individual project richer and more effective. From this interactive, collaborative mode of operation, DS/RAD offers significant leadership to the Agency in conceptualizing and strategizing for rural development. At the same time, the broader development community both in the U. S. and abroad receives the fruits of this effort through newsletters, seminars, workshops, scholarly publications and other information disseminated by the office.

The creation of the office through the combining of rural development and development administration has focussed increased attention on problems of implementing rural development projects. A good example of this is the new project on Administration and Organization of Integrated Rural Development. This project offers collaborating Missions a pool of consultants skilled in various management areas (organization, budgeting, systems operations research, and so forth) as well as with the environmental and institutional factors of particular LDCs. This project provides both short and long-term consulting services through which Mission and host government personnel are helped to diagnose the organizational and management strengths and weaknesses of on-going IRD projects. Similarly, the recently approved Area Development project combines assistance at the design stage of new projects and consultants to help local planning organizations improve operations and the effectiveness of regional plans.

The office's development administration program responds to needs repeatedly stated in CDSS, sector and project analyses and to legislative policy emphasis on "public administration" and management capability needs. Each of the new activities listed below will address crucial field needs defined in consultation with the regional bureaus. These applied research and field support activities are also directly responsive to recent GAO recommendations that the Agency strengthen its work in financial management and public administration training.

All of the activities to be developed or strengthened over the next few years are closely designed to strengthen LDC capabilities and to achieve a more equitable distribution of benefits, income and services. These new project areas include:

- Managing Decentralization;
- Local Revenue Administration and Tax Policy for Local Development;
- Institutional Financial Management;
- Administration and Organization of Poverty Oriented Programs;
- Administration and Organization of Labor Intensive Work Projects; and
- Management Training and Development.

While the office's emphasis in new program development over the next five years will be on development administration, certain new (follow-up or spin-off) activities in rural development are contemplated to help Missions improve access and participation of the rural poor. Priority areas of emphasis include:

- New initiatives aimed at targetting more Agency resources toward resolving the plight of the landless and near landless.
- Developing a capacity to support Missions which are involved with cooperative development in the rural sector, based on the assumption that DS/RAD will be assigned the responsibility and staff to manage the Agency's support of the international operations of several U. S. cooperatives.
- Marketing services which help small farmers and other rural producers gain access to markets and fair returns on their labor.
- Helping the Agency expand its effort to generate off-farm employment and rural enterprises.

### Office of Agriculture

The general objective of the office is to provide a program and technical leadership to support agricultural development in LDCs. An important 1985 objective is to improve the size and quality of the outreach component of support to the field, particularly direct support to the field. The office staff and the contract resources must continue to redirect the emphasis of their efforts to accomplish this objective. The primary target is the A.I.D. Mission.

The office also has a responsibility to help improve the functioning of the Agency as a whole by being a processor of information between the outside professional universe and the Agency and its internal elements, particularly through contributing to policy. DSB is a technical bureau; the quality of its service depends upon its technical intelligence and how well that intelligence is related to development. The office views research results in this context, i.e., as important to upgrade the intelligence of the support process. Of course, the primary source of intelligence must be a better awareness of USAID and LDC needs.

In support of its general objective, the office proposes the following critical 1985 objectives:

1. Increase the quality and extent of supporting human and institutional resources available for identifying, designing and mobilizing agricultural programs in developing countries.
2. Improve the quality and validity of technical information designed to increase productivity and income of target people in agriculture.

These objectives will increase in importance as program levels rise. An essential criterion for development investments technical soundness. A.I.D. needs to maintain an in-house capability to sense the existence of important technical issues or to assess the validity of technical advice in order to ensure the technical soundness of the program. It is our impression that the numbers of personnel in agricultural technology in A.I.D. Missions and Regional Bureaus is declining. The increasingly scarce technical experts in the Agency must be effectively involved in the decision making process. Since agricultural technology is diverse, a fairly large number of different experts are needed to cover all important specialties. These experts need to maintain involvement with the outside scientific and development community to know the state of science and judge quality of technical performance. There is no need to duplicate this capacity in each Regional Bureau. To do so would be wasteful and inefficient.

By strengthening DS/AGR resources to support high quality agricultural assistance programs, the office will be able to play a more constructive role in shaping the direction of A.I.D.'s agricultural programs.

The quality and validity of A.I.D. programs in agricultural technology rest in placing ideas into LDC environments involving LDC talent and institutions in creative and responsible ways. To make this happen effectively the office must continue to find ways of working cooperatively and directly with Missions and Regional Bureaus. It is not sufficient to produce and distribute technical information. The office must have access to the best technical information and draw on the best ideas of U.S. experts and others. Using Mission and Regional Bureau guidance for implementation, DS/AGR will concentrate on both quality and relevance of its supporting technical service and its information base. Both A.I.D. and Title XII university experts will be used in systematic fashion to achieve USAID and LDC priorities and needs. The office is frustrated by the conflict between maintaining quality resources available on demand and the Agency's interpretation of competitive procurement requirements, but DS/AGR will continue to press for approaches using instruments involving collaborative and cooperative modes of operation. Finding a suitable means of procurement which mobilizes the best technical support for development is not a 1985 objective but an urgent one now.

Integration of agricultural technology into LDC socio-economic context is a primary concern. The agricultural economics staff will assume an increasingly active role in bringing this about. Greater interaction between DSB offices particularly Rural and Administrative Development, Nutrition, Science and Technology, Energy, DIU and Education, will be required. Multidisciplinary analyses of development problems with other DSB offices, such as the three undertaken this year by DSB (income and employment, technology transfer and delivery of services) will be expanded.

Applied research is viewed not as an independent activity but as a responsive element in a dynamic cycle of support and as providing opportunity to introduce new ideas into the development cycle. Good technological research needs to be continuous. A recycling process in which feedback of field information gained under pilot and prototype conditions governs the design and revision of each new step. DS/AGR will strive to strengthen this feedback loop by increased staff awareness of field conditions based on objective evaluation and monitoring. Evolution of LDC indigenous capability for research and development of locally appropriate technology is an absolute necessity. Spawning the process of technological development rather than technical transfer is the real objective. Research, extension, training and the other elements of support must constitute a closely-linked package in a dynamic situation. The office's direct responsibility for most research programs may be transferred to ISTC, but the concept of development as an integrated continuum of innovation, implementation, evaluation and refined innovation must not be

disrupted by this separation. Maintenance of this integrity is an important objective of this office, but one that would not be under its direct control.

DS/AGR relies heavily on the International Agricultural Research Centers for applied research and first level extension. As in the past, these services will be complemented by research contracts and grants largely to universities. Much future research will be done under Collaborative Research Support Programs (CRSPs), proposed for transfer to ISTC.

Development of LDC systems of extension research is considered high priority by nearly every knowledgeable authority. DS/AGR will play an important role along with the Regional Bureaus, JCAD, the newly formed ISNAR and the IARCs to build research capability.

In designing and implementing its program, DS/AGR seeks to be fully responsive to Mission priorities and needs. Information from review of CDSS and ABS statements, country visits and discussions with Mission Directors and Rural Development Officers are important sources of information. More formally, program plans and project designs are reviewed by the Technical Program Committee for Agriculture (TPCA) which consists of the chief agricultural rural development officer for each Regional Bureau and PPC and substantive subcommittees. TPCA serves as a project review committee for DS/AGR projects. DS/AGR has initiated program review procedures with the BIFAD Joint Research Committee (JRC) also.

#### Relation to Development Objectives of the Agency:

A.I.D.'s agricultural strategy objectives are centered upon increasing LDC capacity to expand production and distribute food supplies to alleviate hunger and malnutrition, and increasing participation of poor people in the process and benefits of development. (Agricultural Strategy Paper).

DS/AGR plans to continue to give priority attention to promoting better agricultural technology to provide the base for expanding production. In so doing DS/AGR will sharpen the focus of its program to embrace those topics which are of greatest concern to the rural poor generally and which provide opportunities for production of foods having better nutritional quality and income generation for poor people.

The office program is evolving with awareness and consideration of the development problems of concern to the Agency. DS/AGR's program objectives for 1981-1985 are:

In Economics and Sector Planning, sharply focus efforts in three categories. In Development Planning evaluate and promote improved planning analysis techniques, disseminate planning information and augment number and quality of planning staffs in LDCs. Cooperative agreements will be used to involve host countries, A.I.D. Missions and U.S. university in advisors to support mutually agreed upon host country activities.

In Food Production and Rural Incomes evaluate alternative crop and livestock production systems, involving institutional arrangements and policy actions to increase food production, conserve resources and increase financial returns for poor farmers. In Food Distribution and Consumption, evaluate alternative marketing systems, and provide support for programs which can improve income, consumption and nutritional effects.

Initiate a major multidisciplinary effort working with RAD and others to devise improved systems by which agricultural technology is introduced, adapted and used by farmers including support systems of credit, input supply, marketing, processing, storage and technical information for farmers.

Support USAID efforts to implement research adaptation and institution building in LDCs based on principal crop commodities, sorghum, millet, beans, cowpeas, roots and tubers, groundnuts, maize and soybeans, and others, mobilizing U.S. and other expertise and considering national and international research programs.

Substantially improve the management of pesticides by LDCs as a necessary basis for integrated pest management. Implement programs of integrated crop protection based on the interactive effects of insect and vertebrate pests and predators, crop and animal diseases and judicious use of pesticides in basic cropping systems in LDCs through training and applied research.

Develop a network of soil research and management activities integrated with national research, extension and educational centers in LDCs for transfer of agricultural technology using soil taxonomy and implementing research leading to optimal use and conservation on major soil groups most critical to development. Ultisols and oxysols, particularly vulnerable to slash/burn agriculture and deforestation will receive major attention.

Organize and make available high quality technical assistance to improve agricultural water management projects projected at \$1,500 million in A.I.D. bilateral funding for 1981-85 through collecting, evaluating and organizing design and management information for use on new and re-habilitation projects; providing leadership through organizing workshops and seminars; implementing professional training of specialists; and, as needed, initiating adaptive and applied research on new and improved technologies and methods.

Promote implementation of innoculation programs for biological nitrogen fixation for important tropical legumes in several LDCs through applied research, information exchange, training and consulting. As a complementary effort, ISTC should determine the potential for non-symbiotic fixation by tropical grasses and initiate exploratory work in the promising area of mycorrhizia/phosphorus relationships.

Design and implement a program of research, adaptation, training and technical assistance to provide alternate technologies for improving returns to agroforestry activities for small farmers and for conserving threatened soil and water resources arising from agricultural pressure on natural forest and range ecosystems.

Increase production of quality fish products through intensive controlled fish culture in ponds and rivers, coastal estuaries and lagoons; increase fish production primarily by small scale fisheries through improved management of natural fishing resources and increase the quantity and quality of fisheries products reaching low income consumers.

Substantially improve the utilization of animals in small farmer enterprises through improved management of animal resources utilizing U.S. and other expertise to help implement needed programs of research, institution building, training and technical assistance in LDCs.

Increase substantially efforts to evaluate and to reduce postharvest food losses at all levels by providing technical assistance in processing of grains, fruits and vegetables, providing assistance in training professionals, assisting in developing better technology, and in helping to put in place administrative and institutional arrangements to organize and implement postharvest food loss programs.

Provide a clearing house role in assessing U.S. resources in agribusiness useful for development in LDCs and in assuring the mobilization of a critical mass of them. Provide training, consulting and technical assistance to substantially increase private and cooperative enterprise in promoting and developing income-producing activities in the processing and marketing of agricultural products.

With other donors, A.I.D. and ISTC should formulate 1985 objectives for the International Research Center. Several alternatives exist, e.g., a conservative program of essentially the present level in order to test the effectiveness (not yet proven) of new programs started during the past five years; cautious expansion based on criteria now being explored by CGIAR/TAC; expansion of the international center approach to additional kinds of problems outside of the present CGIAR guidelines.

The historical role of the Office of Agriculture has been to provide the technical leadership in the broad field of agricultural development for the Agency. At various stages in the evolution of A.I.D. and in the changing needs of the developing countries the functions of the office have varied. The fundamental role, however, remains as valid today as it did in the early days of foreign assistance.

Agriculture remains the primary economic activity of the majority of the population in the less developed countries. In a broader sense agriculture and rural development epitomize the the bilateral foreign assistance plans of the 1980s. A solid technical foundation for the A.I.D. programs in agriculture and related disciplines is needed now more than ever before.

The role of DS/AGR over the next five years will be to provide the technical leadership in the Agency in agriculture, working closely with Regional Bureaus and field Missions with other bilateral donors and international agencies and with universities and private industry to develop and mobilize the best of U.S. capability.

Office of Nutrition

AID can make a significant contribution to the reduction of malnutrition in developing countries by encouraging and assisting countries to incorporate nutrition goals into their planning and by helping them to implement the policies and programs which emerge from such planning, especially through investment in food production and distribution, improved water supply and better sanitation.

AID's major nutrition objectives, therefore, are: (1) to encourage and assist developing countries (and regional and local levels of government in developing countries) to incorporate nutrition considerations into their social and economic development plans; (2) to make available to them the methodologies for assessing needs, determining causes and selecting interventions; and (3) to make available the most cost effective interventions with information on when they are most appropriate to apply, the costs and other requirements for implementing them, the best methods for implementing them, and information on expected results.

This can best be brought about by a cooperative effort among USAID field Missions, regional bureau backstop offices, and the Development Support Bureau Office of Nutrition. In the early 1970s, there was little or no staff in the regional bureaus to backstop USAID/managed country nutrition projects; therefore, the Office of Nutrition provided most project development assistance and project backstopping service to Missions. As the regional bureaus have begun to gear up for this in the past year or two by hiring nutrition program officers, they have also taken over most of this responsibility. DS/N is however still deeply involved in project development and backstopping through the technical inputs of direct-hire staff and through the provision of expertise through RSSA, IQC and other arrangements. Two RSSAs with HEW and two with USDA provide the Agency with backstopping expertise in surveys and surveillance, food technology, consumption analysis and nutrition as a component of health delivery services. Seven IQCs provide expertise to backstop Missions in everything from specific areas such as nutrition education to broad multi-sectoral analysis and planning.

DS/N also maintains active involvement with U.N. agencies, other bilateral aid agencies, and other organizations both as technical counterparts and, in the case of the U.N. agencies, through helping to shape the U. S. positions presented before their governing bodies. These efforts are designed to make the U. N. agency programs more effective, more coordinated with AID's activities, and more supportive of the AID nutrition program.

To ensure that all AID nutrition activities are based on the best scientific knowledge, we maintain an arrangement with the U. S. National Academy of Sciences, under which they provide the Agency with guidance on new or controversial matters. Since nutrition is a relatively new science in which conventional wisdom tends to shift from time-to-time, this arrangement has helped AID's nutrition programs to be as scientifically correct as possible, while avoiding any external criticism on scientific or technical grounds.

The Office of Nutrition also works to develop and refine the methodologies which are needed by countries and private voluntary organizations to better conduct their nutrition activities. For example, DS/N developed methodology for nutrition planning is currently being used in about a dozen countries and a methodology for simplified field assessment of nutritional status has been applied in nine countries in the past three years and will become the standard methodology to be applied in many other AID-assisted countries.

Over the next five years, major emphasis will be given to stimulating national nutrition planning and methods of assessing the nature and extent of national nutrition problems. Together with the Offices of Agriculture, Population and Health, programs will (1) encourage and help countries to examine their agricultural development strategies in terms of how they impact on providing a nutritionally adequate diet for the poor; and (2) encourage and assist countries to incorporate nutrition components into Health and Family Planning Delivery Systems; and to organizing an effective international network of LDC, regional, and U. S. institutions involved together in collaborative training, in research and development, and in information exchange.

By 1985, it is expected that: at least 20 countries will be actively and effectively incorporating nutrition goals into agricultural planning; all AID-assisted health delivery programs will, where appropriate, include nutrition components; and an effective training, R&D and information exchange network will be in operation.

HUMAN RESOURCES CLUSTER

Office of Health Development Strategy

The main objectives of the Office of Health are to mobilize technical resources to provide technical guidance and information, to support relevant research applicable to field program need and to promote interagency, multidonor and intersectoral program coordination. For the next five years, the office will emphasize five major fields of activities in support of these objectives:

1. Health Delivery Systems

In support of the international consensus on meeting the most basic health needs of the poor majority, the program will focus on assisting regional bureau and country efforts in the following areas:

- development of affordable community based integrated health, family planning and nutrition systems.
- development of alternative systems for the development of health personnel, particularly at the auxiliary level.
- systematic evaluation of ongoing experience with integrated health delivery systems, with special attention to AID-assisted projects.

Other DSB activities in this field will include:

- operations research to determine the cost effectiveness of family planning/MCH systems.
- applied research and technical assistance on questions of decentralized management administration, and financing of community-based health delivery systems.

2. Health Policy Planning and Management

In support of regional bureau programs to develop national self-reliance in planning the health sector, particularly in the context of relating health to broader aspects of development the DSB program will focus on the following activities:

- support of multisectoral training institutions to develop senior managerial and planning leadership within the health sector.
- the preparation of guidelines on multisectoral planning for health.
- the provision of specific field support in health policy planning and management at the country level.

### 3. Community Water Supply and Sanitation

This area of activities will concentrate on preparation and implementation of the U. S. role in the U.N. Water Supply and Sanitation Decade. Particular emphasis will be laid upon the design and provision of services to rural communities. Program emphasis will be on the following areas:

- provision of field support for design, evaluation and technical assistance;
- dissemination of information on appropriate technologies;
- provision of guidelines for improved design, implementation, and evaluation of projects;
- improved low cost technologies for local manufacture;
- research on social problems of adaptation of new technology, impact of water/sanitation programs on health, the economics of environmental programs, and on the particular role of women in relationship to this sub-sector.

### 4. Disease Control

This field activity will concentrate on support of regional bureaus' efforts to bring major endemic diseases under a level of control consistent with economic and managerial capability of governments. Primary emphasis will be on the following major problems:

- malaria, schistosomiasis, onchocerciasis, and the diarrheal diseases.

### 5. Donor Coordination

In response to the 1978 foreign aid legislation requesting AID to examine means for collaboration with other donors "to reduce the worst aspects of absolute poverty by the end of the year 2000;" specific emphasis will be placed on health and multi-sectoral donor collaboration mechanisms to provide more systematic and rational weight behind efforts to improve international health status over the period of the next two decades. Such efforts will be carried out in close coordination with AID and other donor efforts in nutrition and family planning.

## Office of Population

The major objective of the Office of Population is to provide couples in the developing world with the knowledge and means to effectively control their own fertility and therefore contribute to the Agency's objective of meeting basic human needs. The office will continue and expand its programs as described below:

### Family Planning Services

The primary means for meeting this objective of the Office of Population is through the development and support of delivery systems for providing fertility control, information services and contraceptive supplies. These delivery systems include: a) use of existing service delivery infra-structures which can be mobilized to provide family planning services, e.g. rural health networks, commercial outlets, hospitals and clinics; b) new distribution systems created for this purpose, such as village and household distribution systems staffed by paid and/or volunteer workers. These new distribution systems must utilize innovative methods to reach greater numbers of people, such as increased use of paramedical personnel, development of sterilization facilities at hospitals and clinics, and broader involvement of community service organizations in the provision of family planning information and services.

Through bilateral assistance programs with requesting governments, and through centrally funded grants to non-governmental U.S. and international organizations increasing numbers of delivery systems will be established or activated. This Office will provide the necessary family planning commodities to these systems.

At the same time a centrally funded training program will be maintained to meet the growing need for surgical, clinical, paramedical auxiliary, community based and management personnel for rapidly expanding world-wide family planning service requirements.

### Population Information and Motivation

Population information and demographic data is essential to: foster adoption of appropriate population policies, encourage acceptance of contraception from service delivery systems, allow evaluation of demographic impact of services programs and determine current demographic status of a nation or area.

Population information and analysis must be provided to relevant LDC leaders who need to understand the gravity of their population problems. By providing such information to LDCs, these governments can be of assistance in making decisions and commitments to the adoption of population policies and actions to resolve population problems.

Similarly, expanded efforts to obtain and analyze demographic data is crucial to meeting office objectives. Through the continuation of surveys, civil registration and analytical activities, basic information for population planning in the LDCs will be provided. Data will be used also to highlight a country's progress or lack of progress on population problems and can be a management and motivational tool.

Information, education, and communication activities will include development of new communications methods and materials as well as transfer of successful experiences in attacking the barriers to acceptance and use of family planning.

### Population Research

Research contributes to the development of new knowledge and methods to solve population problems including provision of family planning services and therefore facilitates achievement of program objectives. Operational research deals with the lack of adequate service delivery systems, especially in rural areas. Through the design and testing of experimental delivery systems new methods for providing services to the poor can be developed. This will continue to be a major focus of the Office of Population.

The office will continue to support short-term applied biomedical research to seek new and improved means of fertility control. This research will be focussed on development and adaptation of methods for LDC use and the testing of safety and performance of such methods in LDC settings.

Policy research in the area of fertility determinants has an increasing role in the design of programs and the identification of those factors which may affect service delivery.

Demographic research seeks to improve methods for effective collection and analysis of basic population data in LDCs.

### Conclusion

In addition to the above noted activities which are provided directly, the Office of Population serves as a resource to mobilize technical assistance to the field and provide leadership, direction and expertise in the population sector.

Office of Education

The program of the Office of Education follows closely the directions set forth in the new Agency education policy paper, directions which DS/ED helped to define and describe.

Specifically, over the next five years, we propose to give attention to four major problem areas, as follows.

1. Foundation Education for Children. Unless an individual has an opportunity in childhood to learn basic skills, he or she incurs deficits compounded many times over in later years. A great many children in developing countries either have no school to attend or the schooling that is available is of low quality. In such circumstances lies the source of vast illiterate populations; the fact that so many of the unschooled children are in farming areas contributes in a fundamental way to the relative backwardness of rural life.

The goal of work in the problem area is therefore the trial and refinement of affordable and significantly more effective models for the education of children. While this goal encompasses both school and nonschool approaches for the 5 to 12 year age group, it is the former that shall in all likelihood receive the greatest attention. Emphasis will be on basic subjects.

2. Work Skills. Out-of-school youth, many of whom have never really attended school, as well as older unschooled adults, are functionally illiterate and either lack marketable skills altogether or are engaged in marginal, near-subsistence work demanding only the most rudimentary capabilities.

The goal here is to search out the best methods for imparting specific job-related knowledge and skills, with first-order attention to the traditional sector. Such work-connected training will in many cases encompass what is sometimes referred to as "functional knowledge," including attention to the 3 R's where appropriate.

3. Leadership Skills. Developing countries need assistance in training individuals for leadership roles of many kinds. Shortages exist at the local level - in less structured groups such as farmers' associations, mothers' clubs, youth organizations and the like; in institutional settings (e.g., teachers); and in business and industry.

The goal is to design, test and make available improved methods of training the broad range of indigenous leaders needed at all levels of technical and professional competence, and employing both formal and nonformal means.

4. Development Communications. There are many things that impede the diffusion of important ideas and facts. Some of these barriers are cultural - for example, linguistic differences; some natural, like mountains or expanses of sand and water; some are themselves the result of insufficient knowledge about how best to overcome obstacles to the transmission of new information.

The goal is the identification of more effective development communications to (a) achieve greatly improved delivery of essential information required by poor people, by incorporating educational and communications principles in programs in health, nutrition, agriculture and family planning; and (b) countering the effects of rural isolation and ineffective rural administration through the use of reliable low-cost telecommunications at the community level. Work in Development Communications will include the new Intelsat Communications Satellite initiative, approved by the Administrator in October 1978. Both satellite and non-satellite communications projects will be embraced in the program, however, with major attention being given to software preparation.

overall office  
Our/activities will be oriented to field needs in two basic ways. First, we shall continue to assist Regional Bureaus and Missions in the design and evaluation of their own projects. The practice shall be continued of allocating at least 25 percent of total staff time to respond directly to field requests.

Second, our program of research, trial and testing of new methods and improvement of existing education and training systems shall be closely linked to field needs. We will build on proven, successful ventures where possible, adapting and applying lessons learned in the Radio Mathematics project, for example, to language arts and science teaching in primary schools. This kind of undertaking represents DS/ED's conviction, reinforced by nearly ten years' experience, that attention to certain educational problems requires a sustained effort of longer duration. Other new activities will marshal technical expertise and put together "packages" for diverse, usually out-of-school training needs. This kind of effort represents a commitment to assist Missions and LDCs with more proximate needs.

Office of International Training

DS/IT has three principal functions:

- it is responsible for developing and monitoring policies, standards, procedures, and statistical data for participant training;
- it is responsible for arranging participant support services for all AID-sponsored participants in the United States; among these services are health care, visa renewals, counseling, meeting at point of entry, U. S. orientation, and proper placement of academic participants based on an evaluation of their qualifications; and
- it is responsible for the development of training programs for all participants funded under PIO/Ps sent to DS/IT for administrative handling.

DS/IT also is responsible for providing reimbursement of costs incurred by U. S. Federal Agencies that provide assistance in the training of UN fellows. These costs will average \$1.8 - \$2 million a year.

DS/IT has undergone considerable reorganization and reduction of staff within the last five years. This resulted in large part from increased Mission use of host country contracts to handle participants and severe reductions in AID/W staff ceilings. Over the next five years, there will be some additional reduction in staff. However, DS/IT will retain the capacity to handle directly on an annual basis up to 400 participants for which Missions request special handling. The handling of all other participants funded by PIO/Ps, about 2,000 per year, will be contracted out to other government agencies such as USDA for agricultural participants, or to private contractors, such as the South-East Consortium for International Development for participants enrolled in member universities.

## DEVELOPMENT TECHNOLOGY CLUSTER

### Office of Urban Development

In most developing countries the urban population growth rate is estimated to be two or three times greater than the national population increase. Based on the existing situation, the private sector is finding it difficult to absorb the increased labor force, urban financial resources are insufficient, and urban facilities and services are unable to meet the growing demand. Conversely, however, the urban environment continues to offer developing country populations the best available opportunity to satisfy many of their economic, social, and political aspirations. Urban centers, therefore, have a major role in achieving rural, regional, and national development goals.

This strategy assumes that the urban development program will increase in importance in the Agency's country assistance activities. DSB urban development efforts will be directed toward a continuing assessment and demonstration of appropriate Agency interventions in this sector, and the provision of program support to Bureaus, Missions, and developing countries for a growing effort.

The core program will concentrate on seven associated efforts. Initially and continuing throughout the planning period, the program will address the apparent need for a stronger, clearer, and more assertive policy and program interest in urban and regional development which recognize the urban and spatial dimensions of the development process. Adequate technical services will be made available to Regional Bureaus and Missions for the preparation of urban and regional development strategies and assessments. Opportunities for training and direct-hire, contract, and consultant services will be available to strengthen, support, and supplement Bureau and Mission technical capability in the skills of urban and regional development. A major program, which is complementary to those in associated DSB offices, will be initiated to identify programs for increased employment and income-producing opportunities for the urban poor. A revival of Agency efforts aimed at improvement of local government financial and related management capabilities will take place. Research and prototype efforts will be underway to improve the delivery of services directed at meeting the basic needs of the urban poor. The linkage of urbanization to Agency programs and interests in energy and other resources, the role of women, environment, fertility, urban population growth, and migration will be addressed.

Office of Housing

Shelter is among the most basic of human needs. The extremely rapid rate of urbanization in most LDCs will aggravate already serious shelter problems. LDCs which are struggling to improve shelter for their people find themselves burdened with limited and sometimes misallocated financial resources, inadequately experienced personnel, and misguided shelter policies. DS/H response has evolved largely as the result of working in very low income communities. Most projects financed by DS/H in recent years provide little or no "housing" as the term is generally understood in the United States. Rather, the upgrading of slums and the provision of serviced sites with potable water, electricity and community facilities and services is the heart of the matter.

The Housing Guarantee program will remain the Agency's principal resource in assisting LDCs address their shelter needs. Shelter assessments will continue to precede extension of guarantees, addressing not only shelter projects, but housing institutions, housing finance, urban planning, and shelter policy modifications. In its three staged efforts to assist LDCs develop appropriate urban policy, develop functional institutions, and planning and design of viable projects, DS/H has established close working relationships with key LDC urban institutions and officials in over 40 countries. These relationships, through DS/H and its six regional offices, provide the Agency the major opportunity for expanded urban activities during the FY 81-85 period.

During this period, the program could be expanded to give greater emphasis to middle income countries, subject to a reformulation of U.S. assistance policy toward middle income countries; the increase in annual Housing Guaranties could be up to another \$300 million by FY 1985.

All HG programs are joint ventures with the Missions and Regional Bureaus. The planning process for shelter programs provides opportunities to introduce new concepts of urban development and to address problems of employment, community organization, environment and energy conservation. The Office of Housing will continue to solicit appropriate participation of other DSB offices -- Urban Development, Health, Energy, Science and Technology -- to participate in the development of HG projects.

## Office of Science and Technology

The purpose of the Office of Science and Technology is to encourage developing countries to use scientific and technological knowledge through programs supported by AID Missions which improve the lives of poor people. Taking into account that the immediacy of the impact will vary, this can be accomplished, for example, through the application of industrial technologies that create employment or by preserving the natural resources on which their lives depend.

The office program, therefore, will include a portfolio of projects that: (a) determine the existing knowledge base of a given area of concern to strengthen staff resources and respond to anticipated field needs, (b) develop prototypes and provide demonstrations to gain knowledge and understanding (applied research), and (c) provide technical assistance to the Missions through direct application of existing know-how gained from research findings already available in the market place (development).

The mode of operation will stress support to the Regional Bureaus and the overseas Missions. This will take two primary forms -- one, collaborative prototype development and demonstration projects which show a promise of replicability in other LDCs, and two, direct technical assistance to the Missions' program and project development process.

### 1. Remote Sensing

Promote and institutionalize the use of remote sensing technology to resolve problems, for example in agricultural production, desertification, deforestation, coastal food resources and mapping.

### 2. Science Policy and Planning

Determine methodology and undertake science and technology sector assessments. Institutionalize a science planning capacity in the host governments.

### 3. Employment Creation Through Development of Small Industry Technology and Management Capabilities

Design and develop prototypes of industrial technologies suitable for the creation of employment with an output of products relevant to basic human needs.

### 4. Environment and Natural Resources

Develop an expanded information base and provide technical assistance to attack problems related to environmental degradation and natural resource management.

5. Appropriate Technology

Provide support to Mission programs in appropriate technology as applied to small industry, transportation, communication, health and other areas not covered by other offices.

6. Scientific Institutions for Development

Create mechanisms utilizing U. S. scientific organizations that will provide technical expertise to Missions and host governments for the establishment and/or upgrading of scientific infrastructure.

7. UNCSTD Follow-up

Activities yet to be precisely defined that will serve as A.I.D.'s response to the U.N. Conference on Science and Technology for Development.

8. Development of Technologies for Low Cost Construction

Experiment, adapt and demonstrate low cost technologies for construction.

Office of Engineering

We estimate that 60% of AID's activities require some degree of engineering judgment. The efforts of the Office of Engineering, therefore, are defined by the engineering content of AID's development and security supporting assistance programs. The resource of the office, available to Bureaus, Missions and LDCs, will be a staff of professional engineers. The staff will offer a variety of highly specialized engineering skills, complementing and supplementing the general engineering talents available to bureaus and Missions. Specialized disciplines will include transportation, water resources, telecommunications, hydrology, mineral resources, electric power, environment and industry. In addition to the decentralized direct field support function, the office will maintain the Agency's central link to the domestic professional engineering community. The office also serves as the locus of support for the Agency's career development program for engineers.



- (c) Solar Energy Technology - solar and photovoltaic.
- (d) Conventional Energy - resource identification, evaluation and exploitation plans.

In each of these areas, DS/EY will contract with institutions to identify the most adaptable technologies, to determine potential applications, to provide short and long-term advisory services in close cooperation with Geographic Bureaus, and to demonstrate technology in LDC settings. Lead institutions will be responsible for developing detailed programs in conjunction with DS/EY and representatives of the Regional Bureaus. The lead institutions will involve other collaborating institutions and individuals to give AID the quality, breadth and depth of expertise needed to support technology programs in a responsive and efficient manner.

#### Use and Support Resources of Private and Voluntary Organizations

This element of the program will support and channel the resources of PVOs in applying small scale, unsophisticated energy technologies in urban and rural community settings. The Peace Corps, VITA, and other PVO organizations, in conjunction with field Missions and Regional Bureaus, will be implementing agents of this program.

#### Help LDC Develop Trained Personnel and Institutions to Plan, Implement and Manage Their Energy Programs

Training programs will be provided for LDC officials, AID staff, and PVO personnel in energy planning, analysis and policy formulation, and training in the design, operations and maintenance of new energy technologies. The office will also systematically mobilize U.S. institutions -- academic, government and private -- to help strengthen LDC energy institutions particularly in energy conservation and renewable energy technologies.

Proposed DSB Budget  
(In millions)

Proposed Personnel Ceiling

Office	FY	FY	FY	FY	FY	FY 80	FY 85
	81	82	83	84	85		
HEA	10.9	13.0	15.0	17.0	19.0	14	16
ED	9.5	9.5	9.5	10.0	10.0	13	13
IT	4.0	4.25	4.75	5.0	5.0	42	35
EY	16.0	17.0	18.0	19.0	20.0	10	15
S&T	9.4	9.4	9.0	9.0	9.0	13	11
UD	2.2	2.5	3.5	4.2	4.4	6	9
HOUSING	1.3	1.0	1.5	1.8	2.6	20	22
ENGR	-	-	-	-	-	13	14
AGR	22.5	23.0	23.5	24.0	25.0	33	30
RAD	7.0	8.0	9.0	11.0	13.0	13	17
NUTR	9.5	9.0	9.0	8.0	8.0	14	10
TITLE XII	9.0	9.25	9.5	9.75	10.0	6	1
DIU	4.0	4.25	4.5	4.75	5.0	21	21
MGT	-	-	-	-	-	7	7
PO	3.0	3.25	3.5	3.75	4.0	25	24
AA, DAAs	-	-	-	-	-	16	16
SUBTOTAL	108.3	113.40	120.25	127.25	135.0	266	261
* POP	177.5	200.0	225.0	250.0	300.0	65	70
TOTAL	285.8	313.4	345.25	377.25	435.0	331	331

\*The budget estimates for the Office of Population assume substantial growth in the budgets for bilateral population programs during the planning period; however, if Mission proposals do not materialize, centrally funded programs should be increased (in FY 85, up to \$335 million).