

Trends in AID Policies, Programs, and Funds

The U.S. Agency for International Development (AID) is the primary Federal agency in international development assistance and the focus for university involvement in such assistance. Thus, directions taken by the agency will influence, to a large degree, the level and areas of future university participation. Existing agency and regional bureau policies and strategies, as well as funding and program trends, have significant implications for future university involvement in AID-supported technical assistance.

AID STRATEGIES FOR AGRICULTURE, NATURAL RESOURCES, AND ENVIRONMENT

AID has a range of agency and bureau strategies and policies that help define the ways the agency expects to achieve development goals. These strategies may not specify programs or projects, but they have a strong indirect impact on program and project development. They can:

- consolidate AID support for a specific area of assistance,
- influence Mission Country Development Strategy Statements,
- stimulate Missions to develop projects relevant to the strategy,
- help in review of ongoing or proposed projects, and
- establish funding targets.

The following section outlines the agricultural, natural resources, and environment strategies for the Agency overall, as well as for each of four bureaus that work most directly with universities in the provision of technical assistance. The Bureaus include: Bureau for Latin America and the Caribbean, Bureau for Asia and the Near East, Bureau for Africa, and Bureau for Science and Technology.¹ The latter plays perhaps the most prominent role in university involvement in technical assistance.

General AID Strategies

AID's development strategy today emphasizes national economic growth based on the free market and development of the private sector. In part, this strategy is based on the view that developing countries commonly have overemphasized the role of the public sector and restricted the role of the private sector to the detriment of the LDC economy and development.

In the 1980s, AID established four components or "pillars of development" for supporting economic growth through development assistance:

- policy dialogue and reform;
- Private sector development;
 - . institutional development; and
 - . technology research, development, and transfer.

AID established three goals for agricultural assistance: 1) enable countries to become food self-reliant, 2) ensure the food security of their populations, and 3) contribute to broadly based economic growth. These goals were to be reached through approaches based on the "four pillars" of development [98,105]. An additional agricultural goal—commitment to natural resource and environmental maintenance and enhancement—was added under the 1987 agricultural focus statement [72], nearly 20 years after recognition of the importance of maintaining environmental quality by the U.S. Government.

Reorganization and redirection of AID's programs was announced by AID Administrator Ronald W. Roskens in early 1991, citing concerns with the U.S. budget deficit, increasing scarcity of foreign assistance funds, and proliferating legislative objectives.

The much-amended Foreign Assistance Act (FAA) of 1961, with its 30-plus objectives for U.S. assistance, should be recast. It is simply too diverse in its directions to provide a manageable framework for assistance in the current and future environment [55].

¹Regional Bureau names and missions were changed in AID's 1990 reorganization just prior to publication of this document. The new regional Bureaus are: Bureau for Africa, Bureau for Europe and the Near East, Bureau for Latin America and the Caribbean, and the Bureau for Asia, Private Enterprise, and Housing.

The new mission is to “do fewer things, and do them very well” [63]. To achieve this, four strategic initiatives have been proposed to focus AID activities [64,65,66,67], and funds will be allocated on the basis of progress toward democratization, progress in economic reforms, and establishment of a market-oriented economy [64]. While a blend of project and nonproject assistance will continue, increasing weight will be devoted to economic and democratic policy reform and dialogue.

Mutual benefits—for LDCs and the United States—are a prominent focus of the new initiatives: the overall goal of AID is now to “administer economic assistance programs that combine an American tradition of international concern and generosity with the active promotion of America’s national interest.” As such, four new “pillars” of development assistance have been defined:

- *The Democracy Initiative*: “to help promote and consolidate democracy as the legitimate organizing principle for political systems throughout the world,” [64]
- *The Partnership for Business and Development*: “to engage American private sector participation in the effort to develop and sustain free-market principles and broad-based economic growth in developing countries,” [65]
- *Family and Development*: “to use the family. . . as a starting point for analysis of what people need, how they use the resources they have, and as an organizing principle for mobilizing the energy of people to create progress,” [66] and
- *Environment*: “to guide the Agency’s environmental and natural resource interventions to areas where. . . assistance will have the greatest impact” [67].

Agriculture

Agriculture is addressed in large part under the Family and Development Initiative:

Food production is a family enterprise. . . . Family land and labor determine agricultural productivity, and the way in which the land and labor are used affects the natural resource base. . . . Understanding and appreciating the contribution that families make to a farm-system agricultural approach [and] to encouraging the use of safe, clean water. . . can be the factor that spells success for a development project or program [66].

Activities that AID plans to emphasize in its Family and Development Initiative include:

- consideration of LDC family food security goals, strategies, and constraints in formulating development policies;
- “supporting the family’s role in coping with or balancing the often competing needs for economic productivity and sound management of natural resources;
- designing development activities based on studies of resource allocation within families and the impact on individual members (e.g., the impact of cash cropping on the nutritional status of various family members); and
- investigation of the relationship between environmental problems and family stability, “including the short-term potentially negative impact on families’ access to food and fuel resulting from long-term measures to protect the environment.” [66].

Environment and Natural Resources

Although stewardship of natural resources is mentioned in several new AID Initiatives, primary attention is given to environment and natural resource issues in the new Environment Initiative. Under this initiative, AID is expanding its environmental activities given encouragement by “the Congress, the Administration, a vocal environmental NGO [nongovernmental organization] community, and by a growing number of developing countries” [62]. AID projects total environmental obligations to grow from \$408 million in fiscal year 1990 to \$460 million in fiscal year 1992, and a method of tracking these obligations currently is under development. Each bureau has been directed to devote 75 percent of all new environmental resources to:

1. assistance in developing sound economic and environmental policies;
2. strengthening host country environmental institutions; and
3. projects related to priority environmental problems areas in each region.

Regional problems areas identified are: loss of tropical forests, loss of biological diversity, unsound agricultural practices, poor management of coastal resources, poor management of watersheds, inefficient use of energy, and urban and industrial pollution. These problem areas show remarkable

similarity across regions; all three regional bureaus list tropical forests, biological diversity, and aspects of sustainable agriculture as priority environmental problem areas.

AID's Environment Initiative is based on a 1988 Policy Paper on Environment and Natural Resources that identifies three program areas for AID support: sustainable production (including sustainable agriculture), maintenance of natural ecosystems, and improving environmental quality for human health needs [97]. Since the early 1980s, AID focused projects on management of natural resources, to aid the small-scale farmer growing food crops on poor farmland and to limit loss of tropical forests and hillside erosion. Support for this work has included development and dissemination of technologies to increase agricultural production while reducing degradation of land (e.g., agroforestry), improved management of natural forests, and support for natural resource management education at regional education and training centers.

Roles for universities are cited in many of AID's direction-setting documents: participation in research, developing human resources through education and training, institution building, and provision of technical assistance [74,75,79,82,98]. Whereas AID strategy recognizes a substantial role for the type of work that universities have traditionally carried out, concerns exist that this work has received a disproportionately small share of AID's funding. For example, the Board for International Food and Agricultural Development (BIFAD) Budget Panel has argued that "programming guidance" sent by AID to its Missions emphasized policy reform and private sector development while virtually ignoring institution building and technology generation [84].

Under the new organization and directions, entitlements to specific types of organizations seem effectively over, and matching commitments-in initiatives, in staff, and in funds, are expected:

[AID's] work is becoming a cluster of partnerships with recipient countries, with other donors, with many U.S. Federal and State agencies, and with the American private sector. . . . In the future we will not be working with recipient countries but with partner countries. We will not use various private sector entities as agents, but enroll the energies of private voluntary agencies, universities and profit-

making enterprises in the development challenge [55].

In turn, these organizations will be encouraged by AID to develop linkages among themselves (see box 2-A).

AID Regional Bureau Strategies

Each of AID's three regional bureaus has established different development objectives for its region and, thus, has different implications for university collaboration in development assistance. Regional bureaus have varying foci in line with their strategies (see app. C). The Bureau for Africa concentrates on private sector support as part of its policy reform strategy. Technology development, technology transfer, and construction receive less emphasis. The Bureau for Asia and Near East focuses primarily on construction, credit, technology transfer, and private sector support. The Bureau for Latin America and Caribbean focuses on credit, marketing, technology transfer, construction, and export promotion as part of its strategies in nontraditional exports and private sector development.

Bureau for Science & Technology

Prior to the recent reorganization and mission redefinition, the Bureau for Science and Technology (AID/S&T) identified two primary functions: to encourage research, development, and use of new technology to promote LDC economic development; and to plan and carry out scientific activities that are more efficiently conducted by a centralized organization or that are outside the capacity of an individual Mission. Such activities have included [99]:

- basic and applied research to develop new or improved technology that is not location-specific;
- research and development of new and improved technology conducted in the LDC in collaboration with the host country, Mission, regional bureau, or other donor; and
- technical field support for Mission projects.

AID/S&T identified five priority problem areas for its work: inadequate income growth, hunger, health deficiency, illiteracy and inadequate education, and unmanageable population pressure. At least two-thirds of the Bureau's resources were directed to the latter two problem areas in 1989;

Box 2-A—The Role of U.S. Universities Under the New AID Mission

Competitiveness Through Universities

AID's goal is to assist the movement in U.S. universities toward internationalization by developing partnerships between academic institutions in the United States and in developing countries.

The non-profit sector, particularly U.S. universities, can contribute as significantly as U.S. corporations to the long-term competitiveness of the United States in the world of the 1990s. The broad, historic engagement of U.S. centers of intellectual excellence with the world at large has positioned them well if a sustained effort is made. The influence of American scientists on the disciplines, the role of English as a universal language of intellectuals and scientists, and the continuing innovation pursued by U.S. institutions all create favorable conditions. But universities of other countries can now see the opportunities created by the U.S. precedent. The global playing field will be a crowded one, so U.S. institutions will not be able to rest on past glory.

For AID, the health and vigor of U.S. universities are of great importance as well. To respond to new challenges, AID needs new ideas and technologies. As the core cadre of scientists and technologists in AID declines, the need for strong, healthy linkages with the university sector grows. But the need is not simply for linkages between AID and U.S. universities. They, in turn, need to be linked with U.S. corporations active in developing countries. And over the long term, strong support for the development process will come from linkages between U.S. universities and counterpart institutions in developing countries. The transfer of technical knowledge essential for development, both in terms of hardware as well as training key developing country nationals, is a multiyear process where AID can best facilitate the process. AID has extensive experience in this regard in the agricultural sector. It is now time to extend that comprehensive effort to other sectors: natural resources and the environment, health and family planning, enterprise management, and the management of increasingly free-enterprise economies. The universe of U.S. universities, already embarked on increasing internationalization, can work more closely with AID.

No longer can AID afford exclusive, entitlement-style relations with U.S. universities. We need to create processes that are inclusive and competitive, able to adapt to rapidly changing times and requirements, and to grow with the dynamic change occurring in the developing countries. AID will focus on two mechanisms for this activity:

(A) Creation of the Center for University Cooperation in Development. This center will serve to build, promote, and strengthen mutually beneficial development cooperation and partnerships among AID, U.S. institutions of higher education and their counterpart institutions in developing countries.

(B) Creation of ties between schools of business and management in the United States and in developing countries. These linkages will be permissible within the center described in Proposal A but may be desirable on a broader scale than developed in the center. The linkages could involve students, faculty and research projects.

SOURCE: Excerpted from U.S. Agency for International Development, "The Partnership for Business and Development—One of a Series of Initiatives of the U.S. Agency for International Development" December 1990.

agricultural activities made up approximately one-fourth of AID/S&T's appropriations [68].

Agriculture activities have been carried out by several offices in AID/S&T. The Office of Agriculture is the primary funding source for agricultural activities, supplying approximately 50 percent of the funds allocated to the Agriculture, Rural Development, and Nutrition (ARDN) account. Nearly one-third of the Office of Agriculture's projects focused on soil and water management for agriculture between 1977 and 1988 (table 2-1). Other offices carrying out ARDN-type work have included: Nutrition, Forestry and Environment and Natural Resources, Energy, and Rural and Institutional Development.

The AID/S&T Office of Agriculture established three primary responsibilities in 1989: 1) managing the U.S. core contribution to the International Agricultural Research Centers (IARCs), 2) overseeing the Collaborative Research Support Programs (CRSPs) that operate semi-autonomously, both technically and administratively, and 3) projects directly managed by AID/S&T through contracts and cooperative agreements. Over time the CRSPs have become increasingly important components of the Office's work and, in 1988, received 46 percent of its obligations [101].

The Office of Agriculture has one of the closest relationships with U.S. universities of any office within AID. In its purpose, its emphasis on research and technology development, and the academic

Table 2-1—Project Portfolio Categories of Office of Agriculture’s Activities, 1977-88

Category	Percentage of project portfolio
Soil and water management (primarily soils and fertilizer)	30
Crop production (primarily sorghum/millet and beans/cowpeas)	26
Livestock production and health	12
Economic planning and policy	8
Fisheries and aquaculture	7
Biotechnology	6
Pest management	6
Reducing post-harvest losses, storage and utilization	4

SOURCE: U.S. Agency for International Development, Bureau for Science and Technology, Office of Agriculture, “Statistical Overview of S&T/AGR Project Portfolio FY 77-FY 88,” 1989.

background of its personnel, it is similar to the agricultural universities and therefore collaboration is facilitated. The Title XII mandate, and its precursors, strengthened these ties, particularly through the CRSP program. The majority of the Office’s non-CRSP projects are also with universities.

AID/S&T does not seem to suffer disillusionment with AID/university relationships as do AID Missions and regional bureaus. This is reflected in the consolidation of the Board for International Food and Development support staff and the Office of Research and University Relations into the Center for University Cooperation in Development within AID/S&T. The goal of this consolidation is to “develop programs which optimize the contributions of U.S. universities” to achievement of AID goals [56]. Most domestic funding for agricultural and natural resources research currently is directed at nonland-grant universities and private organizations [108]. Thus, the future of AID/S&T’s relations with universities is likely to be concerned more with expanding access to nonland-grant schools as priorities change and with preventing budget cuts from straining existing university work, than with the current debate over the extent to which universities should be favored in development assistance.

TRENDS IN AID FUNDING AND PROGRAMS

In conjunction with its agency and bureau strategies, AID’s choice of program emphases and alloca-

tion of funds among the resulting initiatives illustrate its commitment to agriculture, natural resources, and environmental programs and projects. This commitment and the choices it inspires will affect the type and extent of AID/university relationships.

Funding Trends

Funding data can help show AID’s direction and trends in agricultural development and environment and natural resource activities. Budgetary constraints have affected the international development program as a whole, and university involvement in particular. In fiscal year 1989, the U.S. Government allocated \$15.1 billion in foreign assistance funds to developing nations, down from a peak of \$22.6 billion in fiscal year 1979 [114].

Not only has AID’s overall budget decreased, but so has the Agriculture, Rural Development and Nutrition (ARDN) budget, which accounts for the majority of university funding. Since its creation in 1973, the ARDN account has been a significant component of development assistance and, as such, an indicator of AID’s commitment to agricultural, natural resource, and environmental development. The ARDN account is projected to decline as a percentage of development assistance functional accounts. In 1986, the ARDN account was allocated \$759.9 million, representing 47 percent of total functional account allocations. Projections for 1990 indicated that ARDN will receive \$477.7 million, or 39 percent of total functional account allocations [83].²

Concern also has been raised over declines in the actual buying power of the ARDN account. AID/S&T’s Office of Agriculture estimated that, after adjusting for inflation, the 1988 ARDN budget would purchase only about 44 percent of what the 1977 budget could buy [101].

Decline in the ARDN account reflects an overall decline in Development Assistance (DA) as a proportion of total foreign economic assistance, primarily due to an increase of obligations under

²The fiscal year 1992 AID appropriation request to the Congress recommended that the eight functional accounts, including the ARDN account, be aggregated into a single nonfictional “Development programs” account that would provide flexibility in funding allocation. Certain priority areas, including “the environment” are to be assured funding at levels consistent with fiscal year 1991 allocations [56].

Economic Support Funds (ESF).³ An AID response to this trend was to use part of ESF to fund projects, including those similar to ARDN activities. While not originally envisioned, this use of “projectized ESF” has helped offset downward trends in ARDN funding.

Obligations for ARDN-type activities (funded through both DA and ESF accounts) have been \$1 billion a year since 1982, although there have been significant fluctuations (some in the hundreds of millions of dollars) between years. Obligations for ARDN-type activities declined by 20 percent between 1984 and 1989 [76]. (Nonprojectized ESF and P.L. 480-generated local currencies may also be used for ARDN-type activities. Their use in this way is not well documented and is not included in data on funding of ARDN-type work.)

A recent study examined ARDN-type obligations for the period 1984 to 1989 by breaking them down into 12 purpose categories (table 2-2). Overall AID has focused its efforts in five areas: construction, credit, sector support, technology transfer, and technology development. Only the central bureaus, especially the Bureau for Science & Technology, focus substantial attention on developing LDC capacity to develop, manage, and conserve soil, water, and other resources (Resource Development) or on strengthening LDC capacity for conducting research on improved technologies for production and consumption (Technology Development). Further, considerable uncertainty exists regarding data on funding of natural resources and environment activities (box 2-B).

Diminishing ARDN and ARDN-type funding, and redirection of activities away from resource and technology development, reduce the opportunities for university involvement in development activities and lead to competition over the types of activities to be funded. Further declines in ARDN will lead to increased tradeoffs between natural resources work and the more traditional agricultural activities.

Program Trends

In addition to the type of development work that AID supports, certain changes in the way in which it does its work affect future university involvement. Program trends include: agency decentralization; emphasis on short-term results; reduced AID staffing, particularly of technical personnel; increased project size; increased use of nonuniversity contractors; and transition to a performance-based budgetary system. Many of these trends are reinforced in the proposed AID guidelines “Towards Strategic Management,” December 1990, which states:

Some planning assumptions being explored are that AID will be a smaller bureaucracy, with most of its staff overseas, running the same-sized or larger program in dollar terms. AID may move toward “wholesaling” a set of tested development approaches in certain areas, through private, non-profit or university organizations. . . . There may be two main groups [of AID staff]: highly skilled managers with a clear career path and technical specialists employed as their skills are required. Larger blocks of work maybe run under contracts and grants. There will be greater autonomy for field operations within a system of evaluation and operational/financial auditing to assure accountability. Promotion, incentives and awards will flow to those individuals and teams who can show program impact, account for resources and find a productive balance between innovation and prudence.

Agency Decentralization

Decentralization of decisionmaking and a shift of management responsibilities to the AID Missions occurred throughout the 1980s. Mission directors gained authority in 1985 to approve and implement projects costing up to \$2.5 million based on initial Project Identification Documents if no major issues are raised. The goal of decentralization was to increase administrative efficiency and allow personnel with on-the-ground expertise to make decisions.

Decentralization has hindered use of centralized programs, such as Title XII, and thus may make

³AID’s foreign assistance funds are divided into two accounts: Development Assistance (DA) funds and Economic Support Funds (ESF). Although some ESF funding has been redirected to development assistance projects, these accounts generally are allocated based on political objectives rather than on development assistance goals, and are directed to only a few particular countries. Further, these funds cannot be accessed by central bureaus such as the Bureau for Science and Technology. The Development Assistance accounts are the primary source of funding for agriculture, natural resources, and environment projects, especially through the Agriculture, Rural Development and Nutrition (ARDN) account. Funding for “ARDN-type” activities may also come from functional accounts, such as the Private Sector, Energy and Environment, and through Economic Support Funds. The new Development Fund for Africa, created in 1988, combined all funds for Sub-Saharan Africa (including those previously funded from the ARDN account) into a single fund for development assistance to the region, complicating estimates of funds and program activities in agriculture, natural resources, and environment. Aggregation of funds into a single nonfunctional account also would complicate budget analysis, although AID is developing a system to improve accountability for use of appropriated funds [56].

Table 2-2—Percent Distribution of ARDN-Type Obligations by Purpose Category for AID as a Whole and by Regional and Central Bureaus, 1984-89

Purpose-category	AID	Africa	Asia & Near East	Latin America & Caribbean	Central Bureaus*
Construction	17.5	10	24	10	0
Credit	17	2	20	33	14
Educational systems development	2.5	4	3	0	0
Human resources development	3.5	5	3	5	1
Input supply	2	5	3	0	0
Land tenure	1.5	0	0	9	1
Marketing	2.5	2	0	11	0
Planning and policy analysis	6	7	6	5	5
Resource development	4.5	3	4	4	13
Sector support	16	35	12	4	0
Technology development	11.5	14	6	7	64
Technology transfer	15.5	15	18	10	2

Totals may not add to 100 percent due to rounding.

*The column includes data for the following AID bureaus: Science & Technology; Food for Peace and Voluntary Assistance; and Private Enterprise. The study did not include data from the Bureau for Program and Policy Coordination, which in 1985 became the source of AID's core contribution to the International Agricultural Research Centers of the CGIAR (> \$40 million annually). The table thus undercounts the Technology Development category (which actually represents the majority of this funding) and to a lesser extent the Technology Transfer, Resource Development, and Human Resource Development categories.

NOTE: Between 1984 and 1989, 54 percent of ARDN-type obligations were in Asia and the Near East, 25 percent in Sub-Saharan Africa, 12 percent in Latin America and the Caribbean, and 9 percent in the Central Bureaus. These percentages were calculated after including AID Central Bureau contribution to the core budget of the International Agricultural Research Centers for 1985-89.

SOURCE: U.S. Agency for International Development, AID Washington Technical Personnel, and Chemonics, International Consulting Division, "Agriculture, Rural Development and Nutrition Portfolio Review: Analysis and Recommendations," prepared for AID's Working Group of the Joint Sector Councils of Agriculture, Rural Development, Natural Resources, and Nutrition, Dec. 30, 1988. Data for core contributions to the International Agricultural Research Centers provided by AID, Bureau for Science and Technology, Office of Agriculture, CGIAR Staff, June 1989.

Purpose-Category Definitions

1. construction: to construct" or strengthen* the capacity to construct basic facilities/infrastructure-transport, communications, water supply/waste disposal systems. Does not include construction undertaken as an ancillary activity of project classified under any other category.
2. Credit: to improve* or strengthen* the capacity to improve the delivery of credit for production and consumption.
3. Educational systems development: to develop* or strengthen* the capacity to develop education institution structure/curricula/operations/facilities.
4. Human resources development: to improve" or strengthen" the capacity to improve training and human resource development.
5. input supply: to improve* or strengthen* the capacity to improve the delivery of services and physical inputs for production and consumption.
6. Land tenure: to improve* or strengthen* the capacity to improve access to and/or ownership of land, water, and other resources.
7. Marketing: to improve" or strengthen" the capacity to improve assembly, handling, processing, storage, transport, and/or distribution of commodities and products.
8. Planning and policy analysis: to conduct* or improve* the capacity for conducting economic planning and analysis of policy issues. includes data collection and processing.
9. Resource development: to develop* or strengthen* the capacity to develop, manage, and conserve soil, water, and other resources.
10. Sector support: to provide balance of payments and program support primarily for sector economic development. Includes Commodity Import Programs, Sector Grants, and Program and Development Support funds.
11. Technology development: to improve* or strengthen* the capacity for conducting research on improved technologies for production and consumption.
12. Technology transfer: to extend* or improve" the capacity for extension/diffusion/transfer of improved technologies for production and consumption.

*or expand, establish, study, organize, etc. as appropriate.

university involvement in development assistance more difficult. Universities and BIFAD commonly depended on AID/Washington for information on upcoming Title XII projects. With authority transferred to the Missions, universities and BIFAD must

increase their links to the Missions to keep track of and be prepared to respond to potential projects [117]. In addition, increased Mission authority combined with current reward systems may lead to decreased attention to long-term projects, such as

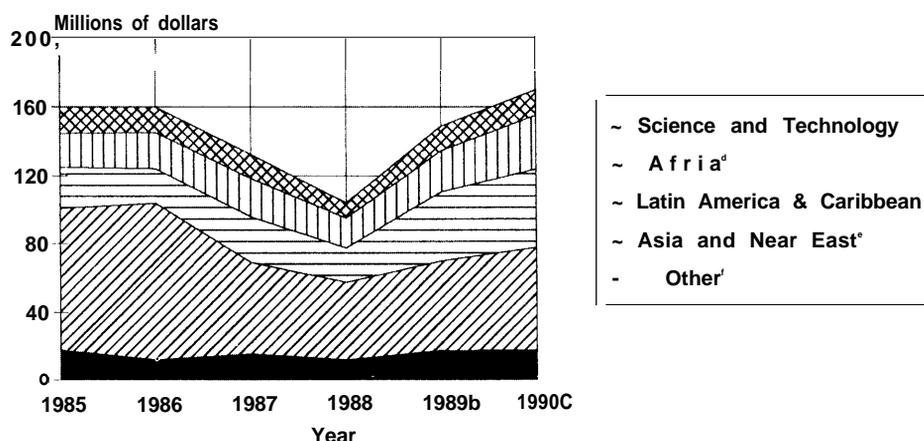
Box 2-B—Funding for Environmental and Natural Resources Activities

Uncertainty and controversy surround the data on AID funding of environmental and natural resources (ENR) activities. Concerns exist that the data significantly undercount AID's ENR activities. Because ENR has only recently become a major issue, past funding was not broken out by ENR obligations, and trends cannot be reliably determined with existing data. Sources of AID obligation data show that ENR obligations were increasing from the 1970s to the mid-1980s; declined in the later 1980s; and are expected to rise through the early 1990s. These sources, however, have been criticized for their weaknesses in counting ENR obligations.

AID's Bureau for Program and Policy Coordination (AID/PPC) developed obligation data for 1985 to 1988 by examining individual projects, breaking out the ENR portion, and cross-checking results with individual bureaus. AID/PPC has since established an automated system for tracking ENR obligations. Project officers at each mission identified ENR obligations for each project, and this work is reviewed by the regional bureaus and compiled by AID/PPC. This system currently contains data compiled for 1989 to 1990, which has not yet been fully reviewed. Data for both periods are combined below. However, due to the change in compilation methods, data may not be fully compatible.

The figure shows a higher level of AID obligations for environmental and natural resources activities than other sources show. The data indicate that AID ENR obligations reached a high point in the mid-1980s, then declined in the latter 1980s. Despite the new Environment Initiative and other activities, such as the Forest Management Project II that will provide \$65 million to forestry and natural resource activities in 42 nations [47], it is unclear to what extent ENR obligations will rise in the 1990s. If funds for such activities do not rise appreciably, then university involvement in ENR work may not grow as projected from mid-1980's obligation trends.

Obligations for Environment and Natural Resources Activities: AID Total and by Bureau



^aData for this figure come from two different collection systems, therefore 1985-88 data are not fully compatible with data for 1989-90. Data for 1985-88 were developed by AID's individual bureaus and the Bureau for Program and Policy Coordination's (PPC) reviews of individual projects. Data for 1989-90 came from a newly implemented, automated system under which the project officers in the Missions provide the data from each project, which is then reviewed by the individual bureaus and compiled by PPC. The data for 1989-90 have not been fully reviewed.

^bEstimated.

^cProjected.

^dData displayed for the Bureau for Africa are about 50 percent lower than those calculated by the Bureau for Africa. This discrepancy is due to different definitions of environment and natural resources activities used by PPC and the Bureau for Africa.

^eData for the Bureau for Asia and the Near East do not include funding for four wastewater projects in Cairo, Egypt whose obligations run from \$85 to \$250 million a year over this period.

^fIncludes the Office of the Science Adviser, the Bureau for Food and Voluntary Assistance, and the Bureau for Program and Policy Coordination (Primarily the core funding it provides the CGIAR).

SOURCE: U.S. Agency for International Development, Bureau for Program and Policy Coordination, unpublished data on environment and natural resources management obligations for 1985-87, summer 1987; initial 1988-90 environment and natural resource management obligations submissions from AID Missions to AID headquarters for review.

research and institution building relative to work that brings observable results in the short-term (see app. E).

Reduced AID Staffing

Long-term projects are hampered by short-term changes in AID policy and personnel. Declines in relevant staff, such as agricultural development officers, environmental scientists, and training officers, can restrict the number or extent of projects or hinder reform implementation [46]. In addition to lack of AID staff, institution-building work, often seen as requiring 10 to 25 years to succeed, can be hampered by staff turn-over [30]. Mission directors and agricultural and rural development office management average 3 years or less per tour of duty [26].

Changes in personnel often result in changes in AID policy and programs that adversely affect the continuity required for long-term projects. Adding to this problem is AID's system that rewards planning and design more than implementation, thereby reducing the incentive to maintain continuity [11,12]. Inability to carry out long-term work may strongly affect the Agency's environmental and natural resources activities since many problems faced in resource-poor regions are not well understood and may require long-term work to develop solutions.

Reduction in AID technical staff and increasing focus on management may also create new opportunities for university involvement. If agricultural development, natural resource management, and improvement of environmental quality continue as primary foci of AID work, AID will need to draw increasingly on outside technical expertise. Universities may be one source. Joint Career Corps, Indefinite Quantity Contracts, and other such mechanisms could be used more to draw on university technical capabilities (see box 1-B inch. 1).

Increased Project Size

AID has reduced its management responsibilities by designing larger and fewer projects than in the past. Accompanying this was a shift of project management responsibilities to AID's contractors. Larger projects push universities to combine into consortia with other schools, private firms, and others and, as a consequence, reduce their management autonomy.

Use of Nonuniversity Contractors

Growing numbers of organizations have become involved in international development and have worked with AID over the years. Currently, U.S. universities face competition from an increased number of nonuniversity development organizations. Some of these have direct AID or congressional support. For example, AID's emphasis on private sector development has fostered increased use of private U.S. firms, and Congress has placed funding earmarks on development assistance for private, voluntary, and minority firms. Congress earmarked 13.5 percent of certain development and disaster assistance for PVOs in 1981 and, in 1984, 10 percent for certain minority contractors. GAO found that 17 percent of ARDN funds went to PVOs in 1987 [106].

Increased open competition for projects has also been stressed, and some mechanisms used to tap universities have been withdrawn, in part, because of their noncompetitive nature. In addition, other development actors now compete directly for work in which universities are considered to have strengths. Private firms may be used to place students in university programs. The International Agricultural Research Centers carry out agricultural institution building and research, and provide training. Private firms also engage in institution building. Increased university involvement may be constrained by that of these other organizations, especially if development assistance funding stabilizes or decreases further.

Shift to a Performance-Based Budgetary Systems

In response to concerns over increased reporting requirements and decreased program flexibility, Congress and AID created the Development Fund for Africa (DFA) in 1987 to provide development assistance to Sub-Saharan Africa without earmarking funding. Assistance for agricultural development under the DFA is projected to fall from 43.7 percent of the DFA in 1988, when it was implemented, to 31.8 percent in 1990 (a drop of about \$60 million) [85]. Based on projections, reduction of earmarks points to reduced emphasis at AID on agricultural development and, thus, a correspondingly reduced role for universities.