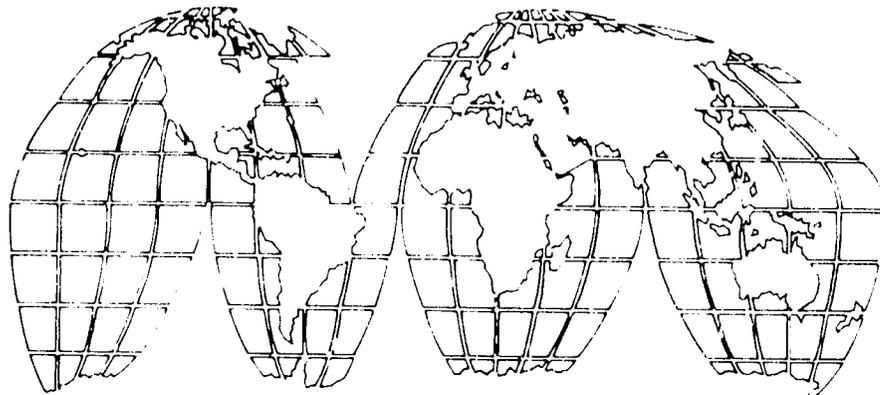


A.I.D. DEVELOPMENT EXPERIENCE ABSTRACT

A.I.D. Program Evaluation Report No. 8

August 1984

tion and A.I.D.'s Experience: A Consideration Based on Evaluations



U.S. Agency for International Development (AID) Washington, D.C. 20523

New or improved irrigation systems are often considered the panacea of increased food production, improved farmer income, and greater rural employment. Although irrigation projects offer great hope, rarely has their potential been realized as planned. Success in irrigation is dependent upon a variety of factors, only some of which are economic. Yet irrigation is in some areas necessary, in others desirable. Usually results are positive overall.

The United States has invested between \$4 and \$5 billion in irrigation in developing countries. A.I.D.'s study of irrigation, undertaken with a nucleus of eleven individual impact evaluations, ranges beyond the Agency's experience to include lessons from the work of other donors and the academic literature.

Sound water management is critical, but often underemphasized, in the design and operation of irrigation systems. The engineering and agronomic aspects are more easily understood and ameliorated.

The management of irrigation systems may be ranged analytically along a continuum from local autonomy to dependence. The latter usually involves state or parastatal control. Irrigation is likely to be more effective and reflect local needs the closer management is kept to the the user. There is however, no single formula for successful field irrigation programs.

Irrigation should be an integral part of national resource strategies. The relationship between irrigated and non-irrigated production needs careful assessment. Issues such as technological choice, water control and the rehabilitation of old or construction of new systems are inter-dependent.

More attention should be paid to traditional irrigation systems, and to greater and earlier involvement of the potential users in project design issues.

SUMMARY OF DEVELOPMENT EXPERIENCE

There is no universal formula for success in irrigation programs. They are highly complex, reflecting social and public policy in microcosm. Important conclusions do, however, emerge from the study.

- Project design should focus on the problem of effective water management, which seems to be the critical element in project failure. Although there are few pure systems, dependency increases as irrigation projects move in complexity from autonomous individual farm systems (Bangladesh), through community-based systems, to major national networks (Afghanistan). The closer management is kept to the user, even in large systems, the more responsive to local needs such systems tend to be and the more effective are operations.
- Irrigation is not a simplistic answer to problems of food production or rural income. It should be considered within the context of a national resource policy. Its efficacy is intimately related to a variety of non-irrigation factors such as agricultural pricing and marketing policies, tenancy, farming systems, credit, energy, and other factors. Irrigation projects should not be undertaken when other policies are unfavorable or when less complex projects might yield similar results over a broader segment of the population. The environmental aspects of irrigation need careful attention.
- The impact of irrigation on farmers is likely to be site-specific, and generalizations are often spurious. Yields and income may increase, but debt may rise more quickly. Tenancy can undercut investments (Philippines). Individual family members may benefit differently; women may have increased burdens (Korea). Rarely does double cropping occur as planned. Irrigation project designs tend to be overly optimistic about anticipated results.
- Traditional irrigation systems are often ignored in the glamour of building major new systems. Yet many traditional systems are both effective and important potential components on which to expand irrigation.
- Rehabilitation of existing irrigation systems is an alternative to building new ones. It is often attractive because of lower capital costs and previous farmer experience with irrigation. Such rehabilitation should not be thought of in a perjorative sense, and should take into account changed conditions.

- There is often a false dichotomy between large and small systems, and conflicting evidence on their relative productivity and efficiency. More important than size are management concepts and the locus of responsibility, which may be localized even in massive operations.
- The distinction between publicly and privately run systems is not as important as the interaction between the two. The public good is more clearly recognized in drainage; private management is important when local knowledge and rapid responses are required.
- Technological choice should be considered in relation to the degree of dependency created, and whether existing or planned institutions can meet the responsibilities that such dependency creates. In the long term, the most important contribution donors can make is to support the creation of an indigenous capacity for technological adaptation and change. Project design should be interdisciplinary, and allow for the greatest flexibility.
- Adequate planning is required for provision of funds for operations and maintenance. Budgets are often structured to place emphasis on new construction, while operations and maintenance are omitted, relegated to secondary consideration, or left to local groups.
- Water-user associations are a critical element in project success. They should be fostered prior to physical construction and be engaged in the planning process. Existing organizations should be used. They must have clear authority and responsibility.
- Recovery of economically realistic water-user fees are now generally advocated, but have yet to prove successful. Whatever recovery is attempted, more effective use of such funds is likely if they are recirculated in the local community to pay for local supervision.
- Irrigation is not equity-neutral. At best, it tends to reaffirm and reinforce, and at worst, exacerbate income and social differences. Project design should anticipate the problems likely to occur as a result.

CONTINUING PROBLEMS

When Not To Support Irrigation. Irrigation is an inherently optimistic undertaking, but worldwide experience is disappointing. Its complexity, the need for skilled management, and the dependencies created, should encourage authorities to consider other possibilities first. Relatively small groups may benefit disproportionately to available resources or other economic or social investments.

Multidisciplinary or Interdisciplinary Design. Too often, irrigation projects are designed by specialists, each of whom writes a portion of an essentially disconnected project paper. More attention should be given to interdisciplinary teams, in which the engineers are involved in the social analysis, and the social scientists or agronomists in the physical aspects of design.

Irrigation Project Papers as Sales Documents. Often, the anticipated rewards of irrigation are dependent on factors optimistically interpreted. These may range from anticipated cropping intensity, input availability, or economic rates of return, to the capacity of untried institutions to manage highly complex undertakings. Donors should understand the dynamics of the approval process, which may result in inflated anticipation of results.

Development of Indigenous Research Capacity. The complexities of irrigation systems and how to deal with them, especially in social organization, are not well understood. The encouragement of a research capacity that improves our understanding of such systems, and links local academic organizations with implementing agencies, could be an important contribution of donors to improved irrigation.

Concentration on Hardware. Too often recipient governments and agencies relate the provision of expensive equipment to project success and seek to be modern through state-of-the-art systems. Technical assistance advisors sometimes share this view. The result may be that the hardware determines the project, and less attention is placed on water management, increasing the danger of project failure.

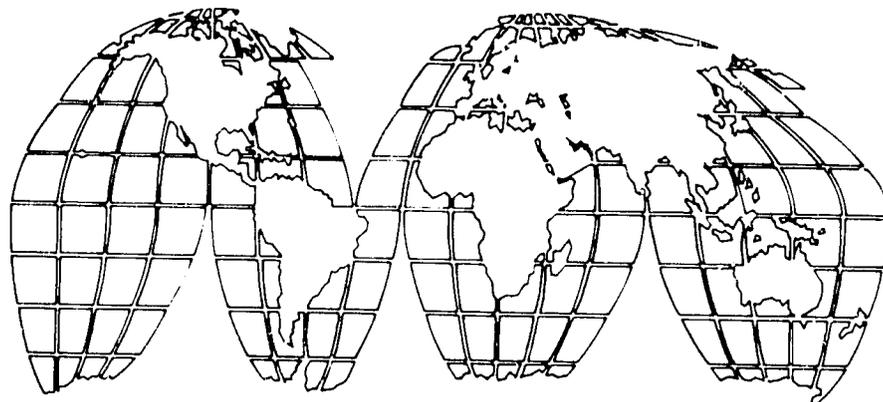
A copy of the completed report, A.I.D. Program Evaluation Report No. 8, Irrigation and A.I.D.'s Experience: A Consideration Based on Evaluations, (August 1983), PN-AAL-019, may be obtained from the editor of ARDA, A.I.D. Document and Information Handling Facility, 7222 47th Street, Suite 100, Chevy Chase, Maryland 20815. Comments on the report will be welcomed by the Center for Development Information and Evaluation, Agency for International Development, Washington, D.C. 20523.

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September 1983

Strengthening the Agricultural Research Capacity of the Less Developed Countries: Lessons from AID Experience



U.S. Agency for International Development (AID) Washington, D.C. 20523

AID and its predecessor agencies have supported agricultural research in developing countries for more than 30 years. AID's current Food and Agricultural Development policy reaffirms the Agency's long-term commitment to agricultural research and to improving human and institutional capabilities for generating, adapting and applying improved science and technology for food and agricultural development.

CDIE's study of agricultural research focused on AID's assistance to regional and national agricultural research institutions. The study was based on analyses of available project evaluations; impact evaluations of projects in eight countries; and a three-day workshop involving AID officers, developing country officials, and agricultural research experts.

The study found that AID projects had successfully trained researchers, established or expanded research facilities, and in several cases increased agricultural production. The impact and sustainability of the projects, however, were hampered by: management problems; inadequate coordination of research, extension, and agricultural service activities; insufficient understanding of the needs and capabilities of practicing farmers; and unfavorable government agriculture policies.

Agricultural research projects should be planned as part of a developing country's overall rural development strategy. Success requires government commitment and support; a farmer orientation; the consideration of social, economic and political, as well as technological constraints; coordination among research, extension and agricultural service institutions; and the involvement of participants ranging from farmers to politicians and private firms.

SUMMARY OF DEVELOPMENT EXPERIENCE

Agricultural research projects represent long-term investments in improving the capabilities of developing country institutions to develop and adapt agricultural technologies. The impact of research activities on agricultural growth depends not only on the scientific quality of research, but also on the management of research institutions, the coordination of research with other public and private sector agriculture participants, the relevance of research to the needs of practicing farmers, and most important the nature of the policy environment for agriculture.

- o AID has had considerable success in training research professionals and in establishing or expanding research facilities. The Nepal project trained 600 researchers, built and expanded five research stations, and established a functioning research system. The Thailand project provided advanced training in the United States for 118 Thai scientists. Training was the most successful component in nearly all of the projects visited. However, retaining trainees and sustaining their research institutions has proven more problematic.
- o Research results have been successfully adopted by farmers and have sometimes yielded substantial increases in agricultural production. Improved technologies were widely used in Tunisia, Korea, and Kenya. In Tunisia farmers adopted several new varieties of wheat, resulting in an overall production increase of more than 5.3 million metric tons from 1971 through 1981 and an increase in per capita production from 104 kilograms to 160 kilograms. In Kenya the widespread adoption of hybrid maize resulted in a capability for self-sufficiency in maize production. In Korea, the development and spread of high-yielding rice produced self-sufficiency in rice by 1975.
- o Government commitment to and support for national research institutions is essential. The effectiveness and sustainability of research depends on the government's willingness to provide human, financial, and administrative resources. Research institutions in Kenya and Thailand suffered from the lack of such support--insufficient staff in Kenya and legal and bureaucratic uncertainties in Thailand. Much of the Korea project's success can be attributed to the high priority accorded research and extension by the Korean Government.
- o Technological solutions alone cannot solve problems that have political, economic, and social dimensions; the utilization of research findings depends on a favorable policy environment. Farmers are reasonable managers who only invest in new practices if the returns are favorable. In West Africa, for example, improved rice varieties were rarely used because government pricing and marketing regulations discouraged

production. The willingness of farmers to adopt new technologies depends greatly on government policies that determine the price, costs and marketing opportunities for crops. Agricultural research projects should be planned as part of broader rural development strategies that encourage governments to make the policy changes necessary for agricultural growth.

- o Researchers must understand existing farming systems, local agro-ecological conditions, and the resources available to farmers. Improved technology must be consistent with farmers' needs and constraints. Farmers in Nepal were aware of the value of fertilizer in wheat production. Fertilizer use, however, was cut back because water was insufficient during critical periods and the requirements for labor to apply fertilizer conflicted with the rice harvest. The ICTA project in Guatemala and CATIE in Central America successfully applied farming system approaches. They took into account the entire range of factors faced by farmers to identify technologies that work under real farming conditions. Farming system approaches may not always be appropriate; adequate feedback among researchers, extension workers and farmers is essential.
- o Technological improvements can increase inequities among households and can negatively affect some households. In Tunisia, larger farms benefited more from the project than smaller farms. The project also increased agricultural mechanization and decreased the demand for labor, encouraging a rural exodus, especially by the young. The project also placed additional labor demands on women, and may have lowered the nutritional status of families.
- o Inadequate management of limited resources, especially high attrition rates among skilled staff, can undermine the effectiveness and sustainability of otherwise satisfactory programs. Institutional development and training are the key elements in most research projects. Training and technical assistance should be complementary--project evaluations frequently mentioned situations where technical assistants departed just when their counterparts returned from training abroad. Trainees must also be assured of satisfactory material and professional rewards. Attrition due to low status and pay was a serious problem, especially in Kenya, Guatemala and Nepal.
- o Close coordination is essential among all of the public and private institutions involved in agricultural education, research, extension, and services. Research results can only be adopted if necessary support services, inputs and information are available to farmers. High adoption rates in Kenya and Guatemala were facilitated by improvements in the availability of seeds and other inputs--in both cases through private firms. In Korea, the integration of research and extension was the key to success.

CONTINUING QUESTIONS

The role of farming system research. Although farming system research is being successfully applied in several projects, it remains loosely defined. While experts agree that such research should identify farmers' needs and constraints, there is little consensus on how this can best be accomplished. An emphasis on a particular farming system approach would be premature.

Balancing equity and production. Trade-off's between increased agricultural production and increased equity may sometimes be necessary. If agricultural growth is the primary goal, some inequities in the distribution of benefits (as in Tunisia) may be unavoidable. Related projects designed to mitigate the negative impacts of agricultural change may be appropriate in such cases.

Improving institutional coordination. Although better coordination among agricultural research, extension and services is clearly needed, the means for achieving it are less clear. The problems of institutional coordination and inefficiency are development management concerns not unique to agriculture.

The importance of policy dialogue. Even well designed and effectively implemented research projects will achieve little if the policy environment is unfavorable. An aggressive policy dialogue is therefore an important corollary to most agricultural research projects. Phased funding for agricultural research may be appropriate when the country's policies are in transition.

Mobilizing the private sector. Although private firms have played an important role in disseminating agricultural products, most projects focus on public institutions. More attention should be paid to involving private firms not only in marketing, but also in funding and planning research and extension activities.

Project evaluation. The impact of agricultural research on production and productivity is long-term and difficult to measure. Shorter term evaluations could usefully focus on more immediate indicators, such as the scientific quality of research, the relevance of research to practicing farmers, the coordination of research with extension and other services, and the adoption of new technologies by farmers.

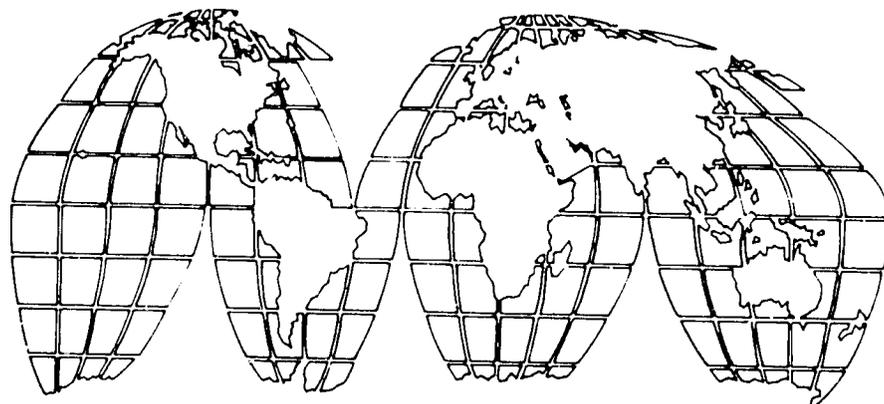
A copy of the report, A.I.D. Program Evaluation Report No. 10, Strengthening the Agricultural Research Capacity of the Less Developed Countries: Lessons from AID Experience, (September 1983), PN-AAL-020, may be obtained from the editor of ARDA, A.I.D. Document and Information Handling Facility, 7222 47th Street, Suite 100, Chevy Chase, Maryland 20815. Comments on the report will be welcomed by the Center for Development Information and Evaluation, Bureau for Program and Policy Coordination, Agency for International Development, Washington, D.C. 20523.

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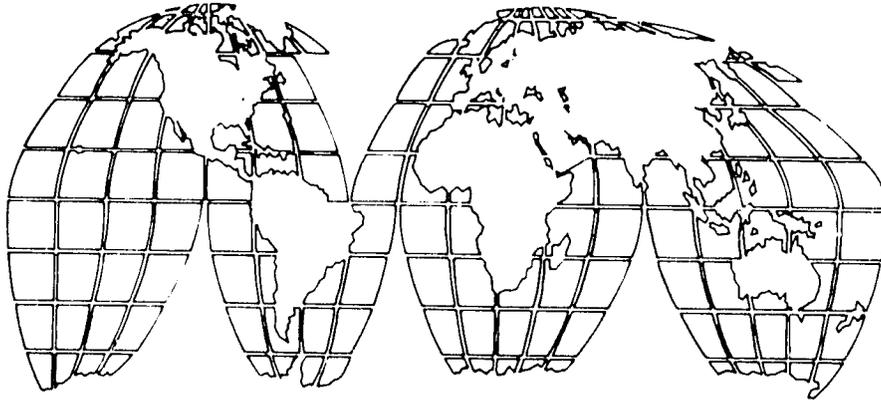
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A.I.D. DEVELOPMENT EXPERIENCE ABSTRACT

A.I.D. Program Evaluation Report No. 12

August 1984

A.I.D. and Education: A Sector Report on Lessons Learned



U.S. Agency for International Development (AID) Washington, D.C. 20523

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A.I.D. education programs have had a profound and widespread impact over the past 30 years, according to a report recently completed by PPC's Center for Development Information and Evaluation. A.I.D. has helped to create local, national, and regional educational institutions that have proven remarkably durable. A few have become influential sources of leadership in the field of education.

Evaluations of twelve completed A.I.D. education projects and programs in Asia, Africa, Latin America and the Near East, show clearly that A.I.D. has been a major contributor to international educational development. These twelve projects and programs, valued at \$242 million, benefited at least 200,000 people directly, and about two million indirectly. Their impact continues.

Through its construction and equipping of facilities, A.I.D. has extended access to education in areas where remoteness and poverty would otherwise have been a barrier to participation in national development.

The Agency has also provided professional training to thousands, many of whom are now policy-makers at national and regional levels, both in education and in other fields. Former participants continue to maintain professional ties to the U.S. institutions at which they studied.

In almost every instance, institutions established under Agency auspices are still in operation, despite in some cases considerable stress from surrounding circumstances.

Summary of Development Experience

A number of important conclusions and lessons bearing on future policies and programs emerge from the Impact Evaluations of education projects.

- o The enduring effects of an education project cannot be determined until a number of years have elapsed after the project has been launched. Elements of a project may continue long after donor withdrawal, and in retrospect, be well-established, despite apparent shortcomings during a project's lifetime. For example, the Nigerian Institute of Education has been beset by political and social forces in its social milieu, civil war, and the division of the Northern Region into separate states. Despite these problems, the Institute has continued the curriculum reform effort begun under the Northern Nigeria Teacher Education Project 16 years ago. The Institute of Education is today a major influential force in teacher education. Teacher training colleges continue to reflect a philosophy of education first introduced through the project.
- o AID has made an important contribution to equalizing access to education through projects that supplied a range of educational services for rural adults and children, male and female. In Nepal, AID assistance to the education sector contributed to raising the female enrollment ratio from 5% to 30%.
- o AID has had considerable success in training professionals and in strengthening educational institutions. Its contributions to teacher training have been most successful in places where career advancement opportunities and salary incentives supported training efforts. By 1969, 10,000 Kenyan teachers per year were enrolling in radio correspondence courses. Alarmed at the implications of this enrollment for the recurrent budget, the Government of Kenya rescinded its practice of awarding salary increases to teachers who successfully completed radio correspondence training, and caused enrollment to plunge to a low of 476 per year by 1980.
- o Systematic consultation with various groups, from government officials to local recipients especially in remote areas, is essential to the success of projects that introduce innovative teaching methods and curricula. In the Philippines, prior consultation with local groups made cost-saving innovations more acceptable to local communities.
- o Prefeasibility studies need to address the following issues: local attitudes toward schools and schooling and the potential sources of local support; cultural concepts of the teacher's and student's roles in the classroom; the preparation time teachers need for using the current program and for the proposed innovations; logistic problems in ensuring a reliable supply of required texts and educational support materials. Continuity of

staff and management on the donor side, from planning and design through the implementation period contributes to the effectiveness of this process.

- o Recurrent costs sometimes fall on local communities, not on the central education budget. To encourage continuity in education programs, AID must not only introduce cost-effective reforms, but must determine how costs are to be apportioned between a central government and the local entities that must bear the recurrent costs. The failure to explicitly deal with this issue following donor withdrawal has led to deteriorating community support for the innovations introduced in Philippine schools.
- o Education planners need to examine the wider economic context into which a project fits to determine how it will respond to workforce needs and how it will advance economic growth of the area. The Elementary-Middle School Pilot Project was a response to a Korean Government study recommending a school system rigorously tied to the country's economic development plans. This pilot effort has since led to a total redirection of Korea's school system toward satisfying the manpower needs of a modern economy.
- o The spread effects of AID education projects are modest, but tangible. The techniques used in the Ecuador Nonformal Education Project to teach communication skills to rural adults, have spread to areas beyond original sites within Ecuador. Similar techniques are also being applied in Ghana, Guatemala, Swaziland, Thailand, and Indonesia, and in part because of their success in Ecuador. In Thailand, the Mobile Trade Training School program has been incorporated into a much larger Life-long Education Center program. Together these programs provide training to 50,000 adult Thais each year.

UNRESOLVED ISSUES, NEW PROBLEMS

Curriculum Reform

Curriculum reform was one of the major areas in which education projects and programs have proved less effective. In Paraguay, Nepal, and Afghanistan, project advisors and counterparts introduced new teaching materials; wrote student texts and teacher guides; created primary, secondary, and teacher training curricula in a wide range of subjects; and provided the structure for training teachers in the use of non-traditional teaching techniques. In every case, one purpose for the curricula reform was to promote a system of learning that would be more practical, more efficient and more effective than the traditional system.

Yet in Paraguay, about 10% of primary schools and 10% of secondary schools, actually use their new curricula. In Nepal the rote memorization so characteristic of traditional formal schooling continues to prevail, and the quality of instruction remains very poor. Elsewhere, the evidence suggests little or no utilization,

either of the new curricula or the new teaching techniques. One of the primary causes of this weakness was the failure of governments or projects to supply the teaching aids and materials for new curricula in sufficient quantity or over a long enough period to have an impact on educational performance.

Work-Oriented Education Projects

The performance of past vocational, technical, and agricultural education projects has been disappointing. Most of these projects gave inadequate training for job preparation, offered it to students who aspired to other types of careers, or required plant and equipment beyond the Developing Country's financial capability to maintain. Further studies are needed to identify variables that bear on the sustained effectiveness of work-oriented education projects.

Quality vs. Quantity

There is often pressure to expand the school system in developing countries, even if it means providing education of poorer quality. AID has attempted to meet the problem by supporting teacher training and by advocating curriculum reform and the use of innovative or technologically advanced teaching methods. These approaches have had mixed success. The question of how to balance pressures for an expanded system with maintenance of acceptable quality is unresolved.

A copy of the completed report, A.I.D. Program Evaluation Report No. 12, A.I.D. and Education: A Sector Report on Lessons Learned, (January 1984), PN-AAL-034, may be obtained from the Editor of ARDA, A.I.D. Document and Information Handling Facility, 7222 47th Street - Suite 100, Chevy Chase, Maryland 20815. Comments on the report will be welcomed by the Center for Development Information and Evaluation, Agency for International Development, Department of State, Washington, D.C. 20523. The following reports in the Education Series may also be obtained from the Editor of ARDA:

Impact Evaluations

- No. 19: U.S. Aid to Education In Nepal: A 20-Year Beginning (PN-AAJ-168)
- No. 23: Northern Nigeria Teacher Educational Project (PN-AAJ-176)
- No. 25: Thailand: Rural Non-Formal Education - The Mobile Trade Training Schools (PN-AAJ-171)
- No. 37: Radio Correspondence Education In Kenya (PN-AAJ-620)
- No. 38: A Low-Cost Alternative For Universal Primary Education In The Philippines (PN-AAL-001)
- No. 46: U.S. Aid to Education in Paraguay: The Rural Education Development Project (PN-AAL-017)

Special Study:

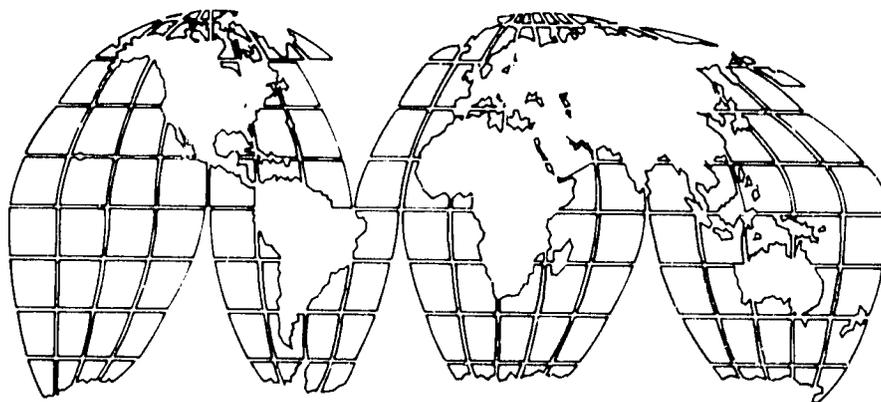
- No. 5: Korean Elementary - Middle School Pilot Project (PN-AAJ-169)

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Summary of Development Experience

A number of important conclusions and lessons bearing on future policies and programs emerge from the Impact Evaluations of education projects.

- o The enduring effects of an education project cannot be determined until a number of years have elapsed after the project has been launched. Elements of a project may continue long after donor withdrawal, and in retrospect, be well-established, despite apparent shortcomings during a project's lifetime. For example, the Nigerian Institute of Education has been beset by political and social forces in its social milieu, civil war, and the division of the Northern Region into separate states. Despite these problems, the Institute has continued the curriculum reform effort begun under the Northern Nigeria Teacher Education Project 16 years ago. The Institute of Education is today a major influential force in teacher education. Teacher training colleges continue to reflect a philosophy of education first introduced through the project.
- o AID has made an important contribution to equalizing access to education through projects that supplied a range of educational services for rural adults and children, male and female. In Nepal, AID assistance to the education sector contributed to raising the female enrollment ratio from 5% to 30%.
- o AID has had considerable success in training professionals and in strengthening educational institutions. Its contributions to teacher training have been most successful in places where career advancement opportunities and salary incentives supported training efforts. By 1969, 10,000 Kenyan teachers per year were enrolling in radio correspondence courses. Alarmed at the implications of this enrollment for the recurrent budget, the Government of Kenya rescinded its practice of awarding salary increases to teachers who successfully completed radio correspondence training, and caused enrollment to plunge to a low of 476 per year by 1980.
- o Systematic consultation with various groups, from government officials to local recipients especially in remote areas, is essential to the success of projects that introduce innovative teaching methods and curricula. In the Philippines, prior consultation with local groups made cost-saving innovations more acceptable to local communities.
- o Prefeasibility studies need to address the following issues: local attitudes toward schools and schooling and the potential sources of local support; cultural concepts of the teacher's and student's roles in the classroom; the preparation time teachers need for using the current program and for the proposed innovations; logistic problems in ensuring a reliable supply of required texts and educational support materials. Continuity of

staff and management on the donor side, from planning and design through the implementation period contributes to the effectiveness of this process.

- o Recurrent costs sometimes fall on local communities, not on the central education budget. To encourage continuity in education programs, AID must not only introduce cost-effective reforms, but must determine how costs are to be apportioned between a central government and the local entities that must bear the recurrent costs. The failure to explicitly deal with this issue following donor withdrawal has led to deteriorating community support for the innovations introduced in Philippine schools.
- o Education planners need to examine the wider economic context into which a project fits to determine how it will respond to workforce needs and how it will advance economic growth of the area. The Elementary-Middle School Pilot Project was a response to a Korean Government study recommending a school system rigorously tied to the country's economic development plans. This pilot effort has since led to a total redirection of Korea's school system toward satisfying the manpower needs of a modern economy.
- o The spread effects of AID education projects are modest, but tangible. The techniques used in the Ecuador Nonformal Education Project to teach communication skills to rural adults, have spread to areas beyond original sites within Ecuador. Similar techniques are also being applied in Ghana, Guatemala, Swaziland, Thailand, and Indonesia, and in part because of their success in Ecuador. In Thailand, the Mobile Trade Training School program has been incorporated into a much larger Life-long Education Center program. Together these programs provide training to 50,000 adult Thais each year.

UNRESOLVED ISSUES, NEW PROBLEMS

Curriculum Reform

Curriculum reform was one of the major areas in which education projects and programs have proved less effective. In Paraguay, Nepal, and Afghanistan, project advisors and counterparts introduced new teaching materials; wrote student texts and teacher guides; created primary, secondary, and teacher training curricula in a wide range of subjects; and provided the structure for training teachers in the use of non-traditional teaching techniques. In every case, one purpose for the curricula reform was to promote a system of learning that would be more practical, more efficient and more effective than the traditional system.

Yet in Paraguay, about 10% of primary schools and 10% of secondary schools, actually use their new curricula. In Nepal the rote memorization so characteristic of traditional formal schooling continues to prevail, and the quality of instruction remains very poor. Elsewhere, the evidence suggests little or no utilization,

either of the new curricula or the new teaching techniques. One of the primary causes of this weakness was the failure of governments or projects to supply the teaching aids and materials for new curricula in sufficient quantity or over a long enough period to have an impact on educational performance.

Work-Oriented Education Projects

The performance of past vocational, technical, and agricultural education projects has been disappointing. Most of these projects gave inadequate training for job preparation, offered it to students who aspired to other types of careers, or required plant and equipment beyond the Developing Country's financial capability to maintain. Further studies are needed to identify variables that bear on the sustained effectiveness of work-oriented education projects.

Quality vs. Quantity

There is often pressure to expand the school system in developing countries, even if it means providing education of poorer quality. AID has attempted to meet the problem by supporting teacher training and by advocating curriculum reform and the use of innovative or technologically advanced teaching methods. These approaches have had mixed success. The question of how to balance pressures for an expanded system with maintenance of acceptable quality is unresolved.

A copy of the completed report, A.I.D. Program Evaluation Report No. 12, A.I.D. and Education: A Sector Report on Lessons Learned, (January 1984), PN-AAL-034, may be obtained from the Editor of ARDA, A.I.D. Document and Information Handling Facility, 7222 47th Street - Suite 100, Chevy Chase, Maryland 20815. Comments on the report will be welcomed by the Center for Development Information and Evaluation, Agency for International Development, Department of State, Washington, D.C. 20523. The following reports in the Education Series may also be obtained from the Editor of ARDA:

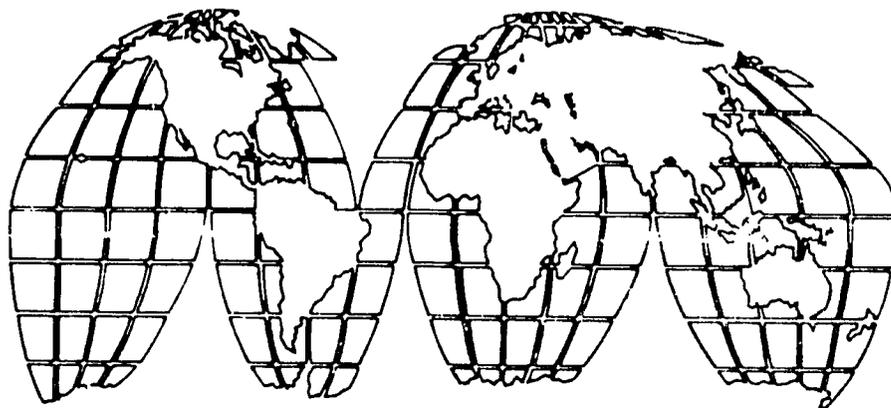
Impact Evaluations

- No. 19: U.S. Aid to Education In Nepal: A 20-Year Beginning (PN-AAJ-168)
- No. 23: Northern Nigeria Teacher Educational Project (PN-AAJ-176)
- No. 25: Thailand: Rural Non-Formal Education - The Mobile Trade Training Schools (PN-AAJ-171)
- No. 37: Radio Correspondence Education In Kenya (PN-AAJ-620)
- No. 38: A Low-Cost Alternative For Universal Primary Education In The Philippines (PN-AAL-001)
- No. 46: U.S. Aid to Education in Paraguay: The Rural Education Development Project (PN-AAL-017)

Special Study:

- No. 5: Korean Elementary - Middle School Pilot Project (PN-AAJ-169)

A Review of AID's Experience in Private Sector Development



U.S. Agency for International Development (AID) Washington, D.C. 20523

This CDIE-sponsored study provides a synthesis of AID's experience with programs in private sector development. The findings are based on a review of 200 ongoing projects, case studies of five successfully completed projects, AID Policy Papers, papers presented at a conference held on private sector development and interviews with AID staff.

The study focuses on how AID promotes private sector development in LDC's through:

- Policy dialogue with the LDC governments to establish a favorable environment for private enterprise;
- Assistance to develop selected private enterprises;
- Project assistance to intermediary institutions in the private sector which deliver credit, marketing and other services to private enterprises;
- Mobilization of financial and technical resources from the U.S. private sector for LDC enterprises.

The report points out that policy reform and project assistance have successfully promoted private sector development in many countries, including Thailand, Indonesia, Tunisia, Ecuador and the Philippines. AID's projects in these countries have demonstrated that AID's resources can be effectively used to encourage private sector growth in agricultural production and agroindustries benefiting small-scale enterprises; in small and medium-scale business enterprises in the urban and industrial sectors of LDC's; and in housing and social services, especially those related to health, education and family planning.

SUMMARY OF DEVELOPMENT EXPERIENCE

Certain constraints to private sector growth in developing countries are beyond the control of individual business enterprises. These constraints--the focus of AID programs--stem primarily from two sources: a) government policies and development activities which inhibit commercial development; and b) national or international economic conditions which impede the performance of private firms. Projects are designed to enable AID to work with LDC governments to identify and resolve problems associated with these two major constraints.

AID's experience in implementing private sector development projects is reviewed in the study. Key findings are summarized below.

- **Policy Dialogue:** Policy dialogues have been successful in encouraging reforms conducive to private sector development if a) communication between the AID mission and the host country is focused on a specific set of issues and continued over an extended period, and b) technical assistance is provided to support policy reform. Privatization of fertilizer distribution in Bangladesh and seed production in Thailand are examples.
- **Project Assistance:** The most effective projects contributing to private sector development have 1) channeled funds through intermediary institutions to private enterprises; 2) provided technical assistance and training to improve the technical and management capability of LDC firms; 3) supported programs aimed at promoting the export of goods produced by LDC enterprises. Examples include a) the establishment of finance companies in Ecuador and the Philippines to provide credit for private manufacturers; b) the dissemination of appropriate technology to local manufacturers for the production of small-scale agricultural machinery in Indonesia; and c) the establishment of a trading company to promote exports of the Caribbean.
- **Private Intermediary Credit Institutions:** Indigenous and U.S. voluntary organizations, foundations and cooperatives are employed in approximately one third of AID's private sector development projects. They concentrate on credit and technical assistance for project beneficiaries. Evaluations of the performance of these private organizations demonstrate that, compared to public sector institutions, they offer a

more efficient and cost-effective means to assist small-scale businesses in rural communities or in urban slums. Private organizations are also more flexible than government agencies in meeting changes in the project environment.

CONTINUING QUESTIONS

Mobilization of U.S. Private Resources

AID encourages joint business enterprises between U.S. and LDC entrepreneurs concentrating on promotional activities and programs to facilitate international trade and technology transfer. Mechanisms used include "mixed credits" (a form of concessional export financing), trade conferences and U.S. consulting firms as brokers to facilitate business partnerships and technology transfer between U.S. and LDC firms. Because implementation of AID projects in this area is fairly recent, their effectiveness has not yet been assessed.

Promoting Reforms through Policy Dialogue

An issue that invariably stalls policy dialogue is the degree to which AID can use its influence to further policy reform. AID's experience indicates that it is advisable to avoid linking broad policy changes to specific project assistance. Rather than seek dramatic across-the-board policy reform, AID has taken a low-key approach to resolve a policy issue related to specific project objectives.

Three features of policy dialogue are important: a specific and well-defined set of issues, high quality analysis to support the dialogue and staying power in carrying out the dialogue.

Private Sector Delivery Systems: Efficiency Versus Coverage

Many AID projects are aimed at establishing private retail outlets in rural communities to supply certain types of goods (e.g., fertilizer, seeds, farm tools, animal feed, contraceptives, etc.). Though private retailers are efficient in performing distribution functions, they are not necessarily an effective means for reaching many project beneficiaries. Their profit orientation and small size limit their ability to provide needed goods and service.

Private enterprises are often unwilling to provide goods and services which yield little profit or require too much time and labor. For example, in a number of AID agriculture projects, private retailers sell agricultural inputs such as fertilizer and animal feed only in bulk, thus serving only farmers who can afford to buy large quantities and ignoring the needs of poorer

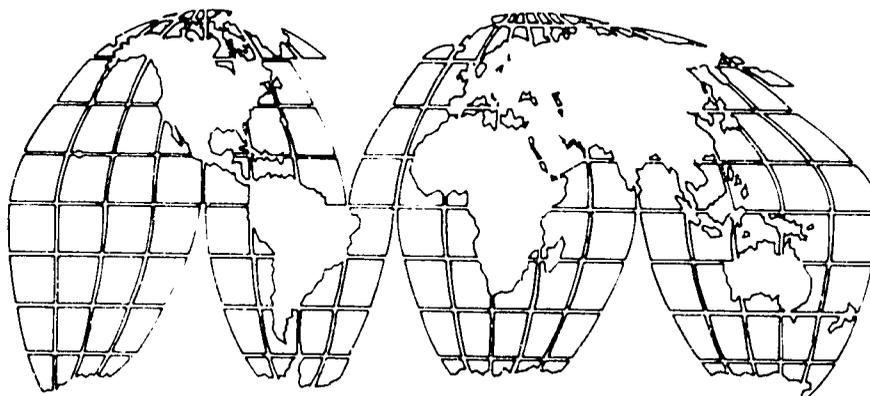
farmers. In other projects, health services run by private enterprises have resulted in poor coverage of rural and poor countries. Such circumstances may require the use of public or quasi-public rather than private institutions to ensure equitable coverage of beneficiaries. However, by doing so, AID might inadvertently perpetuate government intervention in the very areas where it is trying to promote private sector involvement. AID and host country governments should be prepared to intensify efforts to help private organizations overcome their economic limitations and develop their capacity to provide more comprehensive coverage.

Technology Transfer - Deterrents

AID is actively promoting U.S.--LDC business contacts and funding research to identify appropriate technology for LDC enterprises. Nevertheless, two deterrents beyond AID's control may undermine these efforts. First, business relationships are to a large extent dictated by market forces. Many LDC countries are currently facing economic difficulties and are therefore unattractive to foreign investors. Second, private sector development in many LDC's is so rudimentary that a major development program is needed to link them to the international economy.

A copy of the report, A.I.D. Program Evaluation Report No. 14, A Review of AID's Experiences in Private Sector Development, (April 1985), PN-AAL-049, may be obtained from the editor of ARDA, A.I.D. Document and Information Handling Facility, 7222 47th Street, Suite 100, Chevy Chase, Maryland 20815. Comments on the report will be welcomed by the Center for Development Information and Evaluation, Bureau for Program and Policy Coordination, Agency for International Development, Washington, D.C. 20523.

Agricultural Credit, Input and Marketing Services: Issues and Lessons from AID Project Experience



U.S. Agency for International Development (AID) Washington, D.C. 20523

AID and its predecessor agencies have invested in agricultural services in developing countries for more than 30 years. Over that period of time the emphasis has ranged from encouraging production to encouraging equity. Techniques have included institution building to direct service delivery. Throughout, however, AID had maintained its commitment to agricultural growth through a free enterprise farm economy in which public institutions support independent farm operators.

CDIE's study of AID's experience with agricultural services projects entailed review of 203 projects, a close desk review of a sample of 44, and field level impact evaluation of five. For the purpose of this study agricultural services includes only agricultural credit, input and marketing services.

The study drew conclusions in two areas: (1) the agricultural services themselves, and (2) the delivery system for such services. Project difficulties attributable to selection of the services themselves were commonly associated with inappropriate technology selection, and unprofitable applications. Project difficulties attributable to service delivery were generally associated with the selection of inappropriate delivery systems; government, parastatal and private entities each have their own natural strengths and weaknesses. Project results have been most positive where cooperating institutions responsible for service delivery work within their areas of natural advantage.

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SUMMARY OF DEVELOPMENT EXPERIENCE

A major conclusion of the analysis of all the agricultural service projects reviewed--whether agricultural credit, input, or marketing --is that three conditions must be met for a project to succeed:

- (1) the service must be appropriate to the user, that is technologically feasible and financially desirable;
- (2) the delivery of the service must be compatible with the users interests and timely; and
- (3) use of the service must result in a profit for the user.

The absence of any one of these conditions can cause a project to fail.

For agricultural credit projects, credit policies must be appropriate to the small farmer's environment. Many programs have failed because credit funds were priced below the costs of administration, inflation and reserve for bad debts, thus causing leading institutions to decapitalize. Loans must be available through procedures that are timely and compatible to the small farmer's customary ways; many programs have failed because loan processing was too slow, or because loan application procedures were too complicated for the small farmer to deal with. Credit utilization must be profitable to the farmer; unfortunately, government policies, weather, and other factors may result in financial losses, causing farmers to lose interest in applying for credit.

Agricultural input projects must provide technology that is applicable in the small farmer's environment. Often such inputs have been too advanced for the farmer's resources and knowledge base, or too complicated for the local system of transportation and communication to support. Delivery of the agricultural inputs must also be timely. In many cases seed or fertilizer deliveries must be completely written off if they are not available at the proper time in the season. Concerns about untimely delivery inhibit many farmers from experimenting with new inputs. Utilization of the inputs must result in a marketable, profitable product for the farmer, which means that they must be coordinated with the overall farming system, and with supportive prices and economic policies at the national level.

For agricultural marketing projects, services must be appropriate to the systems available in the user's environment. This includes collecting crops at the farm gate, handling small increments, and providing assistance with crop drying and storage. The market services must be timely. Most farmers, especially in the tropics where risks of spoilage are high, prefer an immediate sale to a private trader over a later sale to a government agency, even when a

higher price is offered. Yet, marketing the crops must result in a profit to maintain the incentive to produce. The two most frequent causes of price problems are government policies and seasonal volatility.

A second major conclusion concerns selection of approaches for delivery of project services to target farmers. Public, mixed public/private and private approaches were analyzed to determine areas of strength and weakness. The following conclusions highlight the appropriate roles of each category of delivery mechanism.

Three types of agricultural service interventions are best handled by public-sector agencies:

- (1) general impact, such as infrastructure development and maintenance projects, where costs are too high and the benefits too diffuse for any but a taxing authority;
- (2) public policy, where the project focuses on a particular policy intervention, such as import and export policies, or exchange rate adjustment; and
- (3) transfer programs, such as price-support or input-subsidy programs.

Review of the AID portfolio reveals no conflict concerning the appropriateness of public sector approaches for these programs.

Mixed public/private entities have been more effective where agricultural services require management that is intensive, responsive, and flexible on the one hand, yet require political influence in the interest of program objectives on the other. Mixed public/private entities have commonly been established where private investors are unwilling to invest on their own, where an activity requires a high level of business management, and where the authority of government is required to carry out specific activities effectively.

Private-sector institutions have performed most effectively when agricultural services require a flexible management approach and individual contact with client farmers, such as in retailing production inputs or purchasing production outputs at the farm gate. Private-sector institutions may be divided into three categories: private voluntary organizations (PVOs), cooperatives and private for-profit entities. PVOs have excelled at reaching clients overlooked by government programs with a broad range of services delivered by dedicated staff. The PVOs greatest weakness is financial dependence upon others for their survival. Cooperatives have been particularly successful in lobbying for policy changes, ensuring local participation and commitment, and implementing delivery systems for credit, inputs, and marketing. On the other hand, cooperatives have often suffered from poor financial management, inability to make decisions, and domination by government agencies.

Private-for-profit institutions are particularly effective in projects involving transactions at or near the farm gate. Private businessmen providing agricultural services are normally local residents and thus understand the social system and have interests closely identified with the farmers they serve. Moreover, they tend to be more stable, entrepreneurial and cost efficient than outside public or mixed institutions.

CONTINUING QUESTIONS

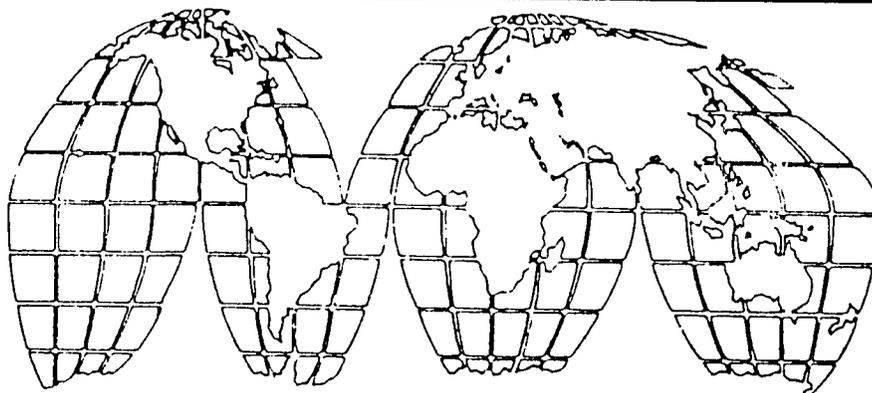
Targeted Versus Comprehensive Assistance

Where farming is unprofitable for any reason, agricultural service projects are destined to fail. Farm profitability, in turn, depends upon social and environmental factors ranging from government policies, markets, and transportation infrastructure to weather and pests. Given this linkage between project success and profitability, and the dependence of profitability upon a great variety of exogenous variables, does it make sense to work in such a targeted fashion? Should one abandon projects focusing on specific services and take a broad, integrated development approach where as many variables as possible are controlled, or should one, alternatively, attack one bottleneck at a time (e.g., credit or better seeds) and trust the farmers themselves to make rational judgements about the "big picture"?

Developing New Institutions Versus Working Through Indigenous Systems

AID has a proclivity, according to the report, to create new institutions for service delivery, generally modeled on the U.S. experience. This has appeal because such institutions are "tried and true" approaches (e.g., farm credit banks and production cooperatives) with which our technical advisors are comfortable. Questions are raised about this approach, and the suggestion made that it might be more efficient and effective to look for ways to adapt ourselves to existing systems. Where there are indigenous systems for allocating credit, input and marketing services, for example, it may be more effective to further their development than create entirely new entities to replace them.

A copy of the report, A.I.D. Program Evaluation Report No. 15, Agricultural Credit, Input and Marketing Services: Issues and Lessons From AID Project Experience, (August, 1985), PN-AAL-079, may be obtained from the editor of ARDA, A.I.D. Document and Information Handling Facility, 7222 47th Street, Suite 100, Chevy Chase, Maryland 20815. Comments on the report will be welcomed by the Center for Development Information and Evaluation, Bureau for Program and Policy Coordination, Agency for International Development, Washington, D.C. 20523.

A.I.D. Program Evaluation Report No. 16**The U.S. Response to the African Famine, 1984-1986
Volume I—An Evaluation of the Emergency Food Assistance Program: Synthesis Report**

U.S. Agency for International Development (AID) Washington, D.C. 20523

The 1984-1986 drought in Africa resulted in the continent's most severe food crisis in recorded history. Millions of lives were saved by the massive outpouring of emergency food and assistance from around the world. Through public and private initiatives, the United States shipped over three million tons of food, matched by another three million tons provided by other donor nations.

A substantial portion of the U.S. assistance was provided to Chad, Sudan and Mali. Six million people in Sudan, two million in Mali and over one million in Chad were assisted in coping with the crisis. These countries were selected for an evaluation of their emergency food assistance programs since they accounted for 40% of the U.S. food aid to Sub-Saharan Africa and were representative of the drought and famine situations that faced many countries in the Sahel.

This study is Volume I of a two volume assessment which records the lessons learned from the U.S. response to the emergency. It concentrates on the food assistance programs in Chad, Mali and Sudan. Volume II, An Analysis of Policy Formation and Program Management, examines policy decisions and overall management of the relief effort. A separate Development Experience Abstract provides a synthesis of its findings.

SUMMARY OF DEVELOPMENT EXPERIENCE

In November 1984, Sub-Saharan Africa suffered the effects of the most severe drought and famine in its history. Harvests in 1984-1985 were below average in nearly every country and many countries were experiencing their fourth or more consecutive years of drought.

Over the years, the U.S. Government, through A.I.D. and its predecessor agencies, has responded to several drought and famine emergencies in Africa. Many of those involved in the most recent crisis realized that few of the lessons learned from similar previous emergencies had been applied in relief operations. Two studies were commissioned to facilitate the application of experience in the future.

This report records the lessons learned from the emergency food assistance program in Chad, Sudan and Mali. It suggests ways that the U.S. and other donors can respond more successfully to food emergencies in the future and relate emergency food aid to long-term development in Africa.

The response to the drought in Chad, Mali and Sudan resulted in numerous positive program features that can be built on in fashioning programs for future food emergencies.

Food Distribution--Channels and Modes

- The U.S. success in providing food to hungry rural people in Sudan, Mali, and Chad resulted in part from identifying efficient channels to distribute massive amounts of food. Although the mix varied, the successful channels in these countries were private voluntary organizations (PVOs), the private sector, and regional/local governments.
- Food-for-work and specialized feeding programs directed toward individuals or households enabled beneficiaries to be reached more regularly with needed food. Other distribution modes, such as monetization and general distribution were also used. General distribution worked well in many areas in Mali and Sudan, but it required careful monitoring. Monetization was effective, especially in urban areas in Mali and Chad. Use of commercial markets to monetize emergency food assistance in urban areas was successful and a key component of the overall impact achieved in the three countries.

Host Governments

- The host government's commitment to deal with food emergencies was greater where the capabilities existed to respond to such crises. Host governments can be very effective in coordinating emergency food assistance, as was the case in Chad, but many are not well-organized to carry out operational activities such as food distribution. Strengthening these capabilities, especially in chronic-drought countries, fosters government commitment.

Donor Coordination

- Donor coordination was maximized when both USAID Missions and AID/Washington played active roles and when the host government was the principal coordinating agent at central, regional and local levels. Coordination among donors was not achieved in all cases, but where coordination was best, the impact of emergency food assistance was enhanced. Donor coordination was most successful when initiated prior to or early in the drought cycle, and, as in Mali, when donors were collectively involved in identifying and assessing the food emergency.

Targeting

- Targeting individuals, households and areas in need of food increased the impact and cost-effectiveness of emergency food assistance. This was especially apparent in Chad where rapid nutritional surveillance was used extensively. The use of both socio-economic and nutrition/health data for targeting throughout the food emergency maximized program impact and cost effectiveness.

Preparedness and Key Information

- The lack of key information contributed to untimely responses to the drought in all three countries. The key information needed for baseline data, early warnings, needs assessments, targeting, and impact assessments was unavailable, late, or inaccurate in Chad, Sudan, and Mali. Without adequate and accurate information, neither the host governments nor donors were willing to act decisively.

A.I.D Management

- Program impact and cost effectiveness was reduced by the lack of experienced personnel, lack of special administrative and funding procedures and understaffing. Given the limited staff resources applied to the emergency, USAID missions in Chad, Sudan and Mali achieved a great deal. The management of the emergency food assistance in the missions and AID/W was attempted within existing organization and staffing arrangements and mostly by persons with little or no experience in managing food emergencies. This management style coupled with understaffing was a hindrance to effective management of the programs.

Packaging of Resources

- Emergency food assistance alone was not enough in Chad, Sudan and Mali. Other resources (e.g., transport, tools, seed and technical assistance) were necessary to make effective use of emergency food. The impact of the emergency food program will be enhanced where these resources are available and appropriately combined with food assistance.

Linkage Between Emergency Food Assistance and Development

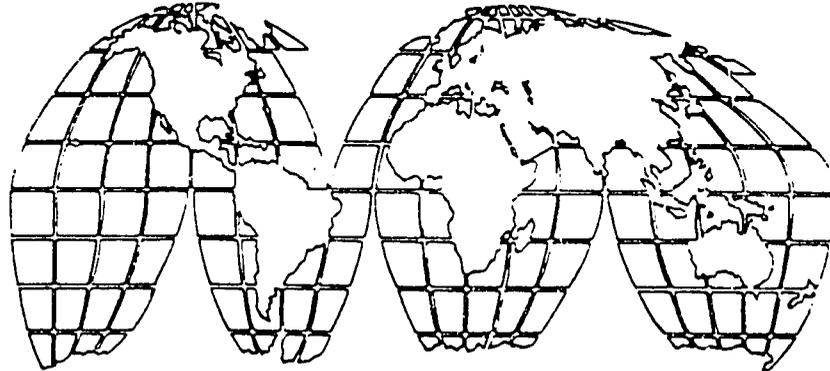
- Lack of adequate income is at the root of both underdevelopment and food emergencies in Sudan, Mali and Chad. Development programs in the countries were not aimed at increasing the economic well-being of groups most vulnerable to drought. When the drought occurred, the income of these groups collapsed, leading to famine and necessitating emergency food assistance.

Copies of the complete report, A.I.D. Program Evaluation Report No. 16, The U.S. Response to the African Famine, 1984-1986, Volume I - An Evaluation of the Emergency Food Assistance Program: Synthesis Report, November 1986 (PN-AAL-082), may be obtained from the editor of ARDA, A.I.D. Document and Information Handling Facility, 7222 47th Street, Suite 100, Chevy Chase, Maryland 20815. The Center for Development Information and Evaluation welcomes comments on the report: Bureau for Program and Policy Coordination, Agency for International Development, Washington, D.C. 20523.

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**The U.S. Response to the African Famine, 1984-1986
Volume II - An Analysis of Policy Formation and Program Management**

MAY 19 1987



U.S. Agency for International Development (AID) Washington, D.C. 20523

The 1984-1986 drought in Africa resulted in the continent's most severe famine in recorded history. Millions of lives were saved by the massive outpouring of assistance from around the world. The U.S. response to the crisis was larger than any other donor nation. Government agencies, private voluntary organizations, private businesses and ordinary citizens gave generously of their time and resources to aid in relief efforts.

The U.S. Government contribution totaled over \$2 billion in food, supplies, transportation, and personnel. This contribution included about 80% of all assistance to Sudan and 50% in most other countries.

This study is Volume II of a two volume assessment which records the lessons learned from the U.S. response to the emergency. It concentrates on policy formation and program management, including managerial and organizational problems, information systems, coordination, legislation and funding, early warning systems, and the transition to development. Volume I, An Evaluation of the Emergency Food Assistance Program: Synthesis Report examines the U.S. financed food assistance in Chad, Mali and Sudan. A separate Development Experience Abstract provides a synthesis of its findings.

SUMMARY

Over the years the U.S. Government, through A.I.D. and its predecessor agencies, has responded to several drought and famine emergencies in Africa. The 1984-1986 drought was by far the most serious of the century. Millions of lives were at risk, herds were decimated, and the environment was further degraded. More than a score of countries were directly affected.

Many of those involved in the most recent crisis realized that few of the lessons learned from similar previous emergencies had been applied in the relief operations. Two studies were commissioned to assure that this mistake is not repeated in the future. This report records the lessons learned regarding policy decisions and overall management of the program. A few of the important lessons and recommendations that emerged from the assessment are outlined.

Policy Concerns

- In an emergency, management must insure that the requirements of "business as usual" do not conflict with those of the emergency. The A.I.D. Administrator made the famine effort the Agency's first priority and exemplified this decision by his own involvement. Although it was sometimes necessary to divert resources already committed to long-range development to relief and recovery, the crisis and ongoing development program were managed with a minimum of conflict.
- Political reservations should be secondary to the immediate task of saving lives. In this famine crisis, policymakers faced the issue of providing assistance to unfriendly countries. There is ample precedent in this and previous responses to human suffering to indicate that life saving decisions must be made in a timely manner even while attempts are made to address political concerns.
- The level of emergency assistance must be flexible in order to accommodate the requirements of differing situations. The U.S. attempted to limit its food emergency assistance generally to 50 percent of the total food need. The crisis demonstrated that flexibility should be maintained for lowering or raising target figures.
- The mode for providing humanitarian assistance should not depend on past practice, but on the most efficient and reliable channels available. A.I.D. depends largely on its own staff resources to manage and

monitor development assistance. Although there were political and operational advantages to maintaining this arrangement, the Agency will need to rely increasingly on the abilities and experience of other organizations as personnel resources decrease.

Implementation

- Delays and extra costs would have been lessened if formal agreements had existed with coastal countries for the shipment of cargo to landlocked areas in West Africa. The effort to ship food from ports to inland destinations required numerous interventions by the U.S. and other donors to persuade coastal countries to assign higher priorities for assistance cargos and to relax or waive import controls and inspections. Opportunities should be explored for including such provisions in existing agreements between the U.S. and coastal countries.
- There was little prior knowledge in the donor community about the details of transportation resources in specific countries. To correct this, donors should assist drought-prone countries to develop inventory systems that would reflect the number and condition of trucks, railroad stock and ferries in the private and public sector. A current World Food Program effort to establish such an inventory should be evaluated to determine its cost-effectiveness.

Early Warning Systems

- Host countries must be convinced that early warning systems are in their own interests. They must become fully involved in their design and operation. Host country data for early warning systems varied in usefulness and accuracy depending on how well staffed and financed governments were and how convinced they were that such data was useful to them.

It is neither possible nor desirable for the U.S. or any other single donor to shoulder the burden of early warning systems. The technical, financial and logistical potential of all sources should be coordinated to the maximum extent possible. Host governments and regional organizations must become decisionmakers based on a national or regional capacity to gather, receive, and assess pertinent data with progressively diminishing assistance of the donor community.

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Coordinating the U.S. Government Response

- The President should again publicly appoint the A.I.D. Administrator to serve as his Special Coordinator in the event of another crisis approaching the magnitude of the 1984-1986 African famine. The public announcement by the President gave the Administrator heightened visibility with international and bilateral donors.
- In order to fully utilize the assets of other U.S. Government agencies, specific guidance must be provided on the goals and tasks to be accomplished. Other U.S. Government agencies will have much to offer in a similar crisis and A.I.D. should not hesitate to call on them. At the same time, every effort must be made to inform them of their specific tasks in the field and to instruct USAID Missions to integrate their work into ongoing relief efforts.
- A.I.D. and the State Department Bureau of Refugee Programs should work out a mutually satisfactory approach for situations involving feeding of refugees and nonrefugees in the same groupings. The presence of refugee populations in the midst of a famine stricken area created special problems because of the difference in philosophies on how assistance should be channeled to recipients.

The Role of Private Voluntary Organizations

- Coordinating mechanisms must be developed to make more effective use of the varied abilities and interests of U.S. private voluntary organizations (PVOs). There was no organized method of sharing information about needs and plans for meeting those needs during the emergency. The ideal situation occurs when the host government has a well organized central office capable of coordinating all famine assistance.

Copies of the complete report, A.I.D. Program Evaluation Report No. 17, The U.S. Response to the African Famine, 1984-1986, Volume II - An Analysis of Policy Formation and Program Management, November 1986, (PN-AAL-083), may be obtained from the editor of ARDA, A.I.D. Document and Information Handling Facility, 7222 47th Street, Suite 100, Chevy Chase, Maryland 20815. The Center for Development Information and Evaluation welcomes comments on the report: Bureau for Program and Policy Coordination, Agency for International Development, Washington, D.C. 20523.

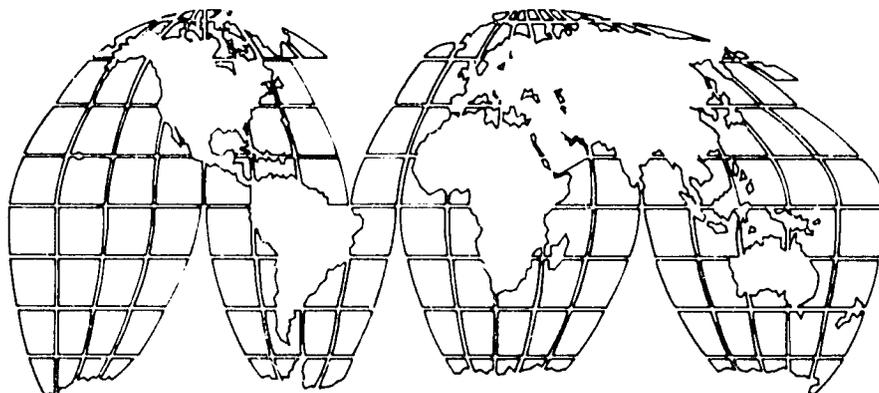
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A.I.D. DEVELOPMENT EXPERIENCE ABSTRACT

A.I.D. Evaluation Special Study No. 20

April 1984

Sine Saloum Rural Health Project in Senegal



U.S. Agency for International Development (AID) Washington, D.C. 20523

Most Primary Health Care (PHC) programs in developing countries experience problems of implementation and viability. Senegal's Primary Health Care program in the Sine Saloum region was no different. Yet by all measures it must now be considered well on its way to success.

The principal lesson learned from Senegal's PHC program is that a thorough, critical evaluation, when taken seriously and acted upon by a donor and the recipient developing country government, can turn a failing program around.

In Senegal, the Government of Senegal's willingness to make the changes recommended by an evaluation have yielded impressive results: development of a viable fee-for-service system, decentralization of certain aspects of program management, and community participation in the program's operation. These steps were coupled with necessary changes in project management by both A.I.D. and the Government of Senegal.

Important modifications in policies were required, and the policy changes that evolved from continuing discussions between A.I.D. and Senegalese officials have paid off. After three years of innovation and modification village-level health care in this PHC program is largely managed and financed by the community.

SUMMARY OF DEVELOPMENT EXPERIENCE

Three years ago the Sine Saloum PHC program was on the brink of failure. A 1980 evaluation concluded that even though a large number of village health workers had been trained and deployed, a series of grave problems jeopardized the program's future. The most critical problems were:

- The village health facilities (health huts) were not financially viable: huts were not recovering their operating costs (particularly the cost of medicines), and were decapitalizing rapidly. Many had closed or would soon cease operating because they would lack the cash to purchase new supplies of medicines.
- Supervision and support for village health workers were inadequate: workers were supervised poorly or not at all. Supervision at higher levels was also feeble, and lack of appropriate transportation for supervisors exacerbated the situation.
- The drug supply and transportation system could not cope with the new demands imposed by the PHC program.

The Sine Saloum PHC program was redesigned to incorporate the findings of the 1980 evaluation. Now, three years later, the Sine Saloum program has turned around and community-level health services are largely self-financing.

The 1980 Sine-Saloum evaluation had far reaching effects. Rather than ignoring its conclusions and recommendations, the A.I.D. mission in Senegal and the Government of Senegal immediately undertook a series of additional reviews and rapidly instituted corrective measures. Among the steps taken were a review of the project by Senegal's National Assembly, and the appointment of new project staff. The project was then redesigned to incorporate the evaluation's recommendations:

- Opening of new health huts was delayed so that pending problems could be resolved, and expansion of the program into new departments was postponed indefinitely.
- A new management structure was introduced, which included better delineation of responsibilities and coordination of activities among U.S.A.I.D., the Ministry of Health and other participating organizations. An experienced, dynamic Senegalese project manager was hired.
- Community level activities (particularly training for village management committees) were intensified to increase the villagers' understanding of the health program and their responsibilities for financing and managing village-level activities.

- Improvements were made in the drug resupply system. The system was decentralized, and the primary store of drugs for the program relocated to the regional capital (Kaolack). A continuing policy dialogue concerning further measures to decentralize the drug system is underway.
- The system of fees and charges for village health services and payment of village health workers was reviewed and modified to increase the likelihood that the program would be financially viable, as part of a Senegalese approach to community participation.
- Training activities focused on improving the skills of Senegalese training staff, and village health workers.
- The Government of Senegal closed redundant health huts (with free services) and new criteria were instituted for the selection of new health hut sites.
- Program administrators reduced the number of village-level workers to two; the matronne (traditional midwife) with maternal and child health responsibilities, and the secouriste-hygieniste (first aid-sanitation worker) who was to provide general preventive and curative care and promote environmental sanitation.
- Supervision was intensified on an experimental basis in a sample of 60 of the 378 health huts. Mobylettes (motor scooters) were substituted for horses and buggies.
- An improved reporting system was initiated. A record-keeping form was introduced for illiterate village health workers, based on a prototype developed for a Dutch-supported health program in another region.
- Preventive health measures [including malaria prophylaxis for children under 5 and pregnant women; DPT and measles vaccination; a diarrhea treatment (oral rehydration) and environmental health activities], were to be phased gradually into the program.
- An evaluation of the revised program was scheduled for one or two years hence; baseline health data were to be collected; and a health surveillance system was initiated.

UNRESOLVED ISSUES, NEW PROBLEMS

The achievements of the Sine Saloum program must be weighed against several issues and problems that are beginning to emerge as it develops. Ironically, it is only because the PHC program is functioning and functioning reasonably well in Sine Saloum that it is possible to look beyond issues of program viability to consider other, more subtle, problems.

USER FINANCING: MEETING DEMAND BUT ALSO MEETING NEED? User fees have become the backbone of the Sine Saloum PHC system. But the effects of the reliance on user fees need to be considered. One result has been little demand for preventive health services. In general the non-clinical, educational activities -- those which are most likely to lead to behavioral change -- are most likely to drop out.

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MALE OR FEMALE HEALTH WORKERS? Male village health workers are trained to give much more comprehensive care than the female health workers. Female health workers are trained midwives. Yet male health workers may be unavailable during a critical period of the year (the rainy season), and during this time the burden of health care may fall on the trained midwives.

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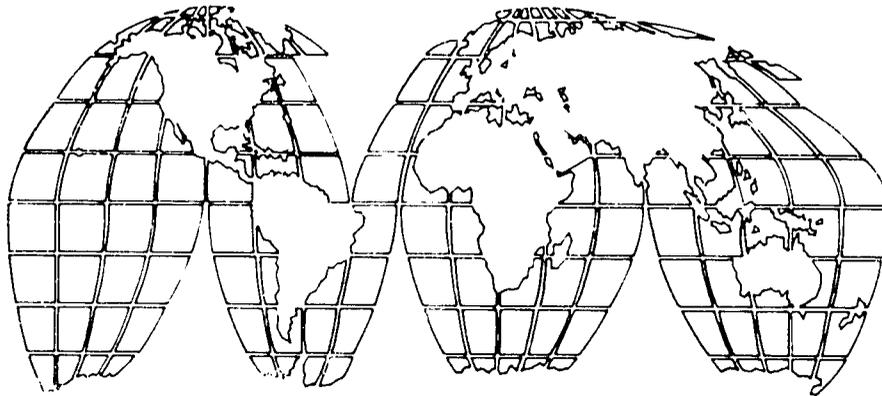
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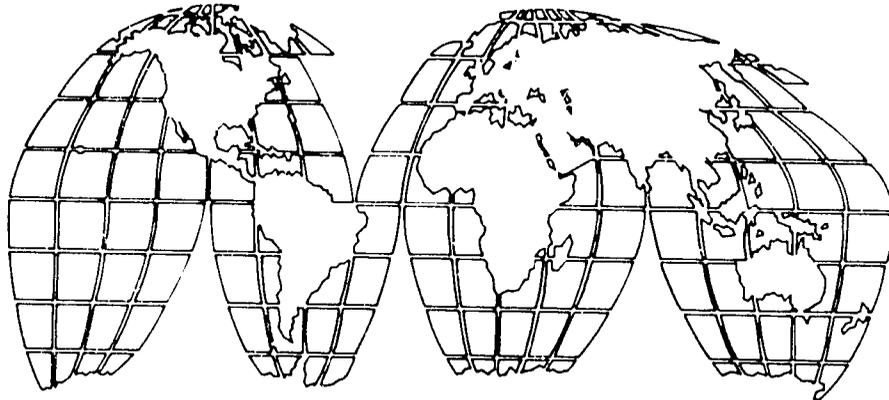
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A.I.D. DEVELOPMENT EXPERIENCE ABSTRACT

A.I.D. Program Evaluation Discussion Paper No. 21

September 1984

Development Potential of New Lands Settlement in the Tropics and Subtropics



U.S. Agency for International Development (AID) Washington, D.C. 20523

New lands settlement schemes have been adopted by many countries in the developing world to absorb population surpluses. Referred to commonly as colonization, resettlement and transmigration, new lands settlement has not been the immediate panacea for population problems envisioned by most governments.

While governments have exaggerated the capacity of new lands settlements to absorb population surpluses, a major conclusion of this evaluation has been that while planning expectations tend to be too high in the rapidity with which early returns can be expected, they are too low on possible long-term benefits.

The evaluation has defined success for settlement projects as those that stimulate an ongoing process of integrated area development. Essential to this definition are linkages between rural and urban sectors. Agricultural development stimulates the emergence of a hierarchy of services as well as manufacturing and industrial development within a region. The word "ongoing" means that the development process must be sustained at least into the second generation.

The research on which this report is based consists of three major components: 1) a literature search in over one hundred settlement areas, in thirty-five countries, plus Micronesia and Melanesia; 2) field studies in four countries in Africa and Asia by grantees funded through the evaluation; and 3) site visits to settlement areas in nine countries in Africa, the Middle East, and Asia.

SUMMARY OF DEVELOPMENT EXPERIENCE

The study has concluded that regional planning and integrated area development are essential for the development of successful new lands settlement projects. For this to occur, greater attention needs to be paid to certain basic issues associated with the development process.

- Scale: For new lands settlement to stimulate a process of integrated area development -- with a simultaneous evolution of agriculture, services and industry -- settler families must number in the thousands rather than in the hundreds. Few multiplier effects can be expected from the smaller settlements in terms of nonfarm production and employment.
- The spacial layout of settler communities and their relationship to rural towns: While there are obvious benefits to the settler of a homestead pattern where the family is surrounded by its fields, a nucleated settlement pattern is more often advantageous in terms of employment generation, the provision of services, and the facilitation of area development.
- Diversifying Farming Systems: Diversified farming systems are more resilient, economically stable and productive. They make better use of family members, and provide food for nonfarm labor and agricultural produce for processing.
- Net incomes of settler families: For new lands settlement to catalyze a process of area development, the settler family must have the incentive and the opportunity to produce. The settler family is the main resource. At subsistence levels, settlers are risk-averse. As net incomes go up, investment strategies change and consumption goes up with related positive impacts on demand for goods and services and nonfarm employment.
- Employment generation: New lands settlement has the potential to increase three general types of employment. These are 1) employment of owner/operators and their families on farm holdings; 2) the employment of permanent and seasonal farm labor; and, 3) nonfarm employment. An emphasis on small holders increases the number of farm owner/operators. Where income is more or less evenly distributed over broad segments of the population the result is large markets for comparatively simple goods. These can be produced within settlement areas, increasing the scope for nonfarm employment.
- National Development Policies: Government and private sector policies may be critical to the success of new lands settlement especially in terms of credit policies, rural-urban terms of trade which are unfavorable to the rural sector, and industrialization policies which favor large scale urban based industries.

- Settlement stages: There are four stages in settlement programs that cover at least a generation: 1) planning; initial infrastructural development, and settler recruitment; 2) transition period; 3) economic and social development and 4) handing over and incorporation. The transition stage by itself for the majority of settlers lasts at least two years and often five to ten years before the settler families can be expected to take risks and increase productivity.

CONCLUSIONS

The evaluation outlines a number of conclusions which are distinctive features of an ideal development process. It is not presented as a new prototype or "model" to be superimposed on a particular area. Rather, it represents a composite based on features -- drawing from many settlements' experiences -- which would appear to increase the possibility for success.

- Farming systems should be sufficiently diversified to provide economic opportunities to all family members. They should realize a net income high enough to stimulate demand for the production and consumption of a wide range of goods and services, which can be provided locally. These diversified farming systems can produce a variety of agricultural commodities to meet the food needs of farm laborers and nonfarm workers, and to for stimulate the emergence of agro-industry.
- There should be major government involvement from the start. Careful attention should be given to how government inputs can be best provided through time and in terms of organizational structure. At the same time, it is important to stress the need for combining government initiative with local participation, and with private sector and private voluntary organization cooperation. Government agencies which go it alone are likely to become a constraint on development.
- Thorough planning should precede implementation with feasibility studies covering climatic, soil, and hydrological surveys of potential settlement areas, and socioeconomic surveys of the land tenure, land use, and sociocultural systems of the host population.
- Settlers should be encouraged to settle in nucleated communities in which the household plots are large enough for vegetable gardening and for second generation heirs to build a house next to that of his/her parents.
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- Economic assistance should have priority over social infrastructure and housing. The provision of such

social infrastructure as schools, clinics, and other community services should have priority over housing, which is best left to settler initiative.

- Organizations such as water user associations, community organizations and cooperatives should be encouraged to increase capacity to organize labor for development purposes, express settler needs, and enable the local population to compete more efficiently for scarce resources.
- An ongoing monitoring capability and periodic evaluations should be present from the start, because as the settlement area evolves, new constraints and problems can be expected to arise.

Management Issues: A major conclusion is that new lands settlements cannot stimulate a process of integrated area development without large scale external assistance - the lack of which is a major reason why spontaneous settlement has been so unsuccessful. The primary source of such assistance is government agencies.

- Parastatal settlement agencies, as implementing agents, can have considerable political support which translates into funds, personnel and influence. But they have major weaknesses such as an inability over time to service the settlement area, poor relationships with other government departments and an inability to handover managerial responsibilities. Budget restrictions tied to handing over measures and local institution building and training may help to offset these weaknesses.
- Government Departments as Coordinating Settlement Agencies: The main advantage in using an existing government department relates to the later stages of the settlement process such as handing over and incorporation. Their weaknesses appear in problems of inflexibility and limited influence. These weaknesses can be overcome to some extent through cabinet/vice-president level, coordinating committees and through strengthened local participation.

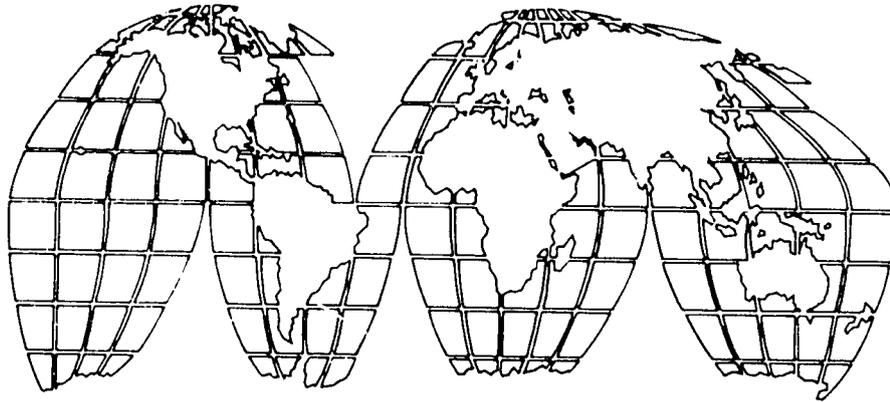
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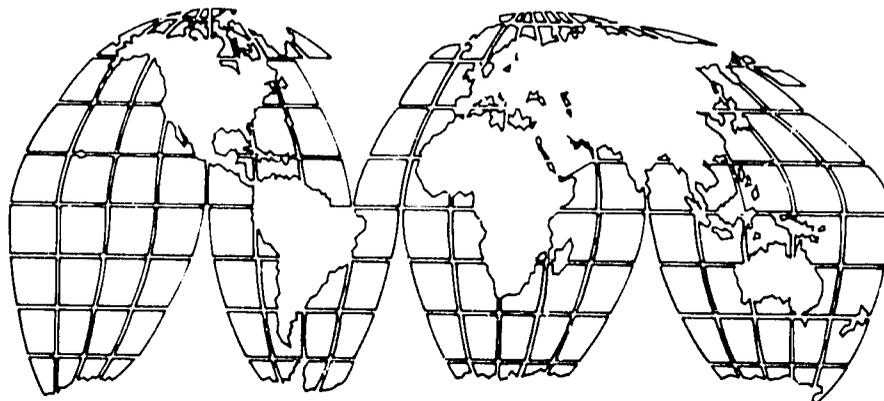
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A.I.D. Special Study No. 22

March 1985

Guanchias Limitada: A Case Study of an Agrarian Reform Cooperative and its Long-Term Relationship
with a Multinational Firm in Honduras



U.S. Agency for International Development (AID) Washington, D.C. 20523

A joint business venture has proved mutually beneficial to Guanchias Limitada, a banana-producing cooperative in north-central Honduras, and the Standard Fruit and Steamship Company, a United States based multinational agribusiness firm.

Both Guanchias and Standard have profited from their 18-year relationship. Not only has the cooperative shown excellent economic growth, it also has effected remarkable social improvements in the lives of its members. Standard has enjoyed profits for almost the entire period of the relationship and gained in public stature for following a socially responsible course.

Key elements in the success of the collaboration were (1) Guanchias' strong cooperative commitment, reliability, and capacity to learn as a business partner; and (2) the financial support, technical assistance, and guaranteed market Standard gave Guanchias.

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Impetus for this evaluation of Guanchias Ltd. experience came from a 1981 "Workshop on Multinational Managers and Third World Poverty" held at the University of Notre Dame. Discussions there about the relationship between third world cooperatives and international business led to the establishment of a task force to look further into the subject. The task force promoted the Guanchias Ltd. study which was financed by AID's Center for Development Information and Evaluation.

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SUMMARY OF EXPERIENCE

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At the time, Guanchias was a young group of small farmers and banana laborers who were determined to escape their poverty. They founded the cooperative under very difficult circumstances and in the three years before they joined Standard's program showed themselves to be plucky and resourceful. Their early tenacity was auspicious.

When Guanchias applied in 1968 to the Independent Growers' program, both groups had pressing needs. The promise of financial security through guaranteed purchase and credit assistance answered Guanchias' needs. A steady supply of bananas and the lowered investment risk answered Standard's needs.

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Guanchias' accomplishments are due to two factors: the spirit of cooperation of Guanchias, and the external support from Standard Fruit and Steamship Company.

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The Guanchias' cooperative is notable for the active participation and esprit de corps of its members. These characteristics are evident in four areas.

- Shared cultural values. Members share aspirations and background, having grown together from field laborers to land-owners and partners in a profit-making enterprise. The founders of Guanchias are peasants determined to escape the oppressive poverty cycle that traps so many. Members agree on common goals for the cooperative and themselves.
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- Capacity to learn as a Business Partner. From their partner, Standard Fruit and Steamship Company, Guanchias' members have assimilated a work ethic and discipline. Members have acquired excellent technical, managerial, and negotiating skills. An effective, dedicated leadership and a highly defined chain of procedures make the cooperative run smoothly.

With this accumulated capital, the co-op as an institution has been able to achieve more improvement in the overall standard of living than individual members could effect singularly. Wages are well above the national average as is the members' standard of living. Members receive a share in the profits. Guanchias has built 123 modern cement-block houses complete with sanitation services, electricity and potable water. Guanchias has also funded literacy programs, primary education and a medical clinic.

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Guanchias matured dramatically as a profit-making institution through its association with Standard.

- Exposure to Standard Fruit and Steamship Company's business practices. At first, co-op members had only a rudimentary sense of agronomy and profit-making. From exposure to Standard's business, co-op members learned about running a business and became entrepreneurs.
- Assured market. Access to a secure and profitable foreign market has probably been the most significant factor. Not having to develop a marketing function, Guanchias was able to concentrate on improving production and developing administrative controls. The resulting economic stability allowed Guanchias to develop more efficiently than otherwise would have been possible. The ability of a large diversified company such as Standard to absorb market risks that would bankrupt a smaller organization, is paramount to Guanchias' success.
- Technical Assistance. The actual transfer of technology and the enforcement of a fairly rigorous agricultural field discipline has been important. Agricultural practices used on Standard's own farms have been implemented by Guanchias. The new techniques Guanchias was encouraged to use, such as chemical pruning, age calibration, and propping, have resulted in improved quality as well as higher productivity.
- Financial Assistance. Standard assists the co-op with direct loans and by supplying materials at cost. The extended line of credit has proved to be an important financial buffer. Standard purchases materials and services at substantial volume discounts and then transfers them to Guanchias. The savings to Guanchias are clear, but Standard has also been able to minimize its overall cost per box of Guanchias bananas as a result of the transfers.

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The costs of the Independent Growers program were far less than the investment costs Standard Fruit and Steamship Company would have had without it. Standard Fruit and Steamship Company is assured a supply of quality bananas. The uncertainty often associated with investments in Third World countries has been reduced. Standard Fruit and Steamship Company has also gained a good public image as a result of its innovative involvement with the independent growers.

POLICY IMPLICATIONS

A.I.D. did not sponsor this particular private enterprise collaboration, but the relationship touches on all four pillars of A.I.D.'s development efforts--policy reform, involvement of the private sector, institution building, and science and technology transfer. The success of this collaborative approach, in one of the poorest Latin American countries, shows the potential of such a method contributing to the development of third world agriculture.

Copies of the report, A.I.D. Evaluation Special Study No. 22, Guanchias Limited: A Case Study of an Agrarian Reform Cooperative and its Long-Term Relationship with a Multi-national Firm in Honduras, (March 1985), PN-AAL-046, by Carolyn M. McCommon, may be obtained from the Editor of ARDA, A.I.D. Document and Information Handling Facility, 7222 47th Street, Suite 100, Chevy Chase, Maryland 20815. Comments on the report will be welcomed by The Center for Development Information and Evaluation, Bureau for Program and Policy Coordination, Agency for International Development, Washington, D.C. 20523.

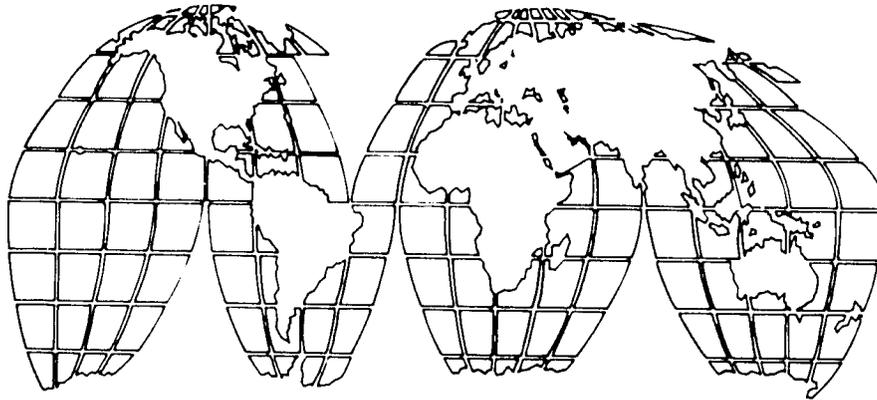
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A.I.D. DEVELOPMENT EXPERIENCE ABSTRACT

A.I.D. Special Study No. 22

March 1985

Guanchias Limitada: A Case Study of an Agrarian Reform Cooperative and its Long-Term Relationship with a Multinational Firm in Honduras



U.S. Agency for International Development (AID) Washington, D.C. 20523

A joint business venture has proved mutually beneficial to Guanchias Limitada, a banana-producing cooperative in north-central Honduras, and the Standard Fruit and Steamship Company, a United States based multinational agribusiness firm.

Both Guanchias and Standard have profited from their 18-year relationship. Not only has the cooperative shown excellent economic growth, it also has effected remarkable social improvements in the lives of its members. Standard has enjoyed profits for almost the entire period of the relationship and gained in public stature for following a socially responsible course.

Key elements in the success of the collaboration were (1) Guanchias' strong cooperative commitment, reliability, and capacity to learn as a business partner; and (2) the financial support, technical assistance, and guaranteed market Standard gave Guanchias.

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SUMMARY OF EXPERIENCE

In the 1960s, Standard Fruit and Steamship Company realized that setting up its own banana growing program in Honduras would be costly. Standard decided to set up an independent grower's program instead.

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Guanchias' accomplishments are due to two factors: the spirit of cooperation of Guanchias, and the external support from Standard Fruit and Steamship Company.

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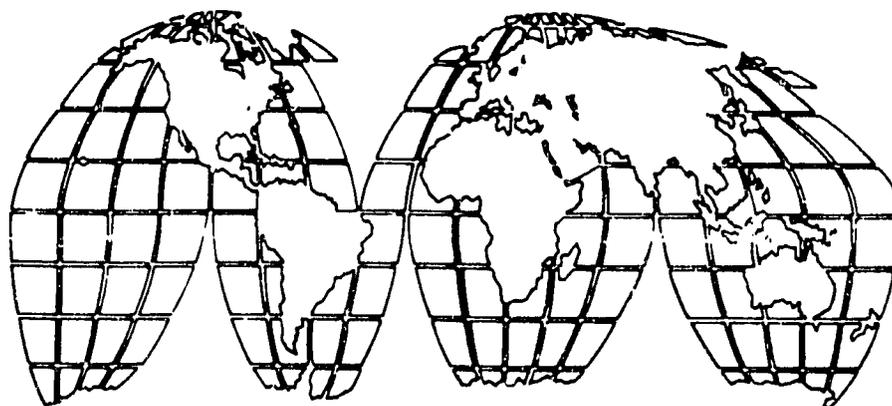
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Private Sector Development in the Thai Seed Industry

U.S. Agency for International Development (AID) Washington, D.C. 20523

The growth of Thailand's seed industry illustrates how the private sector can be involved in government development programs. Six government seed centers are responsible for developing improved varieties of corn and rice. Improved varieties of corn are channeled through private sector distributors. Five private companies which are joint ventures with international seed firms propagate the improved varieties and distribute them through a network of private merchants to farmers. The improved rice seed stock is distributed to a) drought victims for disaster relief and b) rice farmers to increase their productivity. The establishment of the seed centers and the commercialization of the seed industry was accomplished with AID assistance over a 9 year period. AID supported two projects--Seed Development Loan I and II --amounting to a loan of \$9.8 million.

Key factors critical to the successful development of the seed industry in Thailand were:

- sustained government commitment to research and development which established the technological base necessary for applied seed research; and
- the timing of AID assistance under the two projects. The seed centers were built when Suwan 1--a new corn variety developed in 1975--was ready for dissemination. The seed centers were able to demonstrate the disease-resistant quality and commercial viability of Suwan 1 which attracted private sector interest in marketing the new seed.

Other contributing factors were: the availability of Thai seed specialists to conduct the research; an existing interest on the part of the private sector to invest in seed processing; and a well-established network of private merchants and credit institutions which facilitated adoption of the improved seeds by farmers.

SUMMARY OF DEVELOPMENT EXPERIENCE

The principal lessons learned from the Thai experience are:
a) plant breeding to develop improved varieties requires sustained support and funding; and b) successful commercialization depends on policies which encourage private sector involvement. A tradition of free enterprise in the agriculture sector fostered the growth of a rudimentary seed production industry in the 1920's. Seed research in Thailand dates back to the 1940's. However, it was only within the relatively short period of 9 years that the efforts of the Thai Government, indigenous Thai and foreign entrepreneurs, and AID and other donors led to the development of the industry in its present form. Key elements which shaped the modernization process of the Thai seed industry are listed below. They provide useful insights concerning the development of appropriate technology and private sector involvement.

- Continuity in Research: Applied seed research involves much time-consuming experimentation and continuity to build on experimental results. By providing continuous financial support, the Thai government assured an ongoing research program which donors could also support with funding for technical assistance. In the case of corn research, promising gains made in the 1950's led to expanded assistance from the Rockefeller Foundation. Subsequent research led to a new disease-resistant variety--Suwan 1--in 1975 which attracted AID funding. Research since 1975 has led to further improvement.
- Timeliness and Quality of Technical Assistance: AID's Seed Development Projects supported the establishment of seed centers, technical assistance for policy formulation, and counterpart training. The timing of the two projects was instrumental in providing the necessary physical plant and technical assistance required for propagating the improved seed varieties, thus bridging the gap between research and adoption by farmers.

Equally important, the technical assistance provided by Mississippi State University was effective in two principal ways. First, it was decided that more than rice would be processed at the seed centers. This has allowed switching from rice to corn seed processing to meet the demand of private distributors created by Suwan 1. Recently, as private sector involvement has increased, the centers have turned to processing newer and improved varieties of other seeds, such as sorghum and mung beans. Second, several smaller seed centers were created instead of one central facility. This has allowed centers be located near farming areas thus improving access to

farmers and distributors. Both decisions have contributed to the cost-effectiveness of the centers and have encouraged private sector involvement.

- Adequate Number of Thai Research Specialists: The availability of Thai seed specialists contributed significantly to the development of the seed industry. Many of these specialists had been trained through education projects supported by the Royal Thai Government and AID. These specialists provided key personnel for government and university seed research centers and private seed companies.
- Recognition and Encouragement of Private Sector Role: Under Seed Loan 1, an attempt to market improved seeds through a government marketing body failed. Subsequent measures were taken to involve the private sector in marketing. The second AID project actively encouraged the formation of a trade association, "the Seed Club", to facilitate communication between the government and private entrepreneurs. Joint ventures between Thai and foreign investors receive tax holidays and can repatriate profits. Consequently, U.S. firms such as Cargill, Pacific Seed, Funk and Pioneer Hi-Bred International have established branches in Thailand which process and market hybrid corn and sorghum seeds.
- Use of Existing Network of Agricultural Input and Credit Institutions: An existing network of private agricultural input and credit suppliers provided a crucial link between seed producers and farmers. They also purchase a significant amount of grain from farmers. The relationship between merchants and farmers encourages the adoption of high yield varieties--i.e., improved varieties increased the likelihood of a good corn harvest and repayment of loans.

Government and private banks also provide credit to small farmers. The government's Bank of Agriculture and Agricultural Cooperatives (BAAC) has a group lending program. Farmers who cannot qualify for individual private loans can form small groups to borrow jointly. The extensive branch network of the BAAC allows it to also maintain an inventory of agricultural inputs for a credit-in-kind program. Private banks extend credit to farmers either directly or through the BAAC. The various programs have proved to be an effective means to encourage farmers to use credit to purchase improved seeds.

- Other Donor Assistance: Spurred by the success of the AID projects, other donors are also financing projects to build fifteen more seed centers based on the AID project models. The second generation of seed centers should accelerate the growth of the seed industry.

UNRESOLVED ISSUES

To encourage the continued growth of the seed industry, two issues need to be addressed:

1) Government Seed Regulation

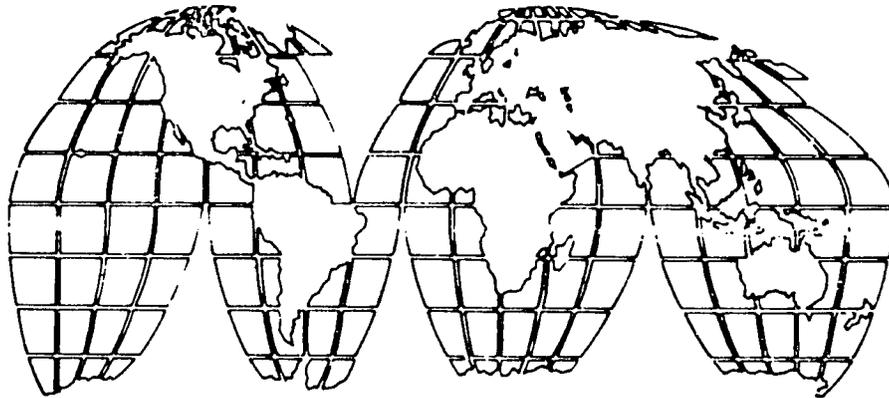
The Thai government introduced a "truth in labelling" requirement to protect producers and buyers. However, enforcement has been lax. Stricter enforcement is needed to prevent abuse of quality standards and to protect the reputation of the industry as a whole.

2) Differential Pricing

There is a substantial difference in price for corn seed sold by government outlets versus private distributors. To move seed stock quickly, government centers sell seeds at prices which do not cover production costs. This undercuts the private sector market. Policy reforms to raise the price of seeds which reflect true production costs are needed.

A copy of the report, A.I.D. Evaluation Special Study Report No. 23, Private Sector Development in the Thai Seed Industry, (June 1985), PN-AAL-047, may be obtained from the editor of ARDA, A.I.D. Document and Information Handling Facility, 7222 47th Street, Suite 100, Chevy Chase, Maryland 20815. Comments on the report will be welcomed by the Center for Development Information and Evaluation, Bureau for Program and Policy Coordination, Agency for International Development, Washington, D.C. 20523.

Other reports in this series of studies by CDIE on private sector development include: AID Evaluation Special Study Report No. 24, Management Education in Modern Tunisia: L'Institut Supérieur de Gestion, Tunis, (April 1985), PN-AAL-050; AID Evaluation Special Study Report No. 25, Ecuador Industrial Development Finance, (July 1985), PN-AAL-051; AID Evaluation Special Study Report No. 26, Promoting the Manufacture and Use of Small-Scale Agricultural Machinery in Indonesia, (June 1985), PN-AAL-052. These reports may be obtained by writing to the address above.

Tunisia: Management Education in Modern Tunisia

U.S. Agency for International Development (AID) Washington, D.C. 20523

A developing economy needs an indigenous supply of trained managers for sustained growth. A shortage of managers is a bottleneck to development. In Tunisia, these shortages were addressed by AID's Management Education and Executive Development Project. This project assisted the establishment and development of the first graduate school of business administration in North Africa, L'Institut Supérieur de Gestion (ISG). AID provided technical assistance from the University of Illinois (1969-1974) and trained the Tunisian faculty in the United States (1969-1980). The goal was to improve the productivity and profitability of public and private enterprises. The Government of Tunisia bore a major part of the project costs and virtually all of the recurrent costs of ISG. AID's assistance totalled approximately \$1.7 million.

ISG has become a source of managers and technicians for public and private enterprises as well as a source of administrators and faculty for programs in management education. ISG has also become the center of excellence in a growing system of management education.

The project suited its setting: Tunisia was a middle-income country with realistic prospects for rapid growth. The United States had a comparative advantage in management education, and management education was a felt need in Tunisia. These factors contributed to this project's accomplishments.

SUMMARY OF DEVELOPMENT EXPERIENCE

ISG Program: ISG originally started a graduate program and subsequently added two undergraduate programs. The curriculum now consists of three degree cycles: Administration Associate (A.A.), Bachelor of Business Administration (B.B.A.), and Master of Business Administration (M.B.A.). Each cycle is a two year period of course work. The annual number of graduates these programs produce are now approximately 150-200 (1st cycle), 100 (2nd cycle), and 10-12 (3rd cycle). The cumulative number of graduates is more than 1900 for the years 1971-1982. These graduates are highly regarded in Tunisia.

Development Contribution: Currently, the two undergraduate programs supply enterprise managers and the graduate program supplies faculty members: 1st cycle graduates become management technicians; 2nd cycle graduates become junior middle managers with bright promotion prospects; 3rd cycle graduates initially became enterprise managers, but now become junior faculty members. The ISG graduates find ready employment in public and private enterprises as well as at the University of Tunis.

Replication: Following the ISG Model, new undergraduate programs in management have been established at the new Faculty of Economics and Management, an offshoot of ISG in Sfax; the existing Institute of Advanced Commercial Studies in Carthage; and the new Faculty of Law, Politics, and Economics in Tunis. ISG senior faculty have become deans and senior faculty in these new management programs. ISG 3rd-cycle graduates in recent years have become a distinctive cadre of junior management faculty in all these branches of the University of Tunis, including ISG.

Other early indicators of project accomplishments are:

- o ISG matriculates and graduates students from other countries in Francophone Africa.
- o ISG graduates are sought by employers--public and private, foreign and domestic.
- o ISG graduates are promoted rapidly, and some have reached high levels (e.g. chef de cabinet executive director of a binational chamber of commerce, vice president of a small company.)
- o ISG faculty, particularly recipients of doctoral degrees, are sought by other employers in Tunisia.
- o ISG faculty consult for public and private enterprises.

- o ISG sets the standard for management education in Tunisia.
- o ISG compares favorably with accreditation standards of the American Assembly of Collegiate Schools of Business--except for its shortage of faculty with Ph.D.s.
- o AID successfully resolved the issue of degree equivalency through exchanges between the Tunisian Prime Minister and United States Ambassador. The manifest quality of returning Tunisians with American Ph.D.s along with the prospect of AID withdrawing its assistance to the project were important considerations in these exchanges.

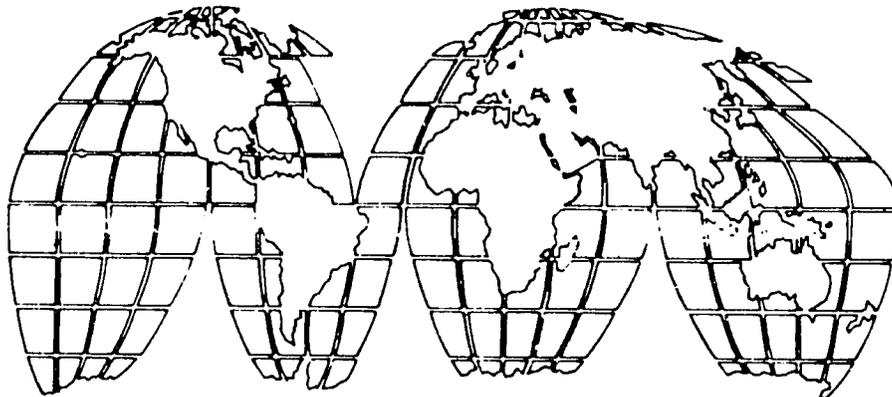
CONTINUING PROBLEMS

This project is an example of institution building and technology transfer with relevance to an indigenous private sector. Policy dialogue was vital in project implementation. ISG is now a part of the establishment in Tunisia. The Tunisian Government is committed to its continuation and recurrent costs. Nevertheless, some recurrent or continuing problems are illustrated by this project:

- o The scarcity of skilled Tunisian personnel, particularly those returning from participant training, causes "raiding of project personnel by other institutions in developing countries. AID should plan to train more than are "needed" to compensate for such leakage in future projects.
- o A mechanism does not yet exist for the renewal of the senior faculty at ISG. The supply of faculty with doctorates is limited and not increasing. The systematic replenishment of doctoral faculty is the most pressing problem for the continuation of high standards at ISG. The premature and unexpected termination of AID assistance contributed to this problem.

A copy of the report, AID Evaluation Special Study No. 24, Management Education in Modern Tunisia: L'Institut Superieur De Gestion, Tunis, Apr. 1. 1985, (PN-AAL-050), by Thomas W. Casstevens, Nancy C. Johnson, Gundar J. King, and Liliane Willens, may be obtained from the Editor of ARDA, AID Document and Information Handling Facility, 7222 47th Street, Suite 100, Chevy Chase, Maryland 20815. Comments on the report will be welcomed by the Center for Development Information and Evaluation, Bureau for Program and Policy Coordination, Agency for International Development, Washington, D.C. 20523.

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Promoting the Manufacture and Use of Small-Scale Agricultural Machinery in Indonesia

U.S. Agency for International Development (AID) Washington, D.C. 20523

Between 1965 and 1974, AID funded a research program at the International Rice Research Institute (IRRI) which successfully developed a variety of low-cost, simple farm machinery for small-scale rice production. Since 1975, additional AID support has been provided to disseminate the IRRI technology to the Philippines and other Asian countries, i.e., Pakistan, India, Thailand and Indonesia. The AID program--the Industrial Extension of Small Scale Agricultural Equipment Project--enables IRRI to provide technical assistance and training to encourage manufacturers in recipient countries to fabricate IRRI designed equipment.

In January - February 1984, a CDIE team assessed the effectiveness of the AID project in Indonesia. The team's study is one in a series of five CDIE studies which examine AID's experience in implementing private sector development programs. Key findings of the study are:

- o **Technology Transfer:** A key concern of the AID-sponsored project in Indonesia and other Asian countries is whether the IRRI technology can be easily adopted by the private sector, particularly small, family-run enterprises. In Indonesia, regardless of their size, private firms have had few problems producing simple IRRI-designed equipment, i.e., hand tools and threshing machines. However, intensive technical assistance and training are required to transmit the necessary skills for the manufacture of the IRRI-designed equipment.
- o **Growth of Local Agricultural Manufacturing:** A primary objective of the AID project is to encourage the growth of a local agricultural machinery manufacturing. The Indonesian example indicates that a successful transfer of IRRI technology is not sufficient to establish a local agricultural machinery industry. Other conditions must prevail: a) a parallel and substantial growth in demand for farm machinery; and b) strong government commitment through policies and programs which support farm mechanization and encourage investment in agricultural machinery manufacturing.

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SUMMARY OF DEVELOPMENT EXPERIENCE

Under the project in Indonesia an engineering consultant from IRRI works with the staff of the Subdirectorato on Agricultural Mechanization (DITPROD) in the Indonesian Ministry of Agriculture. Project funds are also available for training and the construction of workshops to manufacture selected IRRI models of rice production equipment. The project strategy is to demonstrate to private firms the feasibility of producing a range of IRRI-designed machines, primarily hand tools and water pumps, threshers and tillers powered by small engines. The CDIE study team concluded that the approaches used to implement the project have successfully transmitted the IRRI technology to local manufacturers and, with appropriate modifications, could be replicated in other Indonesian provinces and developing countries. These approaches are outlined below:

Startup Phase

After selecting the project areas, a series of steps are taken:

- o The agricultural mechanization needs of the project areas are identified and appropriate IRRI-designed prototype equipment tested for feasibility.
- o Under the guidance of project engineering staff and using blueprints based on IRRI designs, a few local workshops are contracted to manufacture an initial prototype using local materials.
- o Field tests are conducted using locally manufactured prototypes.
- o The original IRRI blueprints are modified to take into account local manufacturing capability and the availability of materials.
- o Modified IRRI blueprints are distributed to research stations, agricultural extension agencies and private workshops in the project areas.
- o Where necessary, the existing government extension program is modified.

Extension approaches: The study team identified three extension strategies which are used to encourage private firms to manufacture IRRI-designed machinery.

- o An "intensive approach" is used in the project area. After the startup phase, project staff train workers from interested firms to manufacture IRRI-designed

equipment. The firms are also provided with other services: assistance to obtain credit; free quality testing of initial products; marketing advice; and assessment of improvements made by manufacturers.

- o A "reactive" approach is taken with firms which, on their own initiative, decide to produce IRRI-designed equipment but may not have the required capacity to produce quality machines. Budget limitations allow the local government extension office to offer only advice to these firms. Subsequently, if the firm is committed and has potential, technical assistance and training are also provided.
- o An "extensive" approach is employed to encourage firms in non-project areas. This approach relies on provincial agricultural extension offices to identify and train interested manufacturers. Training is provided to extension agents from the provincial offices.

Lessons Learned

- o In general, the combination of the three extension approaches is appropriate to introducing IRRI technology to Indonesian manufacturers. Although more time-consuming and costly, the "intensive" extension approach is more effective than the other two approaches in reaching and upgrading small family-run workshops with limited engineering capability and unskilled workers.
- o The existing engineering capability of most local manufacturers is sufficient for the production of simple IRRI-designed equipment such as hand tools and threshers but is inadequate for fabricating more sophisticated machines such as the power tiller.
- o The Indonesian project has demonstrated that the IRRI technology can be successfully transferred to local manufacturers. The success also indicates the importance of adapting the IRRI technology to suit varying local conditions since the manufacturers are widely dispersed. However, to foster the growth of a local agricultural machinery manufacturing industry, the following conditions must also prevail: there is an existing and growing demand for agricultural machinery; credit is available for farmers and for manufacturers; and government policies which support farm mechanization and agricultural machinery manufacturing are effectively implemented.

UNRESOLVED ISSUES

Two related issues raise doubts about the prospects of establishing a local industry in Indonesia for manufacturing agricultural machinery: weak and localized market demand for agricultural machinery; and ambiguity in government policy concerning farm mechanization.

In Indonesia, the market demand for farm machinery is still small, being confined mainly to dispersed areas where there is a labor shortage and where the government has made a concerted effort to encourage mechanization. However, in other rice-growing areas in Indonesia, high population density, high incidence of tenancy and small farm size make labor intensive rice cultivation economically more feasible. Therefore, the government is reluctant to encourage farm mechanization on a national scale. Instead, the government emphasizes "selective mechanization for targeted areas." Government support for farm mechanization therefore emphasizes the manufacture of agricultural machinery which reduce post harvest losses. Programs promoting the manufacture of such machines would be implemented in selected geographical areas.

Unfortunately, there has been much disagreement among government agencies in interpreting the policy. Consequently, government programs to support local manufacturing of agricultural machinery are often undermined or uncoordinated. For example, in the Ministry of Agriculture, one branch is actively promoting local manufacturing of machines which another branch is purchasing from overseas. In one province where the federal government is encouraging farm mechanization, provincial authorities are reluctant to disburse government loans to farmers for equipment purchase. The provincial authorities fear that farm mechanization would displace labor and aggravate the unemployment situation in that province. This inconsistency in government policy, coupled with weak market demand, raises doubts about the prospects for a local industry based solely on manufacturing agricultural machinery. Government efforts to address the issues are underway.

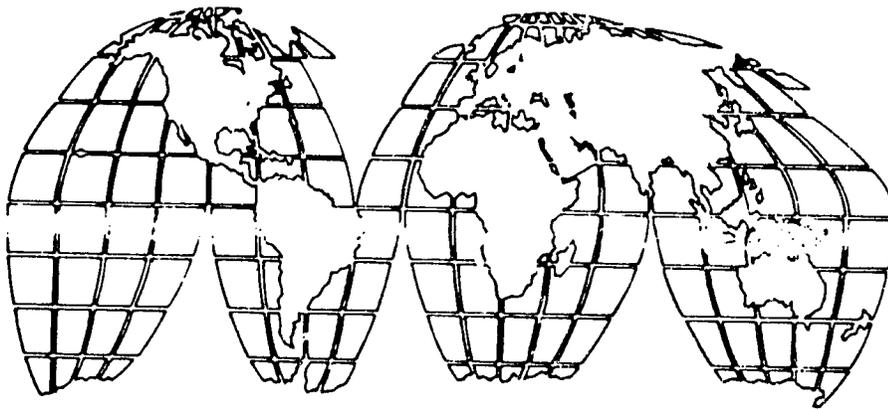
Copies of the complete report, A.I.D. Evaluation Special Study No. 26, Promoting the Manufacture and Use of Small-Scale Agricultural Machinery in Indonesia, may be obtained from the editor of ARDA, A.I.D. Document and Information Handling Facility, 7222 47th Street, Suite 100, Chevy Chase, Maryland 20815. The Center for Development Information and Evaluation welcomes comments on the report: Bureau for Program and Policy Coordination, Center for Development Information and evaluation, Agency for International Development 20523.

A.I.D. DEVELOPMENT EXPERIENCE ABSTRACT

A.I.D. Evaluation Special Study No. 29

April 1986

A Review of AID's Narcotics Control Development Assistance Program



U.S. Agency for International Development (AID) Washington, D.C. 20523

The U.S. strategy for drug control assigns critical importance to the control of illicit production and trade of narcotics in the source countries. Three U.S. agencies are active in international drug control efforts. The State Department's Bureau of International Narcotics Matters (INM) coordinates all Government activities and takes a leadership role in the international arena. The Drug Enforcement Administration (DEA) provides technical assistance and support to foreign law enforcement officials and investigates international traffic in narcotics. The Agency for International Development (AID) focuses on the development dimension of the problem of narcotics control in those source nations in which it operates. AID has undertaken three types of activities.

First, it has launched area development initiatives in select narcotics-growing areas. The underlying rationale for such projects is that comprehensive efforts to develop alternative sources of income, coupled with the provision of public services, will improve the chances for long-term sustainability of a more diversified rural economy no longer dependent on illicit crops.

Second, AID has inserted into projects agreements poppy/coca clauses, which deny its assistance to those areas and populations growing narcotics crops. These clauses are designed to induce source countries to initiate or strengthen narcotics control efforts. In fact, the FY 1986 foreign assistance authorization includes specific limitations on assistance to Peru and Bolivia if these countries fail to achieve certain objectives towards reducing illicit narcotics production.

Finally, AID has initiated and supported narcotics awareness programs which are designed to inform the elite and middle class groups about the harmful effects of narcotics production on their own societies. Such projects are being carried out in Belize, Ecuador, Jamaica and Peru.

The Center for Development Information and Evaluation (CDIE) undertook a review of AID's experience with narcotics control projects to identify from the pertinent historical information the key factors and issues bearing on narcotics production and its control. Because AID's experience with narcotics control activities has been recent (most of its projects are still in the implementation stage), this study also examined projects initiated by INM and the U.N. Fund for Drug Abuse and Control (UNFDAC).

SUMMMARY OF EXPERIENCE

International narcotics control efforts have evolved from projects that almost exclusively emphasized the selection and introduction of substitute crops to those that embrace a more comprehensive area development approach. This evolution reflects the growing recognition that no single alternative crop or mix of crops can fully substitute for income lost by farmers who give up illicit crop cultivation.

The area development strategy provides for a wide mix of development activities and services to improve the quality of rural life, which may include the following:

- o Income Replacement Activities: Improved grain and vegetable varieties (staple or cash crops); improved livestock and forage grasses; introduction of new farming practices; introduction of sericulture and beekeeping; development of new agribusiness; and promotion of off-farm employment.
- o Infrastructure: Farm-to-market roads; electricity; irrigation canals and wells; land leveling and erosion control terraces; storage containers.
- o Public Services: Adaptive research, extension, marketing and credit services; public schools; health clinics; drinking water facilities.

AID's area development strategy links the provision of development benefits with the progressive eradication of illicitly produced narcotics crops. These projects are implemented on agreement with the host countries that the farmers would not be allowed to grow narcotics crops once the project is underway, and in the event such crops are cultivated, they would be destroyed.

The review indicated that the current initiatives to control cultivation of narcotics crops have been facing problems arising from conditions such as the following:

- o Inability or lack of host government commitment to formulate long-term narcotics control policies and programs.
- o High profitability of narcotics crops production relative to alternative sources of rural income and employment.
- o Difficulty of carrying out development assistance programs and enforcement measures in remote, poorly accessible areas.
- o Faltering national economies, in which investment capital is attracted to the dollar-based narcotics trade and high rates of underemployment encourage farmers to cultivate narcotics crops on a cash basis.
- o Local cultural acceptance of narcotics products and their important medicinal, ritualistic, and exchange value.
- o Presence of powerful trafficking organizations and antigovernment groups that can threaten the safety of project staff and the beneficiaries.

The review indicated that despite the above mentioned constraints, AID's projects have been making tangible progress. For example, Northwest Frontier Area Development project in Pakistan has been creating fresh income-generation opportunities for the farmers enabling the government to enforce a poppy ban in a gradual manner. The government of Peru has been able to carry out coca crop eradication efforts because of the AID funded upper Huallaga area development project.

CONCLUSIONS

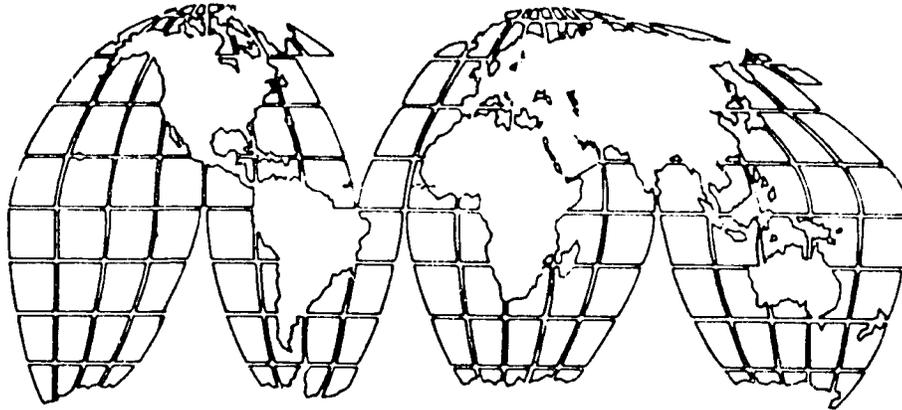
Some of the important conclusions stressed by the experience review are as follows:

- o An area development strategy is required with multicomponent development projects or sets of projects with immediate and long-term objectives. Effective area development addressing narcotics control requires a multiprong approach linking public awareness, narcotics crop eradication, market interdiction, and income replacement. Narcotics control area development initiatives should be long-term endeavors (i.e., 10-15 years).
- o It is important to take into account various sociocultural factors for designing narcotics control projects. These include factors such as the traditional use of the

narcotics crops, the socioeconomic background of the narcotics producing farmers, the non-economic constraints on their behavior, and the cultural and social influences that can be used to discourage narcotics cultivation.

- o A flexible approach is desirable for narcotics control projects, by which management staff has freedom to plan its activities and respond to unexpected events.
- o A separate unit built into each narcotics control project with adequate funding will help in mobilizing the target population against illicit cultivation and trafficking of narcotics. Adequate funds should be provided to this unit which should be administered by a senior project official.
- o Public education activities are important not only in the nations that are currently the major producers of the narcotics crops but also in those that may become potential sources in the future.

A copy of the report, AID Evaluation Special Study No. 29, A Review of AID's Narcotics Control Development Assistance Program, April 1986, (PN-AAL-054), by Krishna Kumar, Ernest Carter, and Stan Samuelson, may be obtained from the Editor of ARDA, AID Document and Information Handling Facility, 7222 47th Street, Suite 100, Chevy Chase, Maryland 20815. Comments on the report will be welcomed by the Center for Development Information and Evaluation, Bureau for Program and Policy Coordination, Agency for International Development, Washington, D.C. 20523.

Development Management in Africa: The Case of the Land Conservation and Range Development Project in Lesotho

U.S. Agency for International Development (AID) Washington, D.C. 20523

Integration of the Land Conservation and Range Development (LCRD) Project into an existing institution strengthened its capacity to initiate change. Located within the Conservation Division and the Range Management Division of the Ministry of Agriculture and Marketing (MOA), LCRD had visibility, legitimacy and close contact with host country staff.

LCRD provided training for 28 degree participants and 12 diploma participants. During the time that host country participants were training, U.S. technicians carried out their responsibilities in line positions. After participants returned from training, U.S. technicians assumed advisory positions and provided significant on-the-job training.

U.S. technicians and host country counterparts are developing conservation plans to protect croplands and rangelands from further erosion.

In Sehlabethebe, Qacha's Nek District, LCRD created a prototype range management area (RMA), provided livestock-handling facilities, and introduced range management techniques. LCRD also established a Grazing Association that functions as a self-governing group to enforce rotational grazing procedures.

Introducing new techniques of resource management required a delicate balancing of friend and enemy roles. LCRD had to secure local support and also play the role of scapegoat for unpopular decisions. Although the project has many accomplishments, more time may be required to establish and sustain new patterns of resource use.

SUMMARY

The Land Conservation and Range Development (LCRD) Project was begun in 1980 to address Lesotho's problems of severe land erosion and low agricultural productivity. Stated objectives were to strengthen technical capabilities within the Ministry of Agriculture and Marketing (MOA), to develop plans intended to protect croplands and rangelands from further erosion, and to establish a prototype range management area where improved livestock and range management techniques could be applied.

Building on earlier training efforts begun in 1973, LCRD made a valuable contribution to strengthening the technical capabilities of the MOA through long-term and on-the-job training. Considerable progress has been made on other objectives. U.S. technicians and their counterparts in the Conservation Division of the MOA have conducted soil surveys as a preliminary step to developing conservation plans. MOA has developed training and educational materials to assist those responsible for implementing the plans.

A prototype 34,000 hectare range management area (RMA) has been demarcated and equipped with livestock-handling facilities in Sehlabethebe, Qacha's Nek District. Within the RMA, a concerted effort is being made to introduce a program of rotational grazing, controlled breeding, culling of less desirable animals, disease control, and the marketing of livestock and livestock products. A Grazing Association has been established as a self-governing group that enforces the rotational grazing regulations on all livestock owners within the RMA.

LCRD is scheduled to terminate in 1987. A 1985 evaluation identified a number of conclusions and lessons in development management.

- o Physical and functional integration of LCRD into an existing institution strengthened the project's capacity to initiate change. The location of the LCRD project within the Conservation Division and Range Management Division of the MOA gave the project visibility, legitimacy, and established lines of communication to other sections of the central government. It also allowed for close contact between U.S. technicians and host country staff.
- o The LCRD project contributed to institution-building through long-term, training of counterpart staff. Former AID trained participants serve in agriculture positions throughout Lesotho. Of 26 past and present MOA Conservation Division professional staff trained in the United States, over half are in management positions. Long-term U.S. training appears to be an important vehicle for professional mobility.

- o The creative problem-solving approaches of U.S. technicians produced results and were instructive to host country counterparts. U.S. technicians used both informal and formal channels effectively. Counterparts learned from these demonstrations how to work creatively using informal communication channels in the Government system. Counterparts also gained technical knowledge.
- o Project design provisions for financial flexibility facilitated management decisions that enhanced project performance. The use of Government of Lesotho channels for the local contribution permitted flexibility within budget line items. Budget provisions for inflation and contingencies also added flexibility.

When an increase in the strength of the dollar provided additional finances, management invested in training 28 degree participants (instead of 16) and 12 diploma participants (instead of 6). Also, to help the MOA overcome recurrent cost problems, the project partially funded local costs of vehicles, gasoline and counterpart salaries.

- o Introducing new techniques of resource management required the project to appear as both friend and enemy to its beneficiary population. In establishing a prototype range management area, LCRD required local support for its efforts. However, the project also had to deflect blame from the Grazing Association for unpopular decisions.
- o A local organization established by a project to control resource allocation must have supportive linkages to preexisting legitimate institutions. Establishment of the range management area (RMA) and its Grazing Association could not have taken place without the sanction of the Sehlebathebe Ward Chief and his subordinate local chiefs. That the local chiefs are all members of the Executive Committee of the Grazing Association gives this organization and the RMA a degree of legitimacy they would not otherwise have.
- o Different management styles in different contexts facilitated project implementation. During the early years, some project technicians held line positions while their counterparts studied in the United States. When the counterparts returned, they moved into advisory positions, functioning as trainers and advisors to MOA staff. In contrast, within the range management association, U.S. technicians must use assertive management styles.

ONGOING ISSUES

Policy Environment

Efforts to introduce new techniques of resource management must be supported by appropriate government policies and regulations to enforce change. The Government of Lesotho, through a variety of legislative, regulatory, and policy actions enacted at national and local levels, is forcing gradual but far-reaching changes in the way rural people manage their land and livestock. Continued national government backing will be necessary to sustain field operations.

Replicability of Prototype Area

The location of the RMA was a deliberate choice based on a unique combination of favorable political, ecological, and functional factors. Since this combination of factors is unlikely to exist elsewhere, LCRD, may be only partially replicable in other locations.

Emphasis on Technical Training

An emphasis on technical training may produce staff that see only technical solutions to technical problems, and fail to accommodate appropriately to political, social, and cultural realities. Since many returned participants are promoted into administrative positions, their training should better prepare them for management roles.

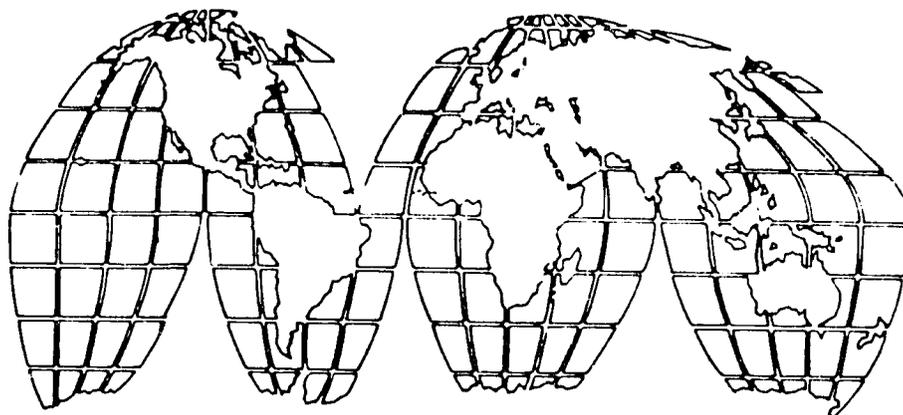
Training Nongovernmental Participants

Although the cooperation of livestock owners and herd boys was important for successful implementation of range management activities, neither group received any training. Training might have enhanced their participation and helped to build a firmer foundation for sustaining the project.

Exclusion of Farmers from Traditional Grazing Areas

Because the use of RMA pastures was restricted to Grazing Association members living within 11 villages, the project excluded some farmers from their traditional grazing areas. They have continued to use RMA pastures in violation of regulations and have threatened range riders for impounding their cattle. No immediate solution exists for this problem.

Copies of the complete report, A.I.D. Evaluation Special Study No. 31, Development Management in Africa: The Case of the Land Conservation and Range Development Project in Lesotho, December 1985, PN-AAL-061, may be obtained from the editor of ARDA, A.I.D. Document and Information Handling Facility, 7222 47th Street, Suite 100, Chevy Chase, Maryland 20815. The Center for Development Information and Evaluation welcomes comments on the report: Bureau for Program and Policy Coordination, Center for Development Information and Evaluation, Agency for International Development, Washington, DC 20523.

**Development Management in Africa: The Case of the Bakel
Small Irrigated Perimeters Project in Senegal**

U.S. Agency for International Development (AID) Washington, D.C. 20523

By demonstrating the technical and economic feasibility of irrigation, the Bakel Small Irrigated Perimeters (BSIP) project secured farmer acceptance of irrigation in the upper reaches of the Senegal River Basin. The project was able to build on efforts begun by farmers by helping the government implementing agency provide guidance, inputs and extension services. Farmers supplied labor to develop the perimeters.

Project implementation was facilitated by the many returned migrants in the area. They had seen irrigated farming in other parts of West Africa or in France and had learned to deal with foreigners.

USAID's decentralized management approach encouraged the development of a sense of ownership, both within the government implementing agency and at the village level. Local participation was enhanced by a multifaceted training program and by national-level policy changes that reduced government control of the economy and increased rice prices.

The Government of Senegal and the donor community currently subsidize farmer credit. Farmers are slow to repay and reluctant to reserve finances for replacement pumps. To sustain project efforts, farmers must be willing and able to repay credit on a regular basis.

This study is one of a series focused on management in agriculture and rural development projects in Africa. The studies, conducted between September 1984 and March 1985, provide a better understanding of development management problems and suggest ways to enhance management capacity.

SUMMARY OF DEVELOPMENT EXPERIENCE

The Bakel Small Irrigated Perimeters (BSIP) project was initiated in 1977 to introduce irrigated rice agriculture to the upper reaches of the Senegal River Basin (Bakel area). By working with a parastatal agency, the National Society for the Development and Exploitation of the Senegal and Faleme River Basins (SAED), BSIP was able to provide farmers with guidance, inputs and extension services. Farmers supplied the labor to develop the perimeters.

Approximately 3,500 farmers were organized into 28 village-level irrigation organizations. Through a series of crop production workshops, BSIP trained or improved the skills of most farmers participating in irrigated agriculture. The project also constructed an operations base near Bakel with a guesthouse, equipment repair center, parts stockroom, offices, conference rooms, and apartments for staff. A demonstration farm conducted applied research, producing seed and providing extension services to farmers.

Through 1984, over 700 hectares had been irrigated, less than half of the area envisioned in the Project Paper. Nevertheless, the project's accomplishments are important because farmers accepted irrigation technologies and increasingly participated in the project.

A 1984 evaluation indicated several key findings and lessons learned.

FINDINGS

- o The outward orientation of the people of Bakel facilitated technology transfer. The Soninke and Toucouleur males have a tradition of migrating to urban centers in France and West Africa. Many returned migrants had seen irrigated farming, had learned to deal with foreigners, and had acquired relevant skills such as machine repair and elementary computation.
- o USAID's decentralized management approach encouraged Senegalese to assume responsibility for the project. Staffing problems and distances limited USAID's ability to provide technical support to the government implementing agency (SAED) and the project area. Under these conditions, Senegalese staff and AID-funded technical assistance contractors assumed responsibility and developed a sense of project ownership.
- o Decentralized management limited USAID's ability to anticipate project needs before problems surfaced. Without close communication, USAID did not recognize inadequacies in SAED's financial management system. After SAED failed to provide accounting information and reports, USAID initiated training for accounting staff.

- o A "fit" between SAED's bureaucratic directives and local management styles facilitated implementation. This shared understanding of the respective but complementary roles and responsibilities of SAED and farmers evolved over time. With few exceptions, irrigation associations met production needs, environmental constraints and SAED guidelines.
- o Within SAED, recruitment training and promotion policies contributed to improved leadership. SAED's pay structure is based on level of education, work performance, responsibility, discipline, and interpersonal relations. Skilled managers command respect from other SAED staff and villagers. Recent improvements in SAED's incentive structure and increased in-service and overseas training have enhanced leadership skills. However, the project made no systematic attempt to provide long-term training to SAED staff to replace U.S. technicians.
- o At the village level, training in improved agricultural techniques contributed to project goals, but could have been improved with better monitoring and follow-up training. As irrigation associations assume more and more responsibility for day-to-day operations, training in literacy, accounting and record keeping will be needed.

LESSONS LEARNED

- o A management strategy that builds on indigenous structures and fosters local participation will enhance sustainability. BSIP built on existing social structures at the village level. Leaders of irrigation associations were well-respected village leaders in the traditional sphere. Some irrigation associations also had advisory councils of older, respected men.
- o Changes in national or regional policies provided incentives for project sustainability. After farmers refused to sell surplus rice at fixed government prices, SAED decentralized the management of field operations and eliminated the requirement that farmers sell to SAED. This policy change was strengthened when the Government of Senegal took steps to move toward a less controlled economy. Farmers valued the autonomy offered by the new policies and the economic incentives of higher rice prices. They responded by increasing their commitment to participate in perimeter operations.
- o A carefully designed and executed training program can help beneficiaries acquire a sense of owning project objectives and actions. This sense of ownership may be an essential ingredient for sustaining key project activities after donor funding ceases.

ONGOING ISSUES

Financial Sustainability

To keep BSIP financially viable when USAID funding ceases, farmers must repay credit fully and promptly. Until now, farmers have been slow to repay. Although SAED supplied the initial pump at no cost, farmers were expected to deposit regular installments to pay for a second pump once the first is beyond repair. Farmers pay lip service to the need to establish funds for replacement pumps, but they hope SAED will replace the pumps for free.

The Government of Senegal and the donor community cannot afford to subsidize farm credit indefinitely. The Government of Senegal will have to decide whether to spread repayment over the long term or develop a more commercial approach to credit, limiting itself only to clients who can repay fully.

Planning for Management Needs

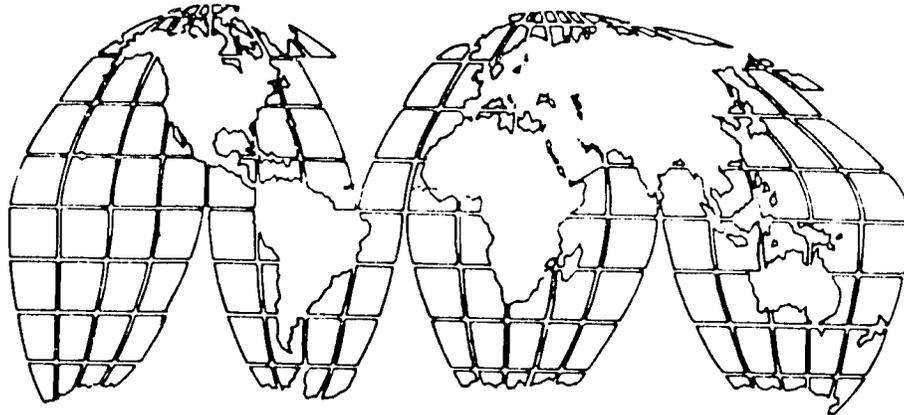
BSIP should have planned for a formal management planning and control system in the project design. Such a system would provide ongoing data to assess objectives, indicate progress and facilitate adaptation to the many policy and organizational changes that occur during the life of a project.

Planning Projects in Remote Areas

Projects located in remote areas should plan for extra logistics and communication needs. Failure to provide basic personnel, technical and material support contributed to problems with BSIP implementation. In 1983-84, actions to remedy these deficiencies gave BSIP a new beginning.

Projects in remote areas should give rigorous attention to standardizing vehicles and equipment. In BSIP, different procurement policies of SAED and AID led to the purchase of vehicles, heavy equipment and pumps of different makes, each with a complex network for spare parts and repair.

Copies of the complete report, A.I.D. Evaluation Special Study No. 34, Development Management in Africa: The Case of the Bakel Small Irrigated Perimeters Project in Senegal, December 1985, (PN-AAL-067), may be obtained from the editor of ARDA, A.I.D. Document and Information Handling Facility, 7222 47th Street, Suite 100, Chevy Chase, Maryland 20815. The Center for Development Information and Evaluation welcomes comments on the report: Bureau for Program and Policy Coordination, Agency for International Development, Washington, D.C. 20523.

Development Management in Africa: The Case of the Egerton College Expansion Project in Kenya

U.S. Agency for International Development (AID) Washington, D.C. 20523

To increase the number of trained agricultural extension agents in Kenya, AID funded an expansion of Egerton College, one of two agricultural institutes in Kenya providing diploma-level training in agriculture. The College's active management of the assistance contributed to the achievement of project objectives. The management style of encouraging departmental initiative but maintaining central coordination fit project needs. Also, although the College had parastatal status its Governing Board was able to exercise considerable fiscal control, without government interference.

Clear project goals and ample financial resources helped the project to meet its objectives. The construction program was well planned and completed ahead of schedule. One-third of the Egerton College staff received training in the United States and returned to assume the positions planned for them. Enrollment oriented toward public sector employment more than doubled, as planned, but the expansion was not correlated with national manpower needs. The expansion of enrollment in areas where employment opportunities are shrinking represents a major shortcoming of the project.

New roles imposed as a result of the expansion call for more formal management systems. Since management enhancement takes considerable time, projects should anticipate future management needs and plan accordingly.

This study is one of a series focused on management in agriculture and rural development projects in Africa. The studies provide a better understanding of development management problems and suggest ways to enhance management capacity.

SUMMARY

As a component of the Agricultural Support Systems Project, AID funded an expansion of Egerton College, one of two agricultural institutes in Kenya providing diploma-level training in agriculture. Major objectives were achieved. Physical facilities were expanded. Faculty were sent to the United States to work on B.S. and M.S. degrees and returned to assume the responsibilities planned for them. Student enrollment more than doubled without impairing Egerton's standards and the practical orientation of its training.

A 1985 evaluation of the Egerton College expansion identified factors contributing to the success of the project and offered several recommendations.

FACTORS CONTRIBUTING TO SUCCESS

- o Egerton College leadership actively managed the assistance provided. Basic decisions regarding construction and equipment were made by the College with the full participation of department heads. The maintenance of local control had a positive effect on the academic management of the College. Faculty developed a sense of ownership of the project and designed a physical plant that met their requirements. Also, many junior faculty gained management skills and experience.
- o The Egerton College management style of encouraging departmental initiative but maintaining central coordination fit project needs. For example, the training effort required considerable departmental initiative and high individual motivation, but the construction required central coordination.
- o College management had extensive experience with the basic activities and skills required for the project including construction contracting, procurement of equipment and academic performance.
- o The College's high level of freedom from Ministry of Agriculture interference facilitates innovation. Although the College has parastatal status, fiscal control is exercised by the Governing Board. Thus the College is able to shift funds among line items, create or upgrade staff positions, and manage its endowment without government interference. The financial cushion provided by income from the commercial farm allows additional flexibility.



- o Continuity of administration and staff facilitated project activities. Institutional norms, working relationships, procedures and traditions were retained throughout the expansion period.
- o Training goals were established and students were highly motivated to perform well and return. Faculty participation was extensive; one-third of staff received training in the U.S., thus sharing in project benefits.
- o Close monitoring of participants encouraged them to complete their training on time. The College leadership made annual visits to U.S. institutions where participants were studying. Participants completed their training in an average of three years, producing sufficient savings to train nine additional individuals.
- o Ample financial resources were available, and they were augmented by the devaluation of the Kenyan shilling.
- o Project goals were simple, clear and quantifiable, making it is easier to reach consensus on them, to discipline activity around them, and to provide objective criteria for resource allocation.

RECOMMENDATIONS

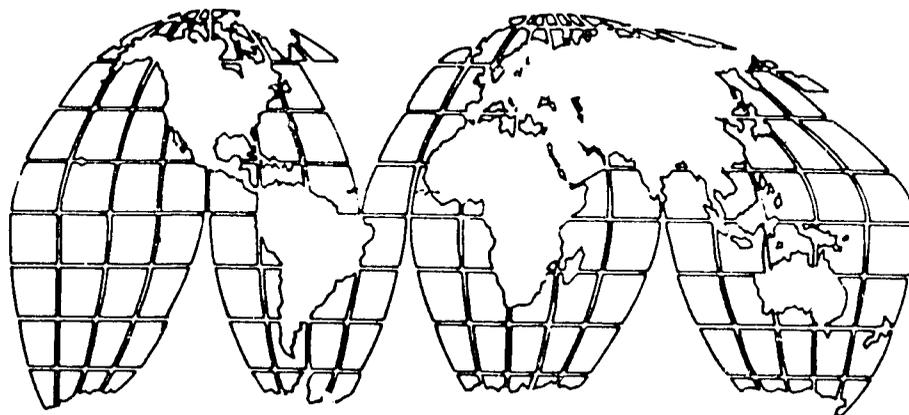
- o Project design should anticipate management needs associated with changes being implemented. Although the College had the institutional capacity to manage this expansion project, the new roles imposed as a result of the expansion strain management capacity.

For example, the existing financial management system is designed to monitor cash flows, not to assist in planning or policy analysis. During the expansion, the Principal exercised tight and centralized control and project financial resources were employed effectively. However, increasing demands for resources, growing fiscal constraints and changing roles will require a better financial management system to plan effectively and make informed trade-offs among competing demands.
- o Agreements made for host government expenditures should be monitored and documented. Although the Kenyan Government was committed in the project agreement to contribute \$18 million, no attempt was made to record how much was actually contributed. Also, the Kenyan Government agreed to assume the recurrent costs associated with the expansion, but these costs were not projected in the project paper.

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- o College expansion programs should be related to projected national manpower needs. Increasing the supply of graduates without commensurate measures to ensure postgraduate employment, can lead to a frustrated work force. Egerton College continued to expand training for public sector employment, even in areas not identified as priorities in manpower assessments.
- o Expatriate assistance should be matched with host country needs. When Egerton staff were sent to the U.S. to obtain B.S. and M.S. degrees, they were replaced with U.S. doctoral-level faculty who were provided with special perquisites that established them as a separate class of faculty. The U.S. team was unfamiliar with the curriculum and teaching style and was more expensive than necessary. Scholars and technicians having B.S. and M.S. degrees might have better served Egerton's needs.
- o When technical equipment is purchased for developing countries, AID should require that maintenance service be available. Because of AID's "buy American" policy, American models of microscopes were purchased for biology labs. No spare parts were delivered with the equipment. Since the equipment was different from that currently being used in Kenya, department heads were unfamiliar with it and did not know what spare parts they would need over the next five years.
- o Library planning should include the purchase of multiple copies of texts. Lack of texts is a serious constraint to student learning and study efficiency. Planning for Egerton College library did not include the purchase of multiple copies of texts. But books are often too expensive for students to purchase. Without access to textbooks, much class time is taken up with dictating notes.

Copies of the complete report, A.I.D. Evaluation Special Study No. 35, Development Management in Africa: The Case of the Egerton College Expansion Project in Kenya, December 1985, (PN-AAL-068), may be obtained from the editor of ARDA, A.I.D. Document and Information Handling Facility, 7222 47th Street, Suite 100, Chevy Chase, Maryland 20815. The Center for Development Information and Evaluation welcomes comments on the report: Bureau for Program and Policy Coordination, Agency for International Development, Washington, D.C. 20523.

**Development Management in Africa: The Case of the Niamey
Department Development Project in Niger**

U.S. Agency for International Development (AID) Washington, D.C. 20523

To increase rainfed agricultural productivity the Niamey Department Development (NDD) project organized training for peasant couples in improved agricultural techniques. Graduates were expected to achieve significant increases in productivity in their own fields and to spread the training's effect to others in their villages.

NDD's experience underscores the importance of agricultural research in developing appropriate and affordable technical packages. Although the agricultural production technologies promoted by the project had been advocated in Niger for many years, they were largely untested and only partially addressed the constraints faced by peasant producers. Their inadequacies limited project efforts.

Project experience suggests that the trade-offs between strengthening existing institutions and achieving effective implementation in a separate structure deserve careful analysis at the design stage. NDD relied on existing government services to provide technical support and follow up to graduates. Several government ministries were expected to cooperate in carrying out these responsibilities, but they typically operated within separate domains and rarely collaborated. Government services staff had important responsibilities but minimal commitment to project goals. Thus, project management had incomplete control over significant aspects of project implementation.

This study is one of a series focused on management in agriculture and rural development projects in Africa. The studies provide a better understanding of development management problems and suggest ways to enhance management capacity.

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SUMMARY OF DEVELOPMENT EXPERIENCE

The Niamey Department Development (NDD) project aimed to increase rainfed agricultural productivity through training and institution building. NDD organized training for peasant couples at rural training centers and at village-level sites in the project zone. Graduates returned to their home villages where they were expected to use and extend the improved agricultural production techniques.

In each project zone, a coordinator linked NDD with existing government services to provide technical support and follow up. Included were: the Service of Agriculture, the National Credit and Cooperative Union, the National Agricultural Credit Bank the National Livestock Service, the Waters and Forestry Service, the National Literacy Service, and Animation.¹ The project strengthened these services by supporting the construction of offices and warehouses and by purchasing vehicles and fuel. The project also fostered local institutional development by training cooperative officers in literacy and arithmetic.

In 1984, after eight years of operation, NDD was operating ten rural training centers and four village centers. Approximately 740 peasant couples had been trained. An evaluation identified several conclusions and lessons learned from project experience.

- o Government services staff have minimal commitment to project goals when reward structures do not reinforce their participation in project activities. Staff recognize that they are paid and promoted within their services and that responsibilities to a project are temporary.
- o Enlisting cooperation and contributions from several government ministries that typically do not collaborate with each other requires considerable project time and energy, and even then may have only limited success. In Niger, the various line ministries and their respective technical services operate within separate domains and compete for resources. Collaborative activity planning rarely occurs. Power and authority are concentrated at national and regional levels and directives are typically top down. Lower level staff seldom take initiatives. Under these conditions, securing commitment to large regional development projects is very difficult.
- o Incomplete control over access to needed inputs limits project management capacity. In order for NDD to meet its production goals, government services must order, purchase, store and deliver large quantities of agricultural inputs

¹Animation - government service which provides for sensitization or awareness/consciousness raising.

in needed quantities at appropriate times. Although NDD has improved input supply by constructing warehouses and purchasing vehicles, input supply problems still exist.

- o In an atmosphere that discourages experimentation, untested technical packages may continue to be promoted even if they are costly and only partially effective. Although the standard technical package of improved production techniques used in Niger since the early 1960s was largely untested, it had support from the National Agricultural Service and the National Agricultural Research Institute. Experimenting with alternatives was discouraged and no mechanisms for feedback on farm-level operations existed. Under these conditions, a expensive technical package that only partially addressed constraints was promoted for many years.
- o When donor priorities change, project implementation may suffer. In 1983-84, in response to a Congressional mandate, USAID began to emphasize greater fiscal accountability. Project management became concerned with quantifiable, accountable inputs, outputs and timetables. At least temporarily, these concerns overshadowed other management priorities.
- o High staff turnover may jeopardize project implementation. In 1984, both the NDD project director and the USAID liaison officer left the project. With the turnover, NDD internal cooperation for planning and coordination was interrupted and had not resumed as of the evaluation.
- o Improving local-level development management requires both training for local populations and creative efforts to support their active participation in the analysis and solution of local problems. When the Niger Government began to emphasize the necessity for rural populations to assume greater responsibility for their own development, NDD initiated training in basic arithmetic, literacy, accounting and management. Other efforts are also needed to encourage a shift from a largely passive role to an active critical role.
- o Training in collective approaches to problem solving has limited impact when cultural support for the innovations is lacking. Since Niger rural development agents have been socialized from early in their careers to place little value on team work, the effects of NDD's training in collective approaches were minimal.
- o Feedback from the farm level on the results of introducing technical packages is essential to understand constraints faced by users and to assist with appropriate modification of technical packages. Production constraints are important, but social, economic and cultural constraints should be examined also.

ONGOING ISSUES

Need for On-Farm Research

Agricultural research in Niger should be expanded to include the on-farm search for more productive methods of raising crops. The key to increasing farmer production is an appropriate and affordable technical package, coupled with proper instruction, adequate inputs and sufficient follow up. If the technical package is inadequate, more seminars and new teaching methods will have little effect.

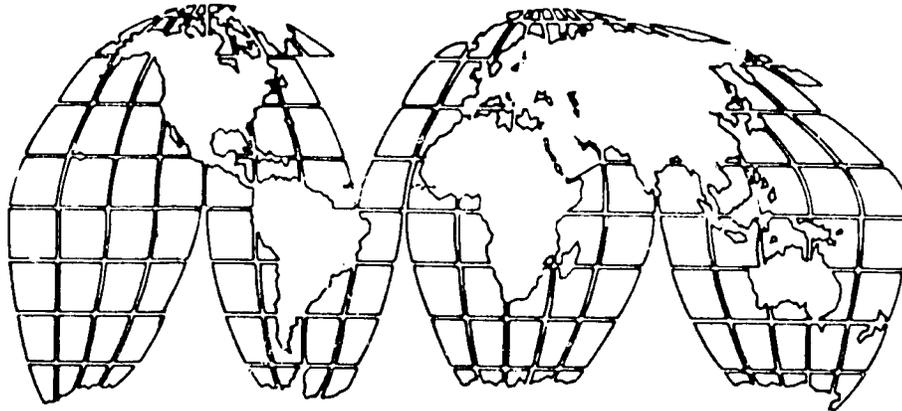
Institution-Building vs. Project Implementation

In designing NDD, USAID and the Niger Government opted to support and work through existing service structures rather than create parallel structures. Although government technical services are responsible for significant implementation activities, the NDD project director has minimal authority over them. Placing the technical services under NDD direction would improve their effectiveness but would not foster constructive institution building and change. Project designers need to analyze the possible trade-off between strengthening existing institutions and achieving effective implementation in a separate structure.

Organizational Norms and Rewards

Project design teams should assess the organizational norms and reward structures of organizations that are expected to assist in project implementation. Unless organizational norms and reward structures are supportive of project goals the task of regularly informing, coordinating, convincing and cajoling participation will be enormous and difficult. Without a strong commitment from host country organizations, project-initiated activities are unlikely to be sustained.

Copies of the complete report, A.I.D. Evaluation Special Study No. 36, Development Management in Africa: The Case of the Niamey Department Development Project in Niger, December 1985, PN-AAL-069, may be obtained from the editor of ARDA, A.I.D. Document and Information Handling Facility, 7222 47th Street, Suite 100, Chevy Chase, Maryland 20815. The Center for Development Information and Evaluation welcomes comments on the report: Bureau for Program and Policy Coordination, Center for Development Information and Evaluation, Agency for International Development, Washington, D.C. 20523.

**Development Management in Africa: The Case of the
Agriculture Analysis and Planning Project in Liberia**

U.S. Agency for International Development (AID) Washington, D.C. 20523

To improve the management capability of the Liberian Ministry of Agriculture (MOA), AID supported two planning projects in Liberia. The major objective of these projects was to develop MOA's capability to collect and analyze the data required for formulating a sector plan that would coordinate and direct agricultural programs and investments.

Through technology transfer, staff development and assistance with organizational and operational changes the projects have built a stronger foundation for sector planning. MOA now has the basic capability to collect and analyze primary agricultural data, a capability that previously did not exist. The most recent project also provided a base of support to the Statistics and Planning Divisions during a period when such support was not available from MOA itself.

These accomplishments occurred in spite of the strong influence of patronage values, the severe economic problems, a changing political scene and frequent staff changes in MOA.

Developing the capacity to manage sector planning is a long-term process requiring both the acquisition of technical skills and changes in organizational structure and management. Technology transfer and training activities often overlook the need for organizational and management changes. Sector planning projects should anticipate both technical and management needs.

This study is one of a series focused on management in agriculture and rural development projects in Africa. The studies provide a better understanding of development management problems and suggest ways to enhance management capacity.

SUMMARY

The Agriculture Analysis and Planning Project (1978-84) and the Agriculture Development Program (1972-76) addressed the need for integrated planning in Liberia's Ministry of Agriculture (MOA). Both projects were designed to help MOA obtain adequate agricultural data and develop a coherent overall plan. The projects' objectives were to institutionalize the sector approach to planning agricultural development (replacing a focus on individual projects and separate programs).

The technology transferred included data collection methods, data management techniques and analytical techniques for sector planning. The projects provided short- and long-term training for 50 MOA staff, technical advisers in the areas of agricultural economics and agricultural statistics, and commodities for field operations and central data processing.

Although sector planning has not been institutionalized in MOA, the Statistics and Planning Divisions within the Planning Department of MOA now have the basic capability to collect and analyze primary agricultural data. Personnel have been trained and MOA has been reorganized so that its internal structure might better support sector planning, should this approach be accepted fully by the ministry.

A 1984 evaluation, focusing primarily on the Agriculture Analysis and Planning Project, identified a number of conclusions and lessons in development management.

- o Developing the capacity to manage sector planning requires a long-term initiative in institution building to allow time for developing appropriate staffing patterns, management skills and administrative procedures.
- o The transfer of new technology and the introduction of policy and planning changes require organizational changes, including modifications in organizational structure and management arrangements. For example, to institutionalize an information system, the recipient institution must have an ability to handle recurrent costs and management requirements as well as an adequate technical understanding of techniques and methods of data collection and analysis.

Neither of the planning projects in Liberia appears to have explicitly anticipated the need for organizational changes and management reforms to support sector planning.

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- o To be sustainable in developing countries, data-related technologies must be simple, low in cost, yet sufficient to meet basic information requirements. For example, uncomplicated sampling designs based on the best available listing of farm households will be more manageable (within budget and staff capabilities) than more elaborate methods such as area frame sampling. To improve data quality, more sophisticated techniques can be introduced on a pilot basis.
- o Interruptions in the provision of technical assistance and training undermine project accomplishments. A two-year delay between the completion of the first and the start-up of the second planning project weakened the foundation built by the first project. Overlap of technical advisers is preferable to gaps in assistance.
- o Where there is a shortage of trained personnel, short-term, in-country training is preferable to long-term training because it minimizes disruptions. The use of short-term training in Liberia permitted immediate, though gradual improvements in office performance.
- o Technical advisers can provide management support, including quality control over analytical work and staff support when these functions are not otherwise institutionalized within the organization.
- o Agricultural planning projects require flexibility in implementation. The objectives of the project (developing data bases and a sector strategy) and the means for meeting objectives are clear (data collection and analysis), but until work gets underway, there is little understanding of the type of studies needed and the direction that information from these studies will lead. To maximize the utility of that information, the implementation of the project must allow for frequent redirection of activities.
- o Leadership affects the viability of agricultural sector planning projects. The history of the two planning projects suggests that the leadership provided by individuals in key management positions significantly affected what the projects did or did not accomplish regardless of the soundness or utility of the technology itself. When key actors in MOA provided leadership and support, they contributed to the achievement of objectives. When supportive leadership was lacking, project accomplishments were thwarted.

ONGOING ISSUES

Management Training

Planning projects should anticipate management needs and include the development of management skills in training and technology transfer activities, even when the principal objective is to develop technical skills.

Attempts to improve the performance of an institution often focus on technical needs and overlook management skills. Yet both are needed. For example, to institutionalize an information system, the recipient institution must have both technical skills in data collection and analysis and an ongoing ability to manage these activities. Furthermore, individuals who receive technical training are often promoted to higher-level positions that require effective managerial skills.

Funding Logistical and Commodity Requirements

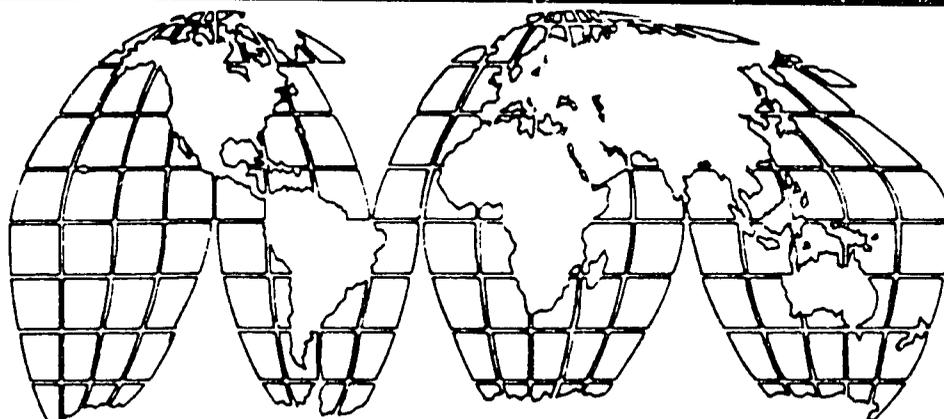
For countries facing severe economic constraints, logistical and commodity requirements for sector planning should be covered by project funds until the host country can assume them. The project purchased microcomputers and basic supplies for data analysis and provided loans to county enumerators to enable them to purchase motorbikes for their work. This assistance was important to implementation.

Assumptions About Rationality

Agricultural planning projects should view purposive and economic rationality in target institutions as objectives to be achieved, rather than conditions that exist at the outset. Projects can encourage rationality by demonstrating the utility of using data and analysis for more informed decision making.

Copies of the complete report, A.I.D. Evaluation Special Study No. 37, Development Management in Africa: The Case of the Agriculture Analysis and Planning Project in Liberia, December 1985, PN-AAL-070, may be obtained from the editor of ARDA, A.I.D. Document and Information Handling Facility, 7222 47th Street, Suite 100, Chevy Chase, Maryland 20815. The Center for Development Information and Evaluation welcomes comments on the report: Bureau for Program and Policy Coordination, Center for Development Information and Evaluation, Agency for International Development, Washington, D.C. 20523.

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**AID's Experience With Contraceptive Social Marketing: A
Synthesis of Project Evaluation Findings**

U.S. Agency for International Development (AID) Washington, D.C. 20523

Contraceptive social marketing (CSM) programs have provided cost-effective means to increase the use of contraceptives among the lower-income populations of developing countries. In twelve countries with active CSM sales in 1984, program contraceptives were estimated to provide more than five million couple-years of protection. In Egypt, Bangladesh, Nepal, Colombia, and Jamaica, 20-50 percent of all contraceptive users are served by CSM programs.

CSM programs usually involve creating an implementing agency, selling low-cost contraceptives through commercial distribution and retail systems, and promoting contraceptives through public relations campaigns and advertising. After several years of sales, CSM programs generally become cost-effective, with net operating costs ranging from \$0 to \$4 per couple-years of protection (CYP). Achieving complete self-sufficiency (with revenue covering commodity as well as operating costs) is more difficult, especially while trying to achieve more widespread contraceptive coverage.

Generally, CSM promotes nonclinical methods that can be sold over the counter, such as condoms, oral contraceptives, and foaming tablets. Over time, most projects expand the methods and brands of contraceptives offered. Market research techniques have proved useful in understanding the perspectives and preferences of the CSM target audience. Promotional messages are tailored accordingly.

CSM programs have operated successfully under both private and public organizational structures. Although the use of experienced U.S. contractors has helped many CSM programs achieve a strong start, a transition to local management is essential for long-term implementation.

SUMMARY OF EXPERIENCE

In 1984, a dozen developing countries had contraceptive social marketing (CSM) programs and were actively selling contraceptive products. Included were: Colombia, El Salvador, Honduras, Jamaica, Mexico, a Caribbean regional program (in Barbados, St. Vincent, and St. Lucia), Bangladesh, India, Nepal, Sri Lanka, Thailand, and Egypt. AID has directly or indirectly (through the International Planned Parenthood Federation) assisted most of these programs.

The percentage of eligible couples covered by CSM was highest in Colombia (15 percent), Jamaica (13 percent), Egypt (10 percent), and Bangladesh (7 percent). By most commercial standards, capturing 5 percent of the target market is considered highly successful.

CSM programs usually include three elements: (1) creation of an implementing agency with commercial marketing and management skills; (2) selling of low-cost, generally subsidized contraceptives through commercial distribution and retail systems; (3) promotion of contraceptive products through market research and advertising campaigns aimed at satisfying consumers' needs and preferences.

A number of conclusions may be drawn from AID experience with the CSM approach to family planning.

- o CSM programs appear to have increased the use of contraceptives among the lower-income population. Limited market research in several countries indicates that the populations benefiting from the CSM program are generally among lower income groups, but not the poorest. Most CSM users live in urban or semiurban areas. Some programs are reaching rural populations, but costs are higher.
- o CSM programs are cost-effective but not yet self-sufficient. After several years of sales, the net operating cost per CYP of most CSM programs ranges from \$0 to \$4. During the first few years of sales, costs can be considerably higher. Some CSM programs (Colombia, Mexico, Jamaica, Thailand, and Sri Lanka) have succeeded in generating revenues to cover all operating costs, but generally they are not yet able to cover commodity costs, requiring a continued donor subsidy.
- o CSM projects have operated under a spectrum of organizational structures, from programs operated entirely by government to those operated completely by private agencies. No one approach is ideal, or even possible in all country situations. CSM programs operated by governments have tended to suffer from

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management problems. The semiautonomous model has worked well (an independent organization implementing the CSM program under the oversight of a policy board with government representation). Private sector models appear promising.

- o CSM projects are more successful in countries with supportive political, social, and economic environments. The host government's commitment to family planning objectives and the existence of specific regulations and policies favoring CSM organizations, often facilitate CSM project performance. Policy boards with representation from government and key groups may be used to obtain support. Public relations campaigns may also be needed. Several CSM projects failed because of misunderstandings and lack of support from key groups.
- o Projects that terminate before local management takes over are unlikely to survive. Using U.S. contractors has been effective in getting CSM projects off to a good start, but plans should be made for the early and smooth transfer of management, technical, and commercial skills to the local agency responsible for long-term implementation.
- o Reliance on a commercial distribution system is satisfactory and economical if a well-established commercial distribution system exists and firms that are interested in marketing CSM products can be identified. Programs in Jamaica, India and the Caribbean rely on commercial distribution systems. Other distribution systems used exclusively or in combination include: government or quasi-government distributors; in-house sales forces; medical representatives and village distributors.
- o Promotion activities, especially mass media advertisements, are very successful in increasing CSM product sales. For example, surveys in Bangladesh found that an intensive CSM radio campaign increased discussion of family planning with spouses and others, heightened recognition of the economic benefits of family planning, and increased contraceptive use among the target population.
- o Finding appropriate retail prices is a delicate balancing act. By using market research and testing, CSM projects gain an understanding of purchasing behavior of target consumers and reactions of distributors and retailers to different product prices and margins. This information is used to determine the prices that best meet objectives of cost-effectiveness and increased contraceptive use.

- o CSM information needs can usually be met by rapid low-cost data-collecting that is directly relevant to operational decisions. Other sources are secondary data, especially national contraceptive prevalence surveys, and routine management information records. Statistical surveys are relatively costly and time-consuming and have rarely been used.

ONGOING ISSUES

Evaluating CSM Programs

While it is clear from sales data that growing numbers of couples purchase CSM contraceptives, estimates of the impact of CSM programs on fertility levels are limited by lack of research on two main issues: (1) substitution--some CSM contraceptive users may have switched from other sources of supply and may not be new users; (2) use-effectiveness--the effectiveness of CSM products in protecting couples from unwanted pregnancies. The traditional approach of evaluating CSM projects based on contraceptive sales data needs to be supplemented in some cases by more rigorous research and statistical survey techniques to answer these key issues.

Choosing an Implementing Agency

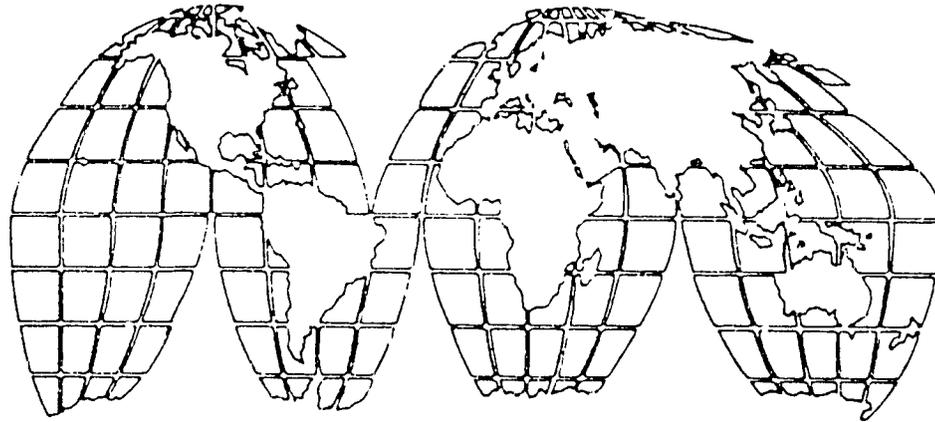
More information is needed on the trade-offs of using different organizational structures as CSM implementing agencies, especially on the effectiveness of using existing private commercial firms.

Reaching Rural Areas Versus Achieving Self-Sufficiency

The objective of achieving widespread contraceptive coverage may conflict with the objective of achieving financial self-sufficiency. Several programs used an in-house CSM sales force to concentrate on distribution to rural areas, but costs were high because sales people had to be recruited, trained, and paid. Inaccessible terrain, extreme poverty, and high illiteracy, make some rural populations very difficult to reach.

Copies of the complete report, A.I.D. Evaluation Special Study No. 40, AID's Experience With Contraceptive Social Marketing: A Synthesis of Project Evaluation Findings, April 1986, PN AAL-073, may be obtained from the editor of ARDA, A.I.D. Document and Information Handling Facility, 7222 47th Street, Suite 100, Chevy Chase, Maryland 20815. The Center for Development Information and Evaluation welcomes comments on the report: Bureau for Program and Policy Coordination, Center for Development Information and Evaluation, Agency for International Development, Washington, D.C. 20523.

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An Evaluation of the Factors of Sustainability in the Gambia Mass Media and Health Practices Project

U.S. Agency for International Development (AID) Washington, D.C. 20523

Over a three-year period, the Gambia Mass Media and Health Practices (MMHP) project developed and tested mass communications techniques for improving health conditions. The project demonstrated that health behavior can be dramatically changed in rural areas of a very poor country through a combination of radio, print and face-to-face contacts. The project was cost-effective, and successfully demonstrated that mass media can be used to reduce morbidity and mortality. Project activities, however, were not sustained after A.I.D. funding terminated.

An evaluation revealed that a three year time period was insufficient to both develop and institutionalize the program. Planners focused on developing, evaluating and refining health intervention techniques and gave low priority to activities required to ensure continuation of the program. Although there was excellent, on-the-job training, there was no project-funded participant training. When the project ended, there were not enough trained Gambians to run the program and no phased plan for withdrawal of technical assistance. No provisions were made for the host government to gradually increase its financial commitment.

Both the technology and the dissemination of the technology were sustainable; they were simple, precise, cheap and made only modest demands on the health bureaucracy. However, when the A.I.D. project ended, The Gambia was facing severe fiscal pressures and could not finance even a minimal program. To sustain project achievements, A.I.D. or another donor should have provided limited post-project maintenance support.

SUMMARY OF DEVELOPMENT EXPERIENCE

To identify factors that contribute to the sustainability of health projects, an evaluation team visited The Gambia in September 1986 to interview personnel familiar with a very successful project that had terminated two years earlier.

During most of project operations, 56 percent of diarrheal episodes (of children under 5 years of age) were being treated at home with oral rehydration therapy (ORT). In comparison with ORT programs in other countries; MMHP costs were very low: \$0.75 per diarrheal episode treated; \$1.56 per child per year; \$224 per death averted. The total program cost for three years was approximately \$500,000.

MMHP improved the capacity of Radio Gambia and the government's Book Production and Material Resources Unit. In the Health Education Unit of the Ministry of Health, the implementing agency, MMHP developed staff skills in field research, sample surveys and development and promotion of innovative health education techniques. The success and experience gained from the MMHP project served as a prototype for A.I.D. efforts in other countries under A.I.D.'s HEALTHCOM project.

The evaluation team concluded that the project was not sustained--but it could have been sustained if certain factors had been considered when the project was designed, or even later when the project neared completion.

FINDINGS

- o MMHP activities were successfully integrated into the Gambia Primary Health care system. Workers at all levels were aware of ORT and accepted and used it. MMHP accomplished integration by keeping the technology simple and inexpensive and introducing it through a cadre of existing health services.
- o The three-year time period was too short. Most A.I.D. projects require five or more years to develop and institutionalize new techniques. MMHP was a two-year project that was extended for a third year.
- o MMHP ended abruptly, making no provisions for the Government of The Gambia to gradually assume budget responsibilities. The Health Education Unit went from an intensive, resource rich campaign effort to a limited effort with minimal budget. When the project ended, nearly all full-time project implementers left. Under these circumstances, high levels of interest and effectiveness could not be maintained.

- o The on-the-job training provided was inadequate to train Gambians to run the program. Long-term training was required to transmit the complex skills needed for a mass media campaign.
- o The lack of an effective and ongoing information system reduced post-project sustainability. During implementation, feedback from evaluation data contributed to the success of the media campaign, enabling program approaches and dissemination techniques to be reevaluated and redesigned. When A.I.D. funding ended, information/feedback capacity became very limited.
- o Following the termination of MMHP, the Government of The Gambia faced severe fiscal pressures and was unable to mobilize funds to continue MMHP activities. The program could have been run effectively on \$36,000 to \$72,000 a year, but was receiving only \$5,000 to \$10,000.

LESSONS LEARNED

- o Activities required to launch a research and development effort are different from those required to institutionalize the effort. In the MMHP project, planners focused on developing, evaluating and refining mass marketing techniques, and gave little attention to long-term training, phased withdrawal or the continued financing of project activities. Planning should include actions needed to sustain new approaches if they prove successful.
- o Volunteers can provide low cost extension or program outreach, but unless they are integrated into ongoing systems, or provided with some compensation (financial or in-kind), they tend to drop out. MMHP successfully used village volunteers to reinforce the media message. Incentives that provided recognition and prestige were effective initially, but in the long run, the volunteer system experienced high attrition rates.
- o Limited post-project maintenance support may be necessary to preserve project achievement. MMHP inputs were appropriate to local conditions and could be maintained at reasonable cost, but the Gambian government could not finance even a minimal program. Planners should have sought systematic post-project funding from A.I.D. or other donors, to help sustain MMHP's demonstrated success.

ONGOING ISSUES

Making Sure the Health Message is Understood

A communications project must have the capacity to continuously revise its messages to ensure that the target audience fully understands the product or service. In the MMHP project, many mothers used the recommended treatment, but evaluation data showed that they had the mistaken view that ORT cured diarrhea. If ORT did not produce a quick improvement, they sometimes abandoned it.

Spread Effects and Spin-offs

Spread effects and spin-offs are encouraging signs of sustainability, but steps must be taken to increase host government capacity to respond to the demand for newly learned technologies and services. Staff of the Health Education Unit became recognized as mass media experts and demand for their assistance spread so quickly that they were unable to keep pace.

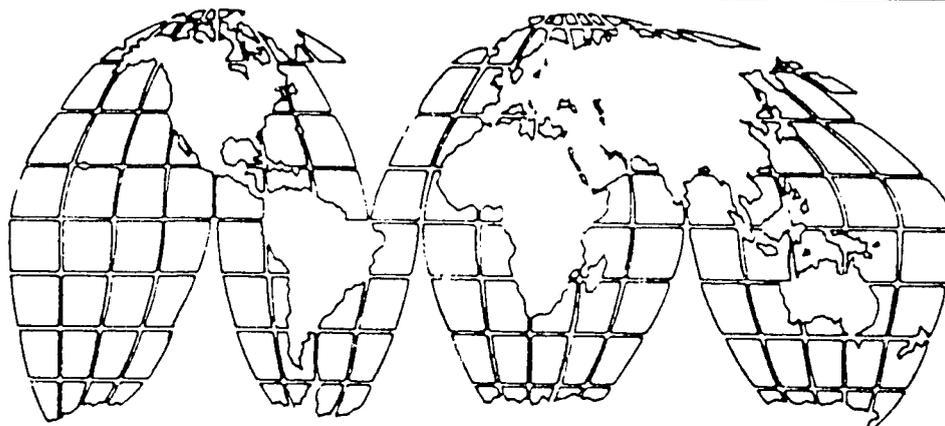
A.I.D. Priorities and Small Mission Programs

Mechanisms are needed to allow highly successful projects to be maintained without a management burden on smaller missions. Towards the end of the project, A.I.D. faced budget cutbacks and both personnel and projects in the Gambian mission were trimmed. MMHP was not continued.

The Need for Mutually Supportive Objectives

In MMHP, each player had a different objective. A.I.D./Washington wanted to show that mass media methodologies could be used to change health behavior. The mission wanted to control diarrheal disease. The Gambian government wanted to improve its health care program. During project implementation, these objectives were mutually supportive, but in the third year, there was disagreement on future directions. Failure to negotiate mutually supportive new objectives stifled the maintenance of MMHP activities.

Copies of the complete report, A.I.D. Evaluation Special Study No. 51, An Evaluation of the Factors of Sustainability in the Gambia Mass Media and Health Practices Project, December 1987, (PN-AAL-098), may be obtained from the editor of ARDA, A.I.D. Document and Information Handling Facility, 7222 47th Street, Suite 100, Chevy Chase, Maryland 20815. The Center for Development Information and Evaluation welcomes comments on the report: Bureau for Program and Policy Coordination, Agency for International Development, Washington, D.C. 20523.

An Evaluation of the Factors of Sustainability in the Lesotho Rural Health Development Project

U.S. Agency for International Development (AID) Washington, D.C. 20523

The way a donor designs a project influences whether or not project activities are sustained after the project ends. The Lesotho Rural Health Development Project (RHDP) was designed to be sustained. Persons at all levels of the health system were involved in the design and host country counterparts worked closely with technical advisors throughout implementation. The design included a planned annual phase-in of host government financial contributions so that by the end of the project, the Government of Lesotho was funding all personnel costs and nearly all training and supervision costs.

Implementation was in two phases, with phase II contingent upon the successful completion of phase I. First, RHDP upgraded the planning, administrative and management capabilities of the Ministry of Health so that it could successfully operate a decentralized rural health care system that used Nurse Clinicians as paraprofessionals. Second, the project helped establish and institutionalize the village health care system, designing the support structure, developing training programs and creating Ministry capabilities to operate these programs.

Two years after A.I.D. funding ended, the project was still operating effectively. An evaluation found that Lesotho had the capacity to continue to manage and operate a rural health services program successfully.

The only threat to continuation of the new health care system is a shortage of financial resources. User fees at government facilities are very low (covering only six percent of operating costs). Given declining central government revenues, Lesotho will probably have to increase user fees in order to continue providing quality health services.

SUMMARY OF DEVELOPMENT EXPERIENCE

The Lesotho Rural Health Development Project (RHDP) was initiated in 1979 to provide integrated basic health services to Lesotho's rural population. A.I.D. contracted with the MEDEX Group of the John F. Burns School of Medicine of the University of Hawaii to implement the project. A.I.D. provided \$3.3 million of the project's \$4.1 million cost.

RHDP successfully supported Lesotho's move to a rural health care system based on a new decentralized structure that relied on para-medical personnel. Nurse Clinicians, trained by the project, diagnosed and treated about 90 percent of health problems in rural clinics and referred remaining cases to doctors at district hospitals. Nurse Clinicians also supervised Village Health Workers, whose role was to encourage preventive health care and to identify health problems. The new system replaced a centralized system of doctor-based health care.

In October 1986, approximately two years after the project terminated, an evaluation team visited Lesotho and found that the Ministry of Health was successfully managing the planning, training, supervision and operations of the new health care system. The evaluation identified a number of factors that helped sustain the project and several lessons learned.

FACTORS CONTRIBUTING TO SUSTAINABILITY

- o The project design and technology fit Lesotho's needs and economic/institutional capabilities. The introduction of Nurse Clinicians was appropriate for Lesotho because doctors were scarce and the government institutional structure was well developed.
- o Beneficiary groups were involved in the project design. Interviews confirmed that persons at all levels of the health system felt that they had been involved in the early design phase and that the project served their needs.
- o The project offered a viable mechanism for achieving both donor and host government objectives. RHDP was designed to meet Lesotho's goal of bringing health care to the rural population. It also fits A.I.D.'s 1970s basic human needs approach.
- o The project's approach had already been developed and tested in the U.S. and some developing countries. The training modules and teaching materials existed and were adaptable to Lesotho.
- o The RHDP training program was highly successful. Fifty-three Nurse Clinicians were trained by the project and more are in training. Attrition rates have been low (5 percent) and demand for training has been high.

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- o The project allowed enough time (six years) to develop a sustainable host government capacity. Both A.I.D. and the Government of Lesotho were committed to institutionalizing the program.
- o The recurrent cost burden of project activities and personnel was well within the government's budget capabilities. The government included increased personnel levels in the Five-Year Plan and in annual budgets.
- o RHDP had a well-designed phase-out plan that allowed A.I.D. advisors to systematically turn over project planning and management to their counterparts.

LESSONS LEARNED

- o Phased project design is an effective means of ensuring that desired institutional changes take place. The politically-difficult administrative changes required in the first phase may have been helped by the understanding that the continuation of donor funds was contingent on such changes.
- o Supervision is a critical element of any health system. Even if initial training is effective, workers must receive systematic support and guidance to remain effective. Since supervision is difficult, costly and produces little tangible output, it is likely to be neglected when money is scarce. Donors and the host country have a responsibility to ensure that adequate provisions are made for this critical and often neglected component.
- o Volunteer time is not free. Serving the needs of the community takes people away from productive activities. Ultimately, volunteers require compensation--financial or in kind--to maintain enthusiasm and interest.
- o Having host country counterparts work closely with expatriate technical advisors enhances sustainability. Missions and project designers should stress the need for appropriate counterparts early in their dialogue with the host country.
- o Even if a project meets its objectives and the host country has good intentions, it may lack the resources required to maintain full project efforts. Donors should be ready to provide limited additional funding, if needed to ensure sustainability. When RHDP ended, A.I.D. continued to provide limited training and consulting services to help maintain program effectiveness.

ONGOING ISSUES

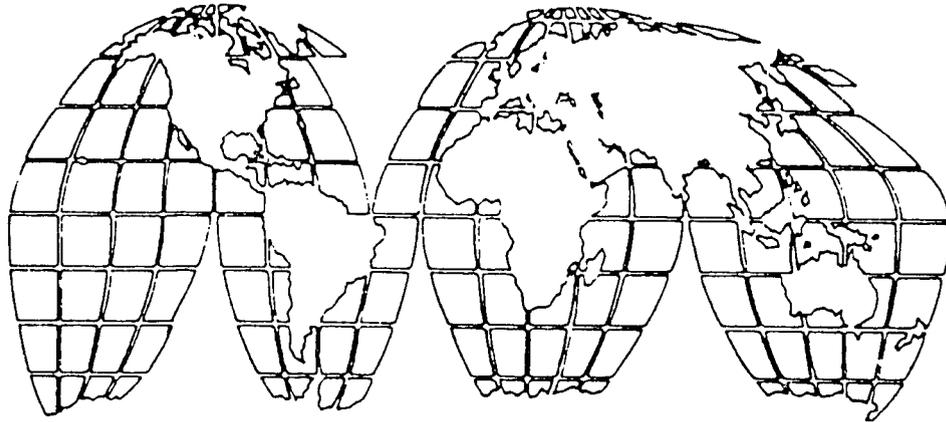
User Fees

Lesotho's rural health care system cannot be sustained without an increase in user fees or a change in health resource allocations. User fees at Ministry of Health facilities have been low and declining. In 1975, they were 16 percent of recurrent expenditures. In 1984, they were only 6 percent. In contrast, facilities operated by the Private Health Association of Lesotho recover 60-80 percent of operating costs through user fees. The Government of Lesotho recognizes the problem, but has taken no action.

Balancing Preventative and Curative Health Care

Donor health projects and host governments face immense pressure to provide curative services, but it is more cost-effective to prevent disease than to treat and control it. Although preventive care gets lip service, most developing countries spend the bulk of their health care money for curative care (82 percent of Lesotho's budget goes to hospitals which provide mainly curative care). Preventive measures such as immunizations and prenatal care and activities such as environmental sanitation are neglected despite their long-term benefits. Experience shows that a minimal level of curative care must be provided if preventive efforts are to succeed. There is no magic formula; each health care system must strive for an acceptable mix of curative and preventive care.

Copies of the complete report, A.I.D. Evaluation Special Study No. 52, An Evaluation of the Factors of Sustainability in the Lesotho Rural Health Development Project, December 1987, (PN-AAL-099), may be obtained from the editor of ARDA, A.I.D. Document and Information Handling Facility, 7222 47th Street, Suite 100, Chevy Chase, Maryland 20815. The Center for Development Information and Evaluation welcomes comments on the report: Bureau for Program and Policy Coordination, Agency for International Development, Washington, D.C. 20523.

A.I.D.'s Experience with Selected Employment Generation Projects

U.S. Agency for International Development (AID) Washington, D.C. 20523

In all too many LDC's, rapid population growth, policy distortions, and exogenous shocks have retarded the structural transformation of the labor force. As a result, vast numbers of people are unemployed or underemployed. Since increased productive employment is the major feature of broadbased economic growth, A.I.D. has initiated a number of projects designed to increase employment.

An examination of A.I.D.'s experience with selected employment generation projects concluded that the policy environment is the single most important determinant of project success.

The study found that employment generation projects work best in fast-growing economies free of policy distortions, but typically that is where they are least needed. Frequently, the constraint on increased employment is the absence of capital and associated inputs. The employment "problem" in this light can be understood in part as a scarcity of complementary inputs which will increase the productivity of labor. Prudence, therefore, suggests emphasis on those policy constraints which reduce growth and the use of abundant resources such as labor. Growth is directly related to employment, and unless the technology of production changes sharply, or prices become rigged in favor of capital so that capital is substituted for labor, increased growth means increased employment.

SUMMARY OF DEVELOPMENT EXPERIENCE

High levels of unemployment and underemployment are endemic to most developing countries. The issue arises repeatedly in A.I.D. programs and projects. This report was commissioned to obtain a better understanding of the employment problem in developing countries and its relationship to other development issues. It examines the literature on employment, including A.I.D. policy and strategy papers and more than 30 evaluation reports on completed A.I.D. projects.

FINDINGS

- Direct action through A.I.D. projects designed to generate employment has been of mixed success.
- While all projects surveyed were relevant to development needs, some had low economic rates of return.
- The relatively small A.I.D. budget allocations to projects intended to directly increase employment suggest that the A.I.D. system is designed to deal best with questions of growth of productive assets rather than directly with employment.
- Equity was not especially favored, and women were sometimes given consideration only as an afterthought.
- Evaluation of employment generation projects is severely hampered by the paucity of available ex-post evaluations and the absence of common criteria on which to judge the different types of projects.

GENERAL CONCLUSIONS

- No single kind of employment generation project has a comparative advantage. Some projects surveyed were successful and some were not. This means that the choice of one kind of project over another depends on local circumstances, the most important of which is the policy environment.
- While the policy environment is critical to project success, this approach needs to be supplemented by an equal emphasis on what might be called the "administrative environment," including for example "honest weights and measures," the ease of entering business, predictability of government actions, an enforceable system of contracts, a reputable system of public accountancy, a system of property rights, the adequate provision of what has been called social overhead capital, a broad-based system of primary education, and a system of risk sharing.

CONCLUSIONS RELATED TO PROJECT TYPE

- Successful vocational education projects require a rising demand for labor, and this demand is most directly linked to the economy's growth rate and to the relative cost of capital and labor. Formal education programs were much more expensive than the one informal program reviewed, yet these programs were not much more successful in terms of placement rates and certainly were far less successful in terms of numbers of people trained. As tools of employment generation these projects often had poor payoffs.
- Labor-intensive infrastructure projects, if they are to have positive secondary and tertiary effects on production and employment, must occur in a reasonably well integrated economy. In general, lack of maintenance prevented the development of capacity for long run productive benefits and employment. Moreover, in the long run when an infrastructure project is expected to eliminate bottlenecks to increased agricultural production, high agricultural price distortions can prevent project success. Both labor infrastructure and food-for-work projects seem promising on paper yet are complex to design and administer, and typically affect relatively small numbers of workers. In both cases, economic analysis needs to be strengthened if such projects are to play a more effective role.
- Food-for-work projects are affected by a wide variety of factors so that it is not possible to isolate a single aspect of the policy environment which is more important than another to the success of projects. Special note can be taken, however, of the questionable extent to which food-for-work projects create permanent productive assets. Aside from the obvious case of poor maintenance, assets can be wasted if they are created in an economic environment in which they will not be used efficiently. A high rate of growth may be the single best test of whether such assets will be used productively. The payoff from some projects was so low that they might better have been treated as relief projects with attendant reduction of administrative expenses.
- Export promotion projects depend heavily for success on appropriate foreign exchange rates because overvalued rates reduce exports and increase imports. The results of export promotion projects were very mixed. Policy conditions that inhibit achievement of either low price or high quality reduce external competitiveness.
- Small-scale credit and technical assistance projects that faced rapid inflation and interest rate ceiling were often decapitalized. Effectiveness of credit programs is also highly dependent on the economic growth rate. Projects to stimulate small-scale enterprise provided some employment, but sometimes at great cost per job created.

ON-GOING ISSUES

Use of Experience

While the A.I.D. "system" concentrates on projects with longer-term growth payoffs rather than short-term employment, and relies more on policy changes than projects to increase employment, emerging crises force attention back to efforts to improve employment in the short run. Policy makers can be helped to design efficient short-term employment programs by strengthening evaluation and its systematic dissemination so that experience becomes a better guide to practice.

Greater Understanding of the Informal Sector

The urban informal sector will continue to be a major "employer" of new entrants for decades to come. Further systematic attempts to understand the vitality of this sector may pay large dividends because this sector is an efficient user of manpower, often has a low capital-to-output ratio, responds flexibly to changing economic circumstances and is a "training ground" for the kind of economic initiative and skill necessary for accelerated economic development.

A.I.D. Priorities and Employment Generation Projects

Almost any well-intentioned project can increase employment, but the central question is whether a particular project is the best use of A.I.D. resources. Good projects in good policy environments sometimes fail, but good projects in bad environments almost always fail. This means that priority attention should be given to policy reform when the intent is to increase employment. Employment generation projects in the absence of policy reform are generally economically indefensible. If emergency conditions are thought to require attempts at direct employment creation, then such projects might be understood better as relief, or as politically required, but not as long run economic development.

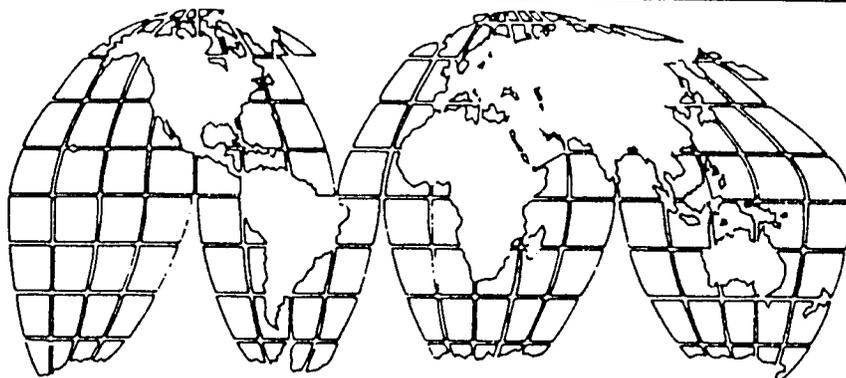
A.I.D. Efforts in Export Promotion

Since export promotion will drive policy formulation for years to come in many LDCs, A.I.D.'s efforts in this area deserve special and on-going systematic study.

Copies of the complete report, A.I.D. Evaluation Special Study No. 53, A.I.D.'s Experience with Selected Employment Generation Projects, March 1988, (PN-AAX-203), may be obtained from the editor of ARDA, A.I.D. Document and Information Handling Facility, 7222 47th Street, Suite 100, Chevy Chase, Maryland 20815. The Center for Development Information and Evaluation welcomes comments on the report: Bureau for Program and Policy Coordination, Agency for International Development, Washington, D.C. 20523-1802.

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An Assessment of A.I.D. Activities to Promote Agricultural and Rural Development in Sub-Saharan Africa



U.S. Agency for International Development (AID) Washington, D.C. 20523

Studies of U.S. agricultural and rural development assistance in six Sub-Saharan countries over the past 25 years indicate that A.I.D. has accomplished the following:

- o contributed significantly to the quantity of people available in the six countries who are skilled in agricultural and rural development work
- o achieved substantial improvements in most of the countries in physical infrastructure
- o compiled a mixed record of limited effectiveness in institution-building

The impact of A.I.D.'s agricultural and rural development assistance has been severely limited by:

- o physical and political constraints distinctive to Africa
- o low priority for Africa in U.S. foreign policy
- o weaknesses in A.I.D. organization and procedure

These findings are contained in an A.I.D. evaluation special study synthesizing individual country reports on Kenya, Malawi, Tanzania, Cameroon, Nigeria and Senegal.

The study recommends that in its programs, A.I.D. should focus more attention on the problems of host countries rather than on prevailing attitudes and policies in Washington. It should put higher priority on activities such as institution-building to facilitate the ability of host countries to carry development forward on their own. It should simplify its processes and allow greater flexibility.

SUMMARY OF DEVELOPMENT EXPERIENCE

A.I.D. has been providing a substantial though fluctuating level of assistance to Sub-Saharan Africa for agricultural and rural development since the 1960s. Total U.S. economic aid to the six countries over 1963-84 ranges from \$278 million to Cameroon, to \$1.2 billion to Nigeria. The U.S. portion of donor assistance over this period ranges from 6.1 percent in Cameroon to 22 percent in Nigeria. In 1984 eight donors joined in a World Bank study, "Managing Agricultural Development in Africa" (MADIA), of their agricultural development assistance to the six countries over the past quarter century. This special A.I.D. evaluation study is the U.S. contribution of the MADIA effort, completed in 1988.

CONCLUSIONS

- o The study gauges effectiveness of A.I.D. programs according to their contribution to different types of "capital accumulation": "human capital" (knowledge, skills, and competence of individuals); "physical capital" (transport and construction); and "social capital" (economically useful knowledge and institution-building). It gives A.I.D. good marks on human and physical capital contributions, but not on the social. It finds that weakness in institution-building has limited the development impact of A.I.D.'s other contributions. Conclusions about specific subsectors include:
 - o A.I.D.'s most impressive institution-building effort in Africa is in the field of agricultural education. But in the areas of research, both A.I.D. and African governments have failed to take steps needed to develop effective national agricultural research systems. A.I.D. livestock projects have performed poorly. Integrated rural development projects are difficult to implement, there were few in A.I.D.'s portfolio, and A.I.D. is commended for having learned rather quickly, unlike other donors, that it does not have the institutional capacity to implement such projects effectively.
 - o A.I.D. Country Missions have significant impact on host government officials through informal contacts and friendship. A.I.D.'s mission system also gives field staff considerable flexibility in applying resources according to their firsthand knowledge of local needs.

However, the effectiveness of A.I.D.'s African missions has been constrained by many pressures. Foremost is pressure to obligate appropriated funds in a timely manner. Also constraining are pressures to select activities according to the current policy climate in A.I.D. Washington, to meet increasingly complex and time-consuming paperwork requirements, to accommodate numerous U.S. special interest groups, and to satisfy State Department political/strategic concerns.

- o A.I.D.'s programming system has done well in broadening the knowledge and numbers of people capable of doing agricultural and rural development work and in supporting training at institutions in the United States and Africa. It has developed a valuable evaluation system and approaches suited to African conditions. On the negative side, institutional changes in A.I.D. since the 1960s have made it more difficult to pursue flexible, risk-taking strategies necessary for success in Sub-Saharan Africa. A.I.D.'s organization has become far more complex, its required procedures more time-consuming, and its personnel system more bureaucratic.

RECOMMENDATIONS

Program Priorities - The study recommends that A.I.D. should put priority on activities which facilitate human, social and physical capital accumulation rather than on direct-impact projects. A.I.D. should avoid projects which assume U.S. technologies can be transferred directly to rural African populations, which assume existing institutional patterns can be easily altered, which depend on extensive logistical support, or which entail complex management. More support should be given to sustain development of institutions after their initial start-up assistance from A.I.D.

Operating Procedures - A.I.D. procedures should be simplified to reduce Mission's time and effort on new, complex projects. More emphasis should be placed on host country problems and on project implementation and impact. The study suggests Congress should give A.I.D. multi-year appropriations and more flexibility in programming these funds, while holding A.I.D. more accountable for the developmental impact of its programs. A.I.D. should pursue a less defensive, more flexible, risk-taking approach. It should welcome more participation in its deliberations by African and U.S. experts. Finally, because of the great diversity among and within the countries of Sub-Saharan Africa, the selection and sequencing of A.I.D. activities there must be country-specific.

ONGOING ISSUES

Reforming the System

The study calls for reforms to reduce procedural pressures on Missions, allowing them to focus more effectively on getting results in the field. Congress would vote multi-year appropriations, A.I.D. would simplify its regulations, the career ladder would reward developmental expertise more than bureaucratic adeptness. These are among the many issues also figuring in the Washington reviews currently underway in Congress and A.I.D. headquarters. Among the difficulties is how to free up the system while retaining enough "accountability" to suit both managers and critics.

Mission Freedom

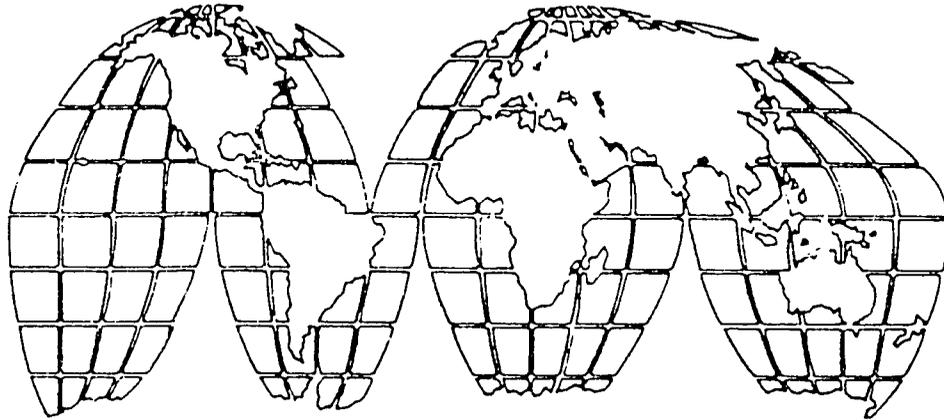
A related issue involves the broad latitude A.I.D. gives its Missions in carrying out their field responsibilities. The study praises this policy for allowing Mission staff to exercise their on-site expertise in meaningful ways, and criticizes pressures on Missions to conform to the current Washington political climate. But mission insensitivity to the Washington influence can cause political problems for A.I.D. in Washington.

Trickle-Down Vs. Bottoms-Up

The New Directions policies of the 1970s caused problems in Africa because of distinctive situations there. Nowadays U.S. emphasis in Sub-Saharan development efforts is on macroeconomic policy reform. The study suggests that A.I.D. needs to achieve a balance between the "top down" and "bottom up" approaches.

Copies of the complete report, A.I.D. Evaluation Special Study No. 54, An Assessment of A.I.D. Activities to Promote Agricultural and Rural Development in Sub-Saharan Africa, April 1988, (PN-AAX-204), may be obtained from the A.I.D. Document and Information Handling Facility, ATTN: User Services, 7222 47th Street, Suite 102, Chevy Chase, Maryland 20815. The Center for Development Information and Evaluation welcomes comments on the report: Bureau for Program and Policy Coordination, Center for Development Information and Evaluation, Agency for International Development, Washington, D.C. 20523.

Agricultural Policy Analysis and Planning: A Summary of Two Recent Analyses of A.I.D. - Supported Project Worldwide



U.S. Agency for International Development (AID) Washington, D.C. 20523

A.I.D.-sponsored agricultural policy analysis and planning projects in 1970-84 largely succeeded in their primary purpose: to improve the analytical capacity of staff in developing country governments. The projects were less successful in influencing policy and program changes, but the projects seldom had that as a major purpose.

These conclusions come from a summary of two studies on impacts of A.I.D. agricultural planning projects. One study covered 24 projects in Latin America and the other reviewed 37 projects in Africa, Asia and the Near East.

The study suggests that increasing the impact of such projects on agricultural policy reform will require:

- better diagnosis of major agricultural problems and policy constraints in the developing country, so projects can be more specifically focused on policy issues where reform is needed.
- greater attention to the needs of developing country decision-makers, whose insights and active support are key elements.
- targeting of the analysis and planning assistance at the developing government units which the decision-makers rely on for policy analysis, whether or not these units are within the ministry of agriculture.

SUMMARY OF DEVELOPMENT EXPERIENCE

Over the past 20 years, A.I.D. has funded a broad range of agricultural policy analysis and planning projects worldwide. Project activities have included development of agricultural data bases, creation of planning units within government institutions, training staff in policy analysis, and implementing policy and program changes.

Over the 1970-84 period, about \$464.6 million from all sources, including \$277.8 million from A.I.D., was allocated to 129 projects in 47 countries identified as agricultural policy analysis and planning activities. The two studies included in this summary covered 61 projects which A.I.D. had evaluated. The sample size was large enough to support general conclusions.

FINDINGS

The studies assessed the projects for four types of impact: (1) capacity-building, (2) inter-institutional coordination, (3) impact on decision-makers, and (4) policy and program changes. Most projects had capacity building and training of developing country personnel as major purposes. Few were designed specifically to achieve policy changes. The studies found that:

- of the 61 projects, 58 (95 percent) succeeded in building agricultural policy analysis and planning capacity in the host countries.
- thirty-nine (64 percent) of the projects achieved inter-institutional impact such as improved coordination between agricultural policy planners and their counterparts in other public agencies.
- twenty-four (39 percent) had effects on decision-makers, most commonly in the form of raising their demands for information and policy analysis.
- twenty (33 percent) contributed to changes in policies or programs. Examples included changes in commodity pricing, credit, marketing, land redistribution, commodity distribution, and investment.

The studies also found that projects in Asia and Latin America had greater policy/program and decision-maker impacts than those in Africa and the Near East. The Asia/Latin American countries were striving for program and policy improvements in agriculture. In the Near East, the projects focused exclusively on data gathering and analysis. Given Africa's limited manpower and institutional resources, the projects were more involved in basic institution and capacity building.

RECOMMENDATIONS

The studies include these recommendations for future agricultural policy analysis and planning projects:

- establish effective contact between analysts and decision-makers.
- concentrate on short-term, highly focused, problem-oriented studies.
- assign technical advisors who are open-minded, not dogmatic, and who will collaborate closely with their counterparts.
- do not load technical advisors with project administration tasks.
- keep analytical methods simple.
- target aid at host country units which have an effect on the decision-makers who formulate policy and programs, wherever the institutional location of those units may be.
- provide incentives to attract and retain qualified staff for the targetted unit.
- avoid designing projects with unrealistically high levels of host government support.
- keep agricultural policy and planning units separate from data collection functions.
- build means for checking accuracy and reliability into all data collection and processing efforts.
- before introducing computer-intensive activities, plan carefully for the necessary hardware, software, and in-country service support.

Creation of policy analysis and planning capacity does not in itself translate into program and policy reform. To increase project impact in this area, the studies recommend:

(1) better diagnosis of the host country's agricultural sector and of policies limiting its development, so the project design staffs can focus more specifically on policy issues that should be addressed; (2) greater attention to the needs and views of key decision-makers, who usually know better than A.I.D. staff or foreign advisers what policy changes are politically viable; and (3) better targeting of assistance to those government units that decision-makers rely on for policy analysis.

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ONGOING ISSUES

Host Country Collaboration

Project designers often have preconceptions about what the major elements of a project should be. They search for evidence to support the preconceptions, rather than viewing things as they are. Meetings between a project design team and an agriculture minister, for example, often focus on the team's ideas and the minister's reactions to them, rather than the minister's perception of his needs and the realities of existing policy analysis and planning capacity.

Gathering the elements for a good design is a complicated process. There is no sure-fire simple formula. Different projects will need different ingredients. Frequent contacts with appropriate developing country officials can be a key in successful design. But the project designers should use the contacts to identify what the host country decision-makers need and want, rather than what the planners and analysts themselves would like to do.

Implementing Recommendations

While many agricultural policy and planning assistance projects have been evaluated individually, the two studies covered in this summary are among A.I.D.'s first attempts for a broad assessment of their impact. The summary carries many specific recommendations based on 15 years experience in all regions of the developing world. The on-going task is to make use of the recommendations.

Some of the recommendations have been incorporated into a new group of A.I.D. projects designed since the studies were completed. They are being implemented in countries such as Ecuador, Peru, Niger, and Sri Lanka. Future project designers will benefit from monitoring the effectiveness of these projects in promoting policy and program reforms.

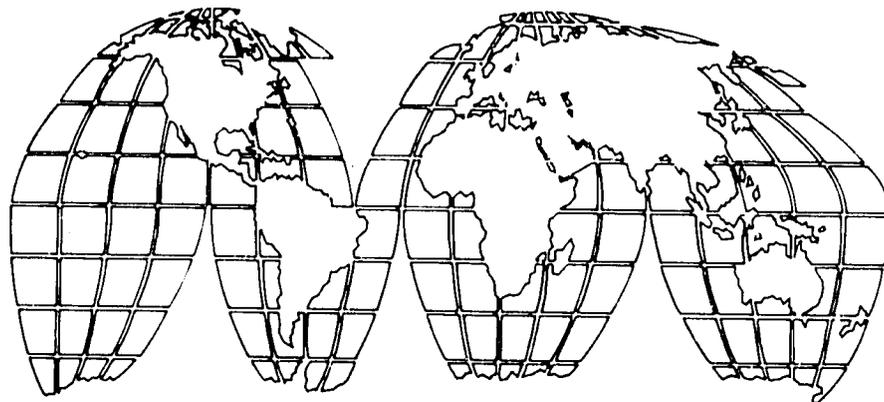
Copies of the complete report, A.I.D. Evaluation Special Study No. 55, Agricultural Policy Analysis and Planning: A Summary of Two Recent Analyses of A.I.D.-Supported Projects Worldwide, August 1988, (PN-AAX-205), may be obtained from the A.I.D. Document and Information Handling Facility, 7222 47th Street, Suite 102, Chevy Chase, Maryland 20815. The Center for Development Information and Evaluation welcomes comments on the report: Bureau for Program and Policy Coordination, Agency for International Development, Washington, DC 20523-1802.

A.I.D. DEVELOPMENT EXPERIENCE ABSTRACT

A.I.D. Program Evaluation Report No. 56

December 1984

i. Aid to Paraguay: Assistance to Credicoop's Agricultural Credit Union System



U.S. Agency for International Development (AID) Washington, D.C. 20523

A fourteen year A.I.D. program in Paraguay developed a nationwide agricultural credit union system to help small farmers. In 1973, A.I.D. established CREDICOOP as a central association to promote credit unions nationwide. Its goal was to increase small farmer income through delivery of agricultural services such as credit and selected farm inputs. Over the years, CREDICOOP has expanded to include additional services where conditions warranted it. This expansion has been beneficial to the small farmer, but may prove detrimental to the credit unions' long-term viability.

Despite many delinquent loans, poor harvests due to natural disasters and inadequate prices for crops, CREDICOOP has provided many useful agricultural services to its members and has enabled them to more effectively participate in Paraguay's overall agricultural development.

The project also indirectly benefited those who were not members by introducing competition into the credit marketplace, providing agricultural information, and breaking the monopoly of the patrons (local merchants who provide high cost farm credit, farm inputs and marketing assistance).

The number of credit unions and individual credit union members shows excellent growth. The first sixteen credit unions have grown to 70, and membership has doubled. All but 25% of the credit unions were fostered by CREDICOOP.

CREDICOOP has shown that a private non-profit institution can be a viable vehicle for bringing agricultural services to small farmers. With member institutions spread throughout the country, CREDICOOP claims 50% of Paraguay's total cooperative membership. It has become well-known nationally and is admired for its efforts, particularly as a provider of agricultural services in the interior. It has had a recognizable impact on local market practices benefiting small farmers.

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Conclusions And Lessons Learned:

- CREDICOOP has labored under the burden of being over-extended financially and offering services beyond its management capabilities. Thus, long-term institutional viability is still unclear.
- If an agricultural credit institution is to develop long-term sustainability, it must charge an interest rate that takes into account both its operating costs and the cost of competitors' money. In most cases, the appropriate competition reference is the local merchant, not a government agency. His interest rate is more likely to reflect the true risk of the loan than any rate established by public policy. CREDICOOP could charge a higher interest rate than it has and still not discourage small farmers.
- A.I.D.'s project designers and managers should bear in mind that the risks associated with developing a small farmer loan portfolio are enormous in the best of times. The vicissitudes of weather and market, in addition to clients who lack credit experience, do not encourage risk-taking. Any pressure to move money through the system at a faster than natural rate of speed is disruptive. A.I.D. should design projects of this type to be implemented at the borrower's natural rhythm, not at A.I.D.'s administrative convenience.
- The ability to lend without requiring mortgage collateral is an important strength of the credit union vehicle. By so doing risk of default rises considerably, but so too, does the ability to reach small farmer borrowers. Small farmers find it difficult to pledge a mortgage for several reasons. Some don't have a title, most fear the procedures and forms, and many are unwilling to gamble their means of livelihood (title to the farm) on the success of a single crop.
- Before national consolidation of the savings and loans system, CREDICOOP developed a range of agricultural services (production inputs, marketing, processing and crop diversification) for its fledgling rural coop affiliates. While the net impact on farm members may be positive, the institutional impact has proved negative for CREDICOOP and its affiliates. Concentration on the basic credit union service, the savings and loans function, is vital to self-sufficiency over time.
- The integration of farmer and non-farmer members in the same credit union can strengthen the institution by helping to level financial flows during the course of the agricultural year and by providing relatively sophisticated leadership. Because of the nature of their work,

farmers tend to ask for loans at the same time, just prior to planting. With all the loans drawn at once, the farmers can't withdraw much in excess of what they put in (which defeats the purpose of the union), and if the crops fail, many loans become delinquent at the same time. This makes it difficult to provide funds for the next crop cycle. Urban members have different borrowing patterns because they are borrowing for houses or businesses, things which are not seasonal. Thus, with an urban membership base, seasonal capital flows are more even. Furthermore, the well-educated urban professionals brought in are able to assist with leadership. CREDICOOP's most stable credit unions are the ones with a strong urban base.

- While it is difficult to estimate, many members seem to have experienced substantial growth in income and net worth during the past ten years. Many of those interviewed by the evaluation team were eager to point out the crucial role of CREDICOOP in the development of their farm enterprises. Many farmers have made conscious attempts to improve their living conditions. They have constructed better living structures, improved sanitation water facilities, and implemented more health conscious personal hygiene practices. Credit union membership turnover has been high however. The quality of life statistics may reflect only the position of those who have been most successful.
- Because the credit unions are cooperatives, they are closer to the community than the banks. They present a less formidable front to farmers who shy away from new things and are unfamiliar with red tape. While the neighborhood merchant is still more familiar and more available, and thus still has the edge over all the formal institutions, CREDICOOP has made it possible for small farmers to have better choices. The credit unions have made it increasingly difficult for merchants to exploit their farmer clients with high repayment rates or unfair assessments of the value of their produce. Also, because of experience gained using credit union services, small farmers are more willing to make the bridge to other formal credit sources.

CONTINUING PROBLEMS

High delinquency rate: In CREDICOOP's early years promoters were eager to stimulate growth. This desire, coupled with a great deal of available money, contributed to making credit policies too liberal for a time. Farmers were permitted to have loans in excess of ten times their share account balances. Few of these loans were secured by mortgages and most only by a co-signature. Many of the farmers borrowed money without a clear notion of how they would invest it. This would have been a high risk approach in the best of times. Given the

unevenness of Paraguay's weather, as well as vacillating farm crop prices, it proved disastrous to many early borrowers. Crop and market place failures resulted not only in short-term hunger, but also in unpaid loan obligations that carried on for years. With a major crop failure in 1978, defaults came in record numbers. Many credit unions found themselves without the funds to continue operating. At that point, A.I.D. provided stabilization funds to carry many otherwise healthy credit unions through a brief liquidity crisis. The next year's crop helped many resume loan amortization. Nevertheless, many farmers will be in debt for a very long time. Some try to pay back these loans and continue to borrow money. Others have backed out of the system entirely and ignore the debt they incurred. If the more cautious loan policies the credit unions now employ had been in use at the beginning of the project, the high delinquency rate might have been avoided.

Unsuccessful Marketing Efforts: In 1979, A.I.D. gave money to encourage production, processing, and marketing of selected fruits and vegetable crops. The struggling young network of agricultural credit unions was dealt an entirely new set of responsibilities as they transformed themselves to full service cooperatives. Management time became increasingly diverted from the original focus on the savings and loan function to CREDICOOP's new marketing role.

The output of the system is impressive, but its effectiveness has been only fair to poor. Attempts to affect the market have been disastrous. Year-round harvests were planned in order to keep up cash flow. Members were encouraged to borrow for the A.I.D. supported tomato growing program. Unfortunately, the production went so well, the bumper crop far outweighed the demand, and prices for tomatoes plunged. CREDICOOP also invested in a cotton gin which farmers have been slow to use. Partially as a result of this diversion into marketing, the credit unions have found it hard to attain self-sufficiency and have had to depend on external concessionary financing and the urban/rural mix of affiliates to remain viable. Offering a wide range of services before ensuring a secure financial base does not encourage long-term viability.

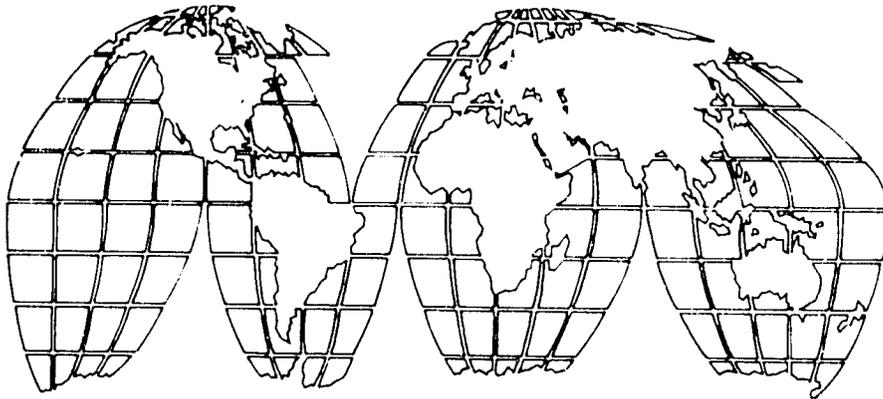
Copies of the complete report, A.I.D. Project Impact Evaluation No. 56, (December 1984), PN-AAL-041, U.S. Aid to Paraguay's Agricultural Credit Union System (CREDICOOP), by Richard Ray Solem, may be obtained from the Editor of ARDA, A.I.D. Document and Information Handling Facility, 7222 47th Street - Suite 100, Chevy Chase, Maryland 20815. The Center for Development Information and Evaluation welcomes comments on the report: Bureau for Program and Policy Coordination, Center for Development Information and Evaluation, Agency for International Development, Washington, D.C. 20523.

A.I.D. DEVELOPMENT EXPERIENCE ABSTRACT

A.I.D. ^{Impact} Program Evaluation Report No. 56

December 1984

Aid to Paraguay: Assistance to Credicoop's Agricultural Credit Union System



U.S. Agency for International Development (AID) Washington, D.C. 20523

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Despite many delinquent loans, poor harvests due to natural disasters and inadequate prices for crops, CREDICOOP has provided many useful agricultural services to its members and has enabled them to more effectively participate in Paraguay's overall agricultural development.

The project also indirectly benefited those who were not members by introducing competition into the credit marketplace, providing agricultural information, and breaking the monopoly of the patrons (local merchants who provide high cost farm credit, farm inputs and marketing assistance).

The number of credit unions and individual credit union members shows excellent growth. The first sixteen credit unions have grown to 70, and membership has doubled. All but 25% of the credit unions were fostered by CREDICOOP.

CREDICOOP has shown that a private non-profit institution can be a viable vehicle for bringing agricultural services to small farmers. With member institutions spread throughout the country, CREDICOOP claims 50% of Paraguay's total cooperative membership. It has become well-known nationally and is admired for its efforts, particularly as a provider of agricultural services in the interior. It has had a recognizable impact on local market practices benefiting small farmers.

Conclusions And Lessons Learned:

- CREDICOOP has labored under the burden of being over-extended financially and offering services beyond its management capabilities. Thus, long-term institutional viability is still unclear.
- If an agricultural credit institution is to develop long-term sustainability, it must charge an interest rate that takes into account both its operating costs and the cost of competitors' money. In most cases, the appropriate competition reference is the local merchant, not a government agency. His interest rate is more likely to reflect the true risk of the loan than any rate established by public policy. CREDICOOP could charge a higher interest rate than it has and still not discourage small farmers.
- A.I.D.'s project designers and managers should bear in mind that the risks associated with developing a small farmer loan portfolio are enormous in the best of times. The vicissitudes of weather and market, in addition to clients who lack credit experience, do not encourage risk-taking. Any pressure to move money through the system at a faster than natural rate of speed is disruptive. A.I.D. should design projects of this type to be implemented at the borrower's natural rhythm, not at A.I.D.'s administrative convenience.
- The ability to lend without requiring mortgage collateral is an important strength of the credit union vehicle. By so doing risk of default rises considerably, but so too, does the ability to reach small farmer borrowers. Small farmers find it difficult to pledge a mortgage for several reasons. Some don't have a title, most fear the procedures and forms, and many are unwilling to gamble their means of livelihood (title to the farm) on the success of a single crop.
- Before national consolidation of the savings and loans system, CREDICOOP developed a range of agricultural services (production inputs, marketing, processing and crop diversification) for its fledgling rural coop affiliates. While the net impact on farm members may be positive, the institutional impact has proved negative for CREDICOOP and its affiliates. Concentration on the basic credit union service, the savings and loans function, is vital to self-sufficiency over time.
- The integration of farmer and non-farmer members in the same credit union can strengthen the institution by helping to level financial flows during the course of the agricultural year and by providing relatively sophisticated leadership. Because of the nature of their work,

farmers tend to ask for loans at the same time, just prior to planting. With all the loans drawn at once, the farmers can't withdraw much in excess of what they put in (which defeats the purpose of the union), and if the crops fail, many loans become delinquent at the same time. This makes it difficult to provide funds for the next crop cycle. Urban members have different borrowing patterns because they are borrowing for houses or businesses, things which are not seasonal. Thus, with an urban membership base, seasonal capital flows are more even. Furthermore, the well-educated urban professionals brought in are able to assist with leadership. CREDICOOP's most stable credit unions are the ones with a strong urban base.

- While it is difficult to estimate, many members seem to have experienced substantial growth in income and net worth during the past ten years. Many of those interviewed by the evaluation team were eager to point out the crucial role of CREDICOOP in the development of their farm enterprises. Many farmers have made conscious attempts to improve their living conditions. They have constructed better living structures, improved sanitation water facilities, and implemented more health conscious personal hygiene practices. Credit union membership turnover has been high however. The quality of life statistics may reflect only the position of those who have been most successful.
- Because the credit unions are cooperatives, they are closer to the community than the banks. They present a less formidable front to farmers who shy away from new things and are unfamiliar with red tape. While the neighborhood merchant is still more familiar and more available, and thus still has the edge over all the formal institutions, CREDICOOP has made it possible for small farmers to have better choices. The credit unions have made it increasingly difficult for merchants to exploit their farmer clients with high repayment rates or unfair assessments of the value of their produce. Also, because of experience gained using credit union services, small farmers are more willing to make the bridge to other formal credit sources.

CONTINUING PROBLEMS

High delinquency rate: In CREDICOOP's early years promoters were eager to stimulate growth. This desire, coupled with a great deal of available money, contributed to making credit policies too liberal for a time. Farmers were permitted to have loans in excess of ten times their share account balances. Few of these loans were secured by mortgages and most only by a co-signature. Many of the farmers borrowed money without a clear notion of how they would invest it. This would have been a high risk approach in the best of times. Given the

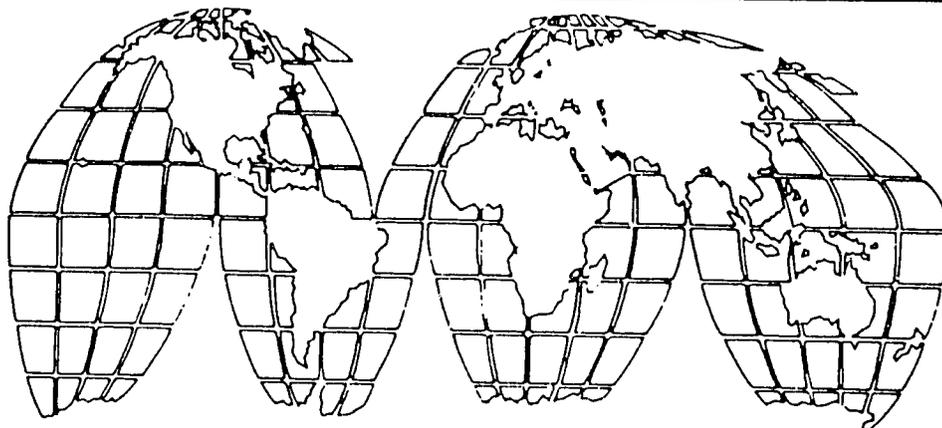
unevenness of Paraguay's weather, as well as vacillating farm crop prices, it proved disastrous to many early borrowers. Crop and market place failures resulted not only in short-term hunger, but also in unpaid loan obligations that carried on for years. With a major crop failure in 1978, defaults came in record numbers. Many credit unions found themselves without the funds to continue operating. At that point, A.I.D. provided stabilization funds to carry many otherwise healthy credit unions through a brief liquidity crisis. The next year's crop helped many resume loan amortization. Nevertheless, many farmers will be in debt for a very long time. Some try to pay back these loans and continue to borrow money. Others have backed out of the system entirely and ignore the debt they incurred. If the more cautious loan policies the credit unions now employ had been in use at the beginning of the project, the high delinquency rate might have been avoided.

Unsuccessful Marketing Efforts: In 1979, A.I.D. gave money to encourage production, processing, and marketing of selected fruits and vegetable crops. The struggling young network of agricultural credit unions was dealt an entirely new set of responsibilities as they transformed themselves to full service cooperatives. Management time became increasingly diverted from the original focus on the savings and loan function to CREDICOOP's new marketing role.

The output of the system is impressive, but its effectiveness has been only fair to poor. Attempts to affect the market have been disastrous. Year-round harvests were planned in order to keep up cash flow. Members were encouraged to borrow for the A.I.D. supported tomato growing program. Unfortunately, the production went so well, the bumper crop far outweighed the demand, and prices for tomatoes plunged. CREDICOOP also invested in a cotton gin which farmers have been slow to use. Partially as a result of this diversion into marketing, the credit unions have found it hard to attain self-sufficiency and have had to depend on external concessionary financing and the urban/rural mix of affiliates to remain viable. Offering a wide range of services before ensuring a secure financial base does not encourage long-term viability.

Copies of the complete report, A.I.D. Project Impact Evaluation No. 56, (December 1984), PN-AAL-041, U.S. Aid to Paraguay's Agricultural Credit Union System (CREDICOOP), by Richard Ray Solem, may be obtained from the Editor of ARDA, A.I.D. Document and Information Handling Facility, 7222 47th Street - Suite 100, Chevy Chase, Maryland 20815. The Center for Development Information and Evaluation welcomes comments on the report: Bureau for Program and Policy Coordination, Center for Development Information and Evaluation, Agency for International Development, Washington, D.C. 20523.

Getting the Message: The Communication for Young People Project



U.S. Agency for International Development (AID) Washington, D.C. 20523

The Communication for Young People project in Latin America was sponsored by the Johns Hopkins University/Population Communication Services with financial and technical support from the U.S. Agency for International Development (A.I.D.). This project must be considered a successful endeavor by both commercial and communication standards. It demonstrated that entertainment programs with social messages can reach a large audience and foster positive attitudes and perhaps even long-term behavioral changes.

The project was a mass media campaign developed around two songs. The songs, sung by two popular young vocalists, Tatiana and Johnny, promoted a message of sexual responsibility for young adults and reached the top of the popularity charts in every country in which they were released. The record company that produces Tatiana's records reported that the album containing the songs became one of the company's all time best sellers.

Both qualitative and quantitative research demonstrated that the use of popular music and the messages conveyed by the songs were appropriate for the intended target audience. The primary message promoted by the project was the need for sexual responsibility, which young adults correctly perceived as a need to reflect on whether to engage in sexual activity. The secondary message, which young adults also understood, urged teenagers to postpone sex until they were more mature.

What made this project a success was its commercial viability. The target audience of young adults emphatically endorsed this entertainment approach to social development communication through the purchase of Tatiana's record. Because the message of the two songs was conveyed in an attractive, modern format by appealing, credible role models and had immediate relevance to the audience's lives, it reached and was remembered by millions of young people throughout Latin America.

SUMMARY OF DEVELOPMENT EXPERIENCE

The Johns Hopkins University/Population Services project sponsored a mass media campaign in 11 Spanish-speaking countries to promote sexual responsibility among young people. In 1985 the project contracted with Fuentes y Fomento Intercontinentales, a Mexican marketing and production company, to coordinate the campaign, known as the Communication for Young People project. The project was formally launched in January 1986 and ended in December 1986.

The challenge for developing this project was to use the techniques of global advertising to reach a large regional audience with a message on sexual responsibility and family planning. Early in the development stage of this project, planners decided to make the products as commercially viable as possible. Thus, professional composers and singers were essential to the project.

In January 1986, the first song, "Cuando Estemos Juntos" (When We Are Together), was launched with a major press conference in Mexico City and it quickly soared to the top of the charts. The second song, "Detente" (Wait, or Stop), was officially launched in August and was also a top-10 hit. The commercial success prompted a closer look at the social impact of this project. In early 1987, it was decided that the Institute of Communication Research would use both qualitative and quantitative research methodologies to examine closely the social impact of the project in Mexico. Specifically, the Institute would (1) conduct a survey of the target audience, (2) hold focus group discussions with different segments of the target audience, (3) analyze the content of a random sample of letters, (4) conduct interviews with media representatives, and (5) analyze focus group discussions for a conceptual mapping of the target audience and the project objectives.

FINDINGS

- Survey results showed that (1) the messages of the two songs were correctly identified, and (2) that recall of the songs was related to attitudes and behavior of teenagers relevant to the responsible-sex theme of the campaign. To determine the social impact of the Communication for Young People project in conveying the messages of the campaign, a sample survey was conducted of preteens and teenagers between 10 and 19 years old. Respondents were asked to recall, unaided, their favorite popular songs from 1987 and then from 1986; then they were asked if they remembered any songs from a list that included the two project songs. The two singers were very popular among both male and female teenagers. In general, the survey results confirmed the positive response among Mexican teenagers to the two songs and the overall success of the campaign. Thus, the popularity of the songs was related to the messages portrayed by them.

- Overall, the female singer in particular was evaluated positively, especially by females. Focus group discussions were conducted with six groups of 10 teenagers each. The focus discussions were designed to complement the sample survey by providing a more intensive, less structured response to the songs than is possible in a survey. The participants believed that the songs were an important contrast to the usual dose of rock lyrics and could thus be effective because they make people think about sexual responsibility.
- The main behavioral impact of the campaign was to encourage teenagers to think responsibly about sex at a young age. From among thousands of letters received during the campaign, a random sample of 1,000 was selected for content analysis. A proportionately greater number of women wrote letters (78%) than did men (22%). Ninety-three percent of the letters indicated that the message of encouraging responsible sex was understood. Four percent of the letters suggested that the impact was to encourage teenagers to talk with and give advice to others on sexual relations.
- The general consensus among media representatives was that campaigns of this type are good because they carry a useful social message. Personal interviews were conducted with 26 representatives of the music/media industry to obtain their reactions to the campaign. The media executives believed that the message to teenagers and young people was to postpone sexual relations until teenagers are emotionally mature. All of the media representatives realized that they have a social, as well as a commercial, responsibility.

LESSONS LEARNED

- Choose the most appropriate medium to reach the intended audience; for young people, this would be popular music. In addition, professionals experienced in the chosen medium must be enlisted to ensure the best human and technological resources available.
- Use role models with whom the audience can readily identify. Use concepts that are known to be the most effective for bringing about the desired social change for that audience.
- Conduct a baseline survey with the intended audience, as well as a survey after the campaign, in order to assess how much change may have occurred as a result of the campaign. For campaigns in which the impact is expected to be cumulative over time, collect data from the intended audience at regular intervals (if not continuously) in order to conduct a time-series analysis of the expected change.

ONGOING ISSUES

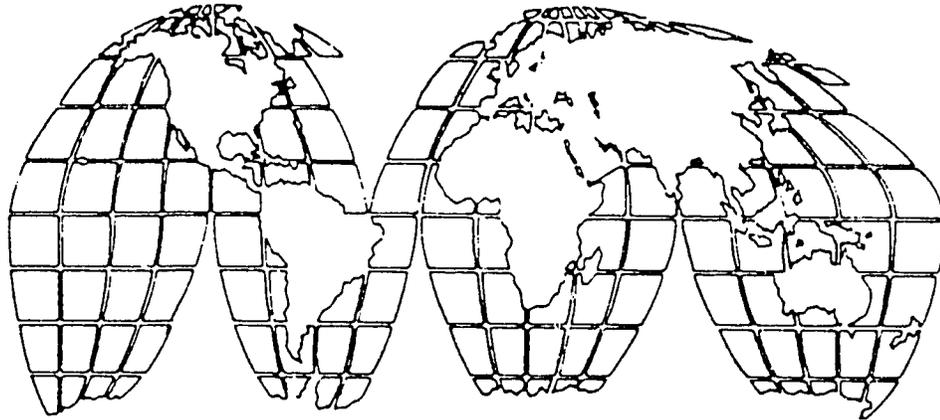
Non-Commercially Viable Social Messages

This project demonstrates that products with a strong social message can be commercially successful. The media have social responsibilities, but their primary concern is the "bottom line," i.e., their company's profit or loss. The media representatives interviewed stated that commercial viability was the principal reason they promoted this campaign more than other social campaigns. It remains unclear, however, how successfully other equally important social messages can be promoted when there is not a profit incentive on the part of participating business representatives.

Other Types of Social Messages

Can broadcast media and popular music be used successfully in other types of development programs? Male-female relationships and romance were already the most common themes for commercial songs, so the emphasis on "sexual responsibility" was not too unusual even if it did contradict the pro-sex trend. For the same reasons, popular songs could probably be used effectively in campaigns concerned with other sexually related problems, such as acquired immune deficiency syndrome (AIDS). But what about such topics as nutrition, breast-feeding, or new varieties of seed and fertilizer? At first glance, some topics appear completely inappropriate for popular songs. The approach is not necessarily limited, however, to teenage music and popular singers. Perhaps there is a place in popular music for a lullaby that can emphasize the importance of breast-feeding or having well-nourished babies. Promotion of other themes through music may not be as feasible, but popular music could certainly be considered for use in background themes for development programs in general or in jingles to be associated with specific development technologies.

Copies of the complete report, A.I.D. Evaluation Special Study No. 56, Getting the Message: The Communication for Young People Project, October 1988, (PN-AAX-208) by Johns Hopkins University/Population Communication Services, may be obtained from the A.I.D. Document and Information Handling Facility, ATTN: User Facility, 7222 47th Street, Suite 102, Chevy Chase, Maryland 20815. The Center for Development Information and Evaluation welcomes comments on the report: Bureau for Program and Policy Coordination, Center for Development Information and Evaluation, Agency for International Development, Washington, D.C. 20523.

Sustainability of U.S. Supported Health Programs in Honduras

U.S. Agency for International Development (AID) Washington, D.C. 20523

Why are the benefits of some development projects sustained while others are not? How can project design and implementation efforts improve the likelihood that project benefits will be sustained? How should sustainability be defined and measured? To examine these questions, A.I.D.'s Center for Development Information and Evaluation developed a methodology for examining sustainability and conducted a retrospective review of U.S.-supported health projects in Honduras. Successfully sustained projects were defined as those in which most of the immediate project outputs and outcomes continued for up to five years after U.S. funding ceased.

Health projects in Honduras were more likely to be sustained if: (1) their objectives were high and broadly-shared priorities of the Honduran government; (2) their design had been negotiated with the Honduran government and was not perceived as imposed; (3) their organizational structures were integrated into the Ministry administration; (4) their efforts were coordinated with other donors to establish a sequence of support and avoid duplication of effort; (5) their activities were perceived as effective during project implementation.

Financing and technical assistance characteristics, training provided and community participation appeared to be unrelated to the sustainability of health projects in Honduras.

Although these findings must be viewed as tentative because they relate to only a limited number of cases in one country, they can serve as hypotheses to be tested in future studies.

SUMMARY

To assess health project sustainability, an evaluation team conducted a retrospective historical field review of U.S.-supported health projects in Honduras since the 1940s.

The team identified nine characteristics that were hypothesized to have influenced the ability of the Honduran government to sustain programs after A.I.D. assistance terminated. Sustainability was defined in terms of immediate outputs--those that were put into place during the life of the project and began to provide immediate benefits to the population--and replicative outputs--those designed to replicate the immediate outputs. For example, the auxiliary nurse who is trained by a project is an immediate output; the nursing school that trains new auxiliary nurses after the project ends is a replicative output.

The team examined project reports and evaluations and interviewed Honduran and donor health officials, both current and past. Eighteen A.I.D. projects provided data for case studies of six types of health project support: malaria eradication; water and sanitation systems; family planning; nutrition improvement; Rural Penetration programs and the current primary health care activities of the multipurpose Health Sector I project. All projects examined had some elements that were sustained and others that were not. In half of the case studies, most immediate outputs were sustained with national government funds after U.S. funding terminated. Half of the cases also sustained replicative outputs, but in only one case with national funding.

Of the nine characteristics examined, five were associated with sustained outputs and four were not. Findings are outlined below. Since the analysis is based on evidence from only one country, Honduras, findings should be viewed as hypotheses to be tested in other countries, and not as definitive conclusions.

FACTORS RELATED TO SUSTAINABILITY IN HONDURAS

- Project outputs and outcomes were more likely to be sustained when the national government was committed to project goals, but government commitment did not guarantee sustainability.

Case studies of rural water projects, the Rural Penetration program and Health Sector I showed that strong commitment from the government of Honduras was associated with sustainability. Conversely, the family planning and nutrition projects demonstrated that projects are unlikely to be sustained if the government is not committed to project goals. Malaria projects are an exception, government commitment was high, but malaria projects could not be sustained without continuing foreign funds.

- Projects were more likely to be sustained when A.l.D. negotiated goals and activities with the Honduran Government. The Rural Penetration effort, which supported national programs and plans, was sustained, but the family planning project, imposed by A.l.D. in the 1960s and unsupported by the Ministry, was not sustained. Some mutually-defined programs could only be sustained by further donor financing.
- Projects were more likely to be sustained when their organizational structures were integrated into the host government administration and used an established authority structure. For example, under the integrated Rural Penetration program the hand pump and latrine projects and the training of auxiliary nurses were successfully sustained.
- Projects were more likely to be sustained if their activities were coordinated with other donors to establish a division of labor and a sequence of support and to avoid duplication.
- Projects that were perceived as effective during implementation were more likely to be sustained than were projects that were not perceived as providing anticipated outputs and outcomes. Malaria projects were an exception. Malaria projects were effective at high levels of foreign funding, but collapsed once the funding ceased.

OTHER FACTORS

- Experience in Honduras showed no clear relationship between patterns of project financing and project sustainability. Among projects that were sustained and among those not sustained, wide variation existed in the proportion of financing and degree of cost recovery provided by Honduras. Similarly, the willingness of the Ministry to absorb the salaries of project personnel did not ensure sustainability.
- No clear relationship existed between technical assistance characteristics (length of time, size and coherence of team, degree of phasing out) and project sustainability.
- The type and extent of training provided was not related to project sustainability.
- Community demand for programs to be established and maintained was not related to health programs sustainability in Honduras.

ONGOING ISSUES

High Levels of Donor Support

Honduras is currently receiving very high levels of U.S. support, reflecting the current geo-political priority of Honduras. Of particular concern is the use of Economic Support Funds from U.S.A.I.D. to fund counterpart responsibilities of the Honduran government. If U.S. priorities change and funding is reduced, Honduras probably could not maintain its current level of public health expenditures.

Methods of Studying Sustainability

The methodology of this study provides a sound basis for future studies of sustainability. By using the case study method and analyzing data available for a long historical period, assessments of what worked in one country's context can be made. The findings of this study are hypotheses that can be examined in future comparative studies of other nations.

Organizational Structure and Sustainability

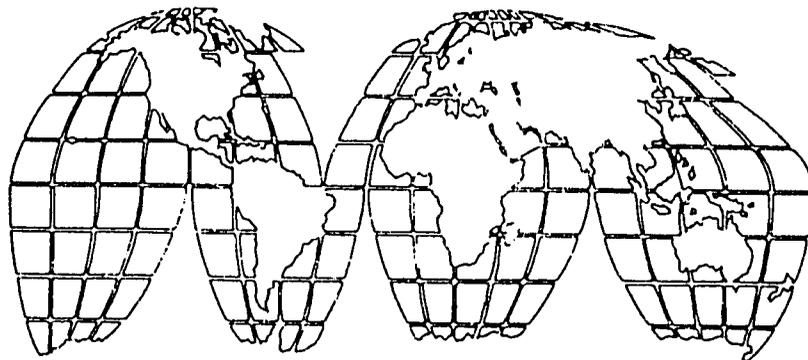
Issues of organizational structure and sustainability deserve further study. Although this study found that projects with organizational structures that were integrated into the host government were more likely to be sustained, such projects appeared to become less effective over time. Also, findings varied depending on the extent of integration sought. For example, a multi-sector nutrition planning program that attempted to integrate activities into several different Ministries was never able to properly coordinate the program. Consequently, it could not be sustained.

Projects with vertical organizations--relatively autonomous hierarchies--generally functioned quite efficiently, but were sustained only with foreign support. This study was not able to assess the matrix organizational structure which combines a vertical program focus on specific problem areas with an integrative management component; however, this structure appeared more likely to be sustained.

Copies of the complete report, A.I.D. Evaluation Special Study No. 58, The Sustainability of U.S.-Supported Health, Population, and Nutrition Programs in Honduras: 1942-1986, December 1988, (PN-AAX-211), may be obtained from the editor of ARDA, A.I.D. Document and Information Handling Facility, 7222 47th Street, Suit 100, Chevy Chase, Maryland 20815. The Center for Development Information and Evaluation welcomes comments on the report: Bureau for Program and Policy Coordination, Agency for International Development, Washington, D.C. 20523-1802.

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Agroforestry Projects for Small Farmers: A Project Manager's Reference



U.S. Agency for International Development (AID) Washington, D.C. 20523

Broadly defined, agroforestry is a land-use system in which trees are grown in conjunction with the production of annual crops or livestock. The trees are cultivated primarily for agricultural uses, for example, to protect or enrich topsoil, or to provide fodder for livestock.

This report summarizes the major issues identified in the general literature on agroforestry and those being addressed in ongoing A.I.D. projects. Between 1977 and 1987, agroforestry activities funded by A.I.D. included 43 bilateral assistance projects and community development projects. These were funded under the PL 480 Food Aid Program or under co-financing arrangements with private voluntary organizations.

The projects' common objectives have been to encourage farmers to grow trees using species and techniques that can protect and sustain the productivity of topsoils, and increase crop or livestock production. In most cases, the projects also provide fuelwood and other products to augment home consumption and cash income.

Various tree-growing techniques have been used, ranging from cultivating trees for windbreaks or contour hedgerows, to tree-cum-crop intercropping systems. Such tree-growing techniques are especially relevant to agricultural and rural development programs directed to farming communities that are cultivating land generally unsuitable for sustained intensive monoculture and subject to soil erosion and environmental degradation.

SUMMARY OF DEVELOPMENT EXPERIENCE

This paper provides a summary of current thinking among agroforestry researchers and development practitioners concerning the potential of agroforestry in resolving land use problems in developing countries. It raises major issues pertinent to designing agroforestry projects. The report should prove useful to non-specialist project managers requiring background information to guide their work in identifying and managing specialists who design, implement, or evaluate an agroforestry project or components.

Since the early 1950s, A.I.D. has sponsored many small-scale tree-planting projects under PL 480 in response to rapid deforestation in developing countries. Support of agroforestry began in the 1970s, ranging from research to pilot nursery development and extension programs.

The rationale for such support has been based on the relevance of agroforestry to agriculture and rural development programs in three important ways: (1) assistance to farmers to increase the contribution of the tree-crop component and the overall productivity of their farms, (2) protection or rehabilitation of cultivated or newly cleared lands, and (3) contribution to rural economies through increased production of fuelwood and other forestry products.

FINDINGS

- Research experiments and small pilot projects have so far indicated the potential benefits of agroforestry. Studies have shown that topsoils have been enriched and stabilized with added organic matter, water retention of soils has been improved, livestock are sheltered with shade from trees, the leaves and pods have provided fodder for the animals, and the trees serve as windbreaks and can be sold as fuelwood.
- There is a consensus among those currently involved in agroforestry research or pilot projects that more applied research is needed, and priority should be given to developing site-specific technologies that take into account climatic constraints and actual farming conditions of the target population.
- There is limited practical knowledge and experience from which to draw general guidance on designing projects to promote widespread use of agroforestry technologies in developing countries. This is especially true in the case of addressing policy, economic, and management issues that affect agroforestry, which are as important in determining farmer response and project sustainability as the potential performance of a new technology.

LESSONS LEARNED

- Tree species and agroforestry techniques selected should be appropriate for local agroclimatic, economic, and socio-cultural conditions. The selection process for types of trees must include several contextual criteria such as (1) adaptability to agroclimatic conditions; (2) economic criteria, such as decisions to grow trees as subsistence or cash crops; and (3) sociocultural factors, including farmers' preferences, customary beliefs, and practices that could encourage or discourage them from growing trees or certain tree species.
- Government policy and land-tenure constraints should be evaluated. A desirable prerequisite to a large scale or national effort to promote agroforestry is a commitment on the part of the host country government to modify forestry legislation and development policies that inadvertently contribute to environmental problems addressed by agroforestry projects. In addition, there are constraints associated with tenancy in developing countries that must be addressed to encourage landlords and tenants to work out sharecropping arrangements conducive to productive agroforestry activity.
- Institutional issues such as the capacity of existing line ministries, the role of private voluntary organizations, and the role of commercial firms and cooperatives should be addressed. In addition, adequate training and extension services must be provided by the project designers, as well as the implementing agencies.
- Effective extension programs are built on a close rapport with, and among, farmers. Such rapport is often achieved through on-site training of extension staff; encouraging communication between researchers, extension staff and farmers; farmer-to-farmer visits; and where feasible, deployment of farmer-trainers to train other farmers.
- A key factor for successful agroforestry projects is having adequate information provided for monitoring and evaluation purposes. Weaknesses in the information systems of past A.I.D. forestry projects underscore the importance of providing adequate funding to support data collection activities for proposed agroforestry projects. In addition, research should be conducted to assess the economic and environmental impact of previously implemented projects.
- Multi-component, large-scale agroforestry projects may require many years to implement, necessitating a phased approach to project design. Broader and more programmatic approaches might be necessary to improve and sustain land-use in an area or region as a whole.

ONGOING ISSUES

Use of Incentives

The incentives that have been used in previous A.I.D. projects to encourage farmer participation have produced mixed results and the full impact of various incentives is not known. Anecdotal evidence from projects, which have relied solely on such incentives to encourage farmer participation, indicates that, in many cases, the projects might encourage farmers to plant trees but do not necessarily motivate them to nurture or use the trees as intended. In addressing this issue, project designers should also be aware that well-intentioned incentives often have unintended effects, e.g., on the economic viability of a project, on equity considerations, and on trade-offs between the economic and the environmental goals of a project. The effects, therefore, of incentives to be provided under a project should be carefully assessed from the start and monitored during project implementation.

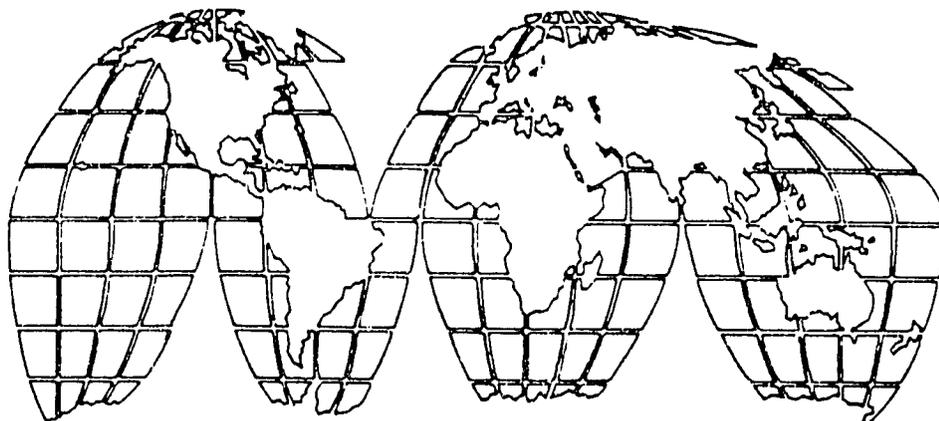
Cost-Benefit Analysis

Cost-benefit analyses based on price data are standard techniques used by economists to determine the value of wood and other commercially valuable tree products generated by projects. This technique is inadequate for assessing non-monetary benefits or other benefits that cannot be easily quantified, e.g., contribution to crop and livestock production and to household subsistence, and effects on soils and the environment. The economic significance, however, cannot be disregarded since the very justification of support for many agroforestry projects is argued in terms of its relevance to subsistence farmers and environmental conservation.

Programmatic Approaches

A.I.D.'s experience so far has emphasized introducing, at the project level, technical solutions to combat soil erosion and environmental problems. It should be noted that broader, programmatic approaches might be necessary to improve land use over the long run, and to sustain gains made in an area or a region as a whole. Such approaches require a long-term commitment to resolve issues that cannot be adequately dealt with in the context of a single, 5-year project, such as land tenure, government policies and population pressure on the natural resource base in a region.

Copies of the complete report, A.I.D. Evaluation Special Study No. 59, Agroforestry Projects for Small Farmers: A Project Manager's Reference, January 1989, (PN-AAX-212), may be obtained from the Document and Information Handling Facility, 7222 47th Street, Suite 102, Chevy Chase, Maryland 20815. The Center for Development Information and Evaluation welcomes comments on the report: Bureau of Program and Policy Coordination, Center for Development Information and Evaluation, Agency for International Development, Washington, D.C. 20523.

Impact Review of the Onchocerciasis Control Program

U.S. Agency for International Development (AID) Washington, D.C. 20523

The Onchocerciasis Control Program (OCP) has reduced the incidence of river blindness in large areas of West Africa. This has been accomplished during a 10-year period at a cost of approximately one dollar per person per year. Onchocerciasis is a parasitic disease that is transmitted to humans by the bite of infected female blackflies. OCP has checked the disease through aerial spraying of rivers to destroy the larvae of the blackfly.

OCP is a multidonor, 20-year, single-disease control program. On completion of the first two phases (1974-1985), the program had demonstrated a measurable impact on human health by decreasing the incidence of blindness, disability, and debility. An estimated 27,000 cases of blindness have been prevented in Burkina Faso alone over the past decade.

By opening up 15 million hectares of tillable land in the former onchocerciasis-endemic areas, OCP has created significant opportunities for increased agricultural productivity and economic growth. Additional investment is required to exploit these new areas.

The OCP strategy is one of control, not eradication. To prevent resurgence of the blackfly population, national and community-level capacities to maintain disease control must be developed. OCP Phase III will attempt to provide participating countries with a low-cost technology to enable them to maintain onchocerciasis control.

SUMMARY OF EXPERIENCE

The Onchocerciasis Control Program (OCP) was initiated in 1974 at the request of seven affected West African countries: Ghana, Mali, Burkina Faso, Niger, Togo, Benin, and Ivory Coast. OCP is a 20-year campaign to check the disease through a strategy of aerial spraying to destroy the larvae of the blackfly, regular monitoring of affected areas to guide and evaluate control activities, and research and training directed to improving control activities.

Onchocerciasis or river blindness is a parasitic disease caused by a filarial worm which is transmitted to humans by the bite of the female blackfly. Of the 10 million persons in the original OCP area, one million were estimated to be infected by onchocerciasis, 100,000 with serious eye lesions or blindness.

Four multilateral agencies sponsor OCP: the World Bank, World Health Organization, Food and Agriculture Organization, and United Nations Development Program. Twenty-two donors provide financing. AID has been the largest single contributor, having provided 13.7 percent of the \$168 million budget for the first two phases (1974-1985). During its third phase (1986-1991), OCP will extend its efforts into four additional countries.

An AID team visited the seven OCP countries in August 1985 to assess progress with onchocerciasis control. A number of important findings emerged from this review.

- o By attacking the blackfly vector with larvicides, OCP has interrupted the transmission of onchocerciasis over large areas of West Africa. Before control began in 1974, only 9 percent of evaluated sites had annual transmission rates scientifically defined as low. By 1984, 86 percent of evaluated sites had low transmission rates. Approximately three million children born since the beginning of the program are free from the effects of onchocerciasis.
- o OCP has had a striking impact on human health and well-being in West Africa, by reducing the incidence of blindness, disability, and debility caused by onchocerciasis. An epidemiological evaluation of 142 villages showed dramatic decreases in the status of infection in each village.
- o OCP performance was enhanced by its multilateral framework and its reliance on recognized international structures for program implementation. Management by the World Health Organization gave OCP access to worldwide talent and an excellent system of staff benefits. The World Bank provided financial management.

Respect for the multinational configuration of OCP, and donor cohesiveness, encouraged participating governments to shield OCP from any adverse effects arising from policy changes or political pressures. Also, OCP was able to seek guidance from its sponsors, without becoming weighted down by bureaucratic restrictions or donor political considerations.

- o The long-term financial commitment of donors at the outset contributed significantly to OCP's success. Nine nations signed the 1974 agreement promising collective, long-term support. This commitment was essential to sustaining individual donor country support, especially during the early years when donor budgets were threatened and success was not assured. Working independently, individuals, communities, and nations could not have controlled the disease. A broad assault with external support was needed.
- o The OCP experience reveals the need for patience and flexibility during the evolving phase of complex disease-control programs. More than a decade of experimentation with various approaches was required before an appropriate intervention strategy could be designed. Several more years were needed to gain expert approval, to obtain governments' concurrence, and to line up donor financing. The basic strategy that ultimately emerged has remained essentially unchanged throughout the program.
- o By removing the threat of onchocerciasis, OCP opened new lands for settlement and created opportunities for increased production. These benefits are very difficult to calculate precisely. Opportunities to realize these potentials require initiatives outside the OCP organization.
- o OCP improved efficiency by contracting out highly specialized project components, such as aircraft operations, larvicide and therapeutic drug development and environmental monitoring.
- o OCP's formal training program is expected to have a tangible impact on indigenous health care systems. By mid-1984, OCP had trained or retrained 169 employees.
- o Vigorous, sustained research efforts were crucial for the ultimate success of OCP. In its early stages, OCP anticipated the need for applied research and included adequate financial allocations for research in vector control. Many technical problems were resolved, but research is still required to gain insights into the pathological process and to develop more rapid methods of diagnosing and treating the disease.

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ONGOING ISSUES

Maintaining Onchocerciasis Control

OCP's excellent research efforts have produced four classes of chemicals that can be used as insecticides. Since insects can develop resistance to pesticides, both research and monitoring activities should continue.

OCP should continue to search for ways that national governments can control onchocerciasis. Although OCP has perfected a high-technology methodology for control, a lower cost technology is needed. In this quest, OCP should continue collaboration with pharmaceutical companies.

To build local capacities, training must supplement technology development. The challenge ahead is to achieve full integration of the vertically-organized OCP within the national health delivery system of each country--at the national, regional and community levels.

Significant improvements in national health services are needed to sustain and expand the health benefits brought about through the program. Phase III plans include the organization of epidemiological evaluation exercises with national counterparts to broaden the one-disease approach into a multidisease detection effort.

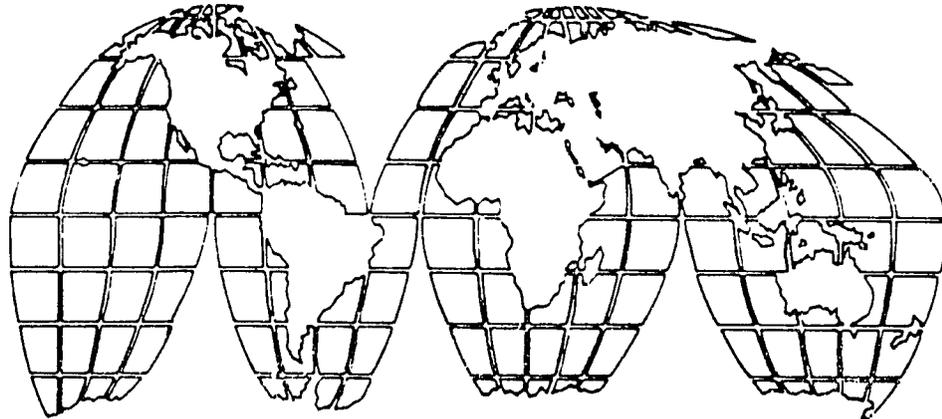
Socioeconomic Development of Onchocerciasis-Free Areas

Socioeconomic research is needed to gather data for the planning of socioeconomic development. Until now, socioeconomic research has not received sustained attention.

In the exploitation of new agricultural opportunities, countries must devise efficient and secure means for controlling land acquisition and tenure and resolving conflict over land claims.

Additional action is needed to extend non-health benefits to women and children. In resettlement areas, women have less access to land for their own garden plots. Also, they have less access than men to training programs. In some areas, children's school attendance has declined because children are needed to cultivate the freed lands.

Copies of the complete report, A.I.D. Project Impact Evaluation Report No. 63, Impact Review of the Onchocerciasis Control Program, Ouagadougou, August 1985, May 1986, PN-AAL-078, may be obtained from the editor of ARDA, A.I.D. Document and Information Handling Facility, 7222 47th Street, Suite 100, Chevy Chase, Maryland 20815. The Center for Development Information and Evaluation welcomes comments on the report: Bureau for Program and Policy Coordination, Center for Development Information and Evaluation, Agency for International Development, Washington, D.C., 20523.

Impact Review of the Onchocerciasis Control Program

U.S. Agency for International Development (AID) Washington, D.C. 20523

The Onchocerciasis Control Program (OCP) has reduced the incidence of river blindness in large areas of West Africa. This has been accomplished during a 10-year period at a cost of approximately one dollar per person per year. Onchocerciasis is a parasitic disease that is transmitted to humans by the bite of infected female blackflies. OCP has checked the disease through aerial spraying of rivers to destroy the larvae of the blackfly.

OCP is a multidonor, 20-year, single-disease control program. On completion of the first two phases (1974-1985), the program had demonstrated a measurable impact on human health by decreasing the incidence of blindness, disability, and debility. An estimated 27,000 cases of blindness have been prevented in Burkina Faso alone over the past decade.

By opening up 15 million hectares of tillable land in the former onchocerciasis-endemic areas, OCP has created significant opportunities for increased agricultural productivity and economic growth. Additional investment is required to exploit these new areas.

The OCP strategy is one of control, not eradication. To prevent resurgence of the blackfly population, national and community-level capacities to maintain disease control must be developed. OCP Phase III will attempt to provide participating countries with a low-cost technology to enable them to maintain onchocerciasis control.

SUMMARY OF EXPERIENCE

The Onchocerciasis Control Program (OCP) was initiated in 1974 at the request of seven affected West African countries: Ghana, Mali, Burkina Faso, Niger, Togo, Benin, and Ivory Coast. OCP is a 20-year campaign to check the disease through a strategy of aerial spraying to destroy the larvae of the blackfly, regular monitoring of affected areas to guide and evaluate control activities, and research and training directed to improving control activities.

Onchocerciasis or river blindness is a parasitic disease caused by a filarial worm which is transmitted to humans by the bite of the female blackfly. Of the 10 million persons in the original OCP area, one million were estimated to be infected by onchocerciasis, 100,000 with serious eye lesions or blindness.

Four multilateral agencies sponsor OCP: the World Bank, World Health Organization, Food and Agriculture Organization, and United Nations Development Program. Twenty-two donors provide financing. AID has been the largest single contributor, having provided 13.7 percent of the \$168 million budget for the first two phases (1974-1985). During its third phase (1986-1991), OCP will extend its efforts into four additional countries.

An AID team visited the seven OCP countries in August 1985 to assess progress with onchocerciasis control. A number of important findings emerged from this review.

- o By attacking the blackfly vector with larvicides, OCP has interrupted the transmission of onchocerciasis over large areas of West Africa. Before control began in 1974, only 9 percent of evaluated sites had annual transmission rates scientifically defined as low. By 1984, 86 percent of evaluated sites had low transmission rates. Approximately three million children born since the beginning of the program are free from the effects of onchocerciasis.
- o OCP has had a striking impact on human health and well-being in West Africa, by reducing the incidence of blindness, disability, and debility caused by onchocerciasis. An epidemiological evaluation of 142 villages showed dramatic decreases in the status of infection in each village.
- o OCP performance was enhanced by its multilateral framework and its reliance on recognized international structures for program implementation. Management by the World Health Organization gave OCP access to worldwide talent and an excellent system of staff benefits. The World Bank provided financial management.

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Respect for the multinational configuration of OCP, and donor cohesiveness, encouraged participating governments to shield OCP from any adverse effects arising from policy changes or political pressures. Also, OCP was able to seek guidance from its sponsors, without becoming weighted down by bureaucratic restrictions or donor political considerations.

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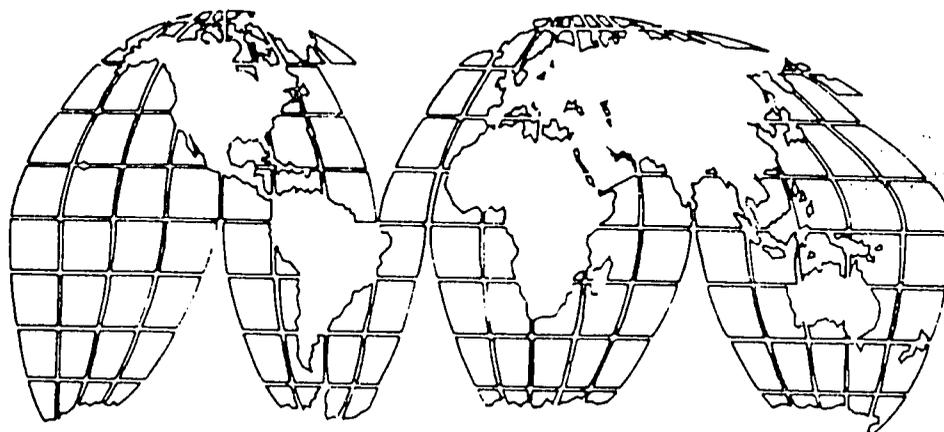
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Malawi: Bunda Agricultural CollegeU.S. Agency for International Development
Washington, D.C. 20523

U.S. Agency for International Development

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U.S. Agency for International Development (AID) Washington, D.C. 20523

When Malawi became independent in 1964, few of its citizens had advanced training in agricultural sciences and most senior management positions in agriculture were held by expatriates. To train the manpower needed to support agricultural growth, the Government of Malawi established Bunda Agricultural College within the University of Malawi. Beginning in 1966, A.I.D. provided two grants totaling U.S. \$6.8 million to assist with the construction and staffing of the Bunda College campus near Lilongwe.

Since 1969, Bunda has granted 861 diploma degrees and 300 B.S. degrees, or approximately one-quarter of all degrees granted by the four constituent colleges of the University of Malawi. Bunda's graduates have readily found jobs in the agriculture and education sectors and nearly all expatriates have now been replaced. Interviews with Bunda graduates and with employers of Bunda graduates showed that most held highly positive views about the relevance and quality of the education program at Bunda.

Bunda College has fulfilled its primary mission as a teaching institution, but conditions within Malawi and Bunda College are changing. Current manpower projections show a declining demand for trained agriculturalists. Yet Bunda's faculty remains almost exclusively focused on teaching and uninvolved in the Ministry of Agriculture's national research program, which needs their help. Major institutional readjustments are required to enable Bunda faculty to support the national research program because the College currently has no institutional or budgetary connection with the Ministry of Agriculture which funds agricultural research at its own experiment stations.

SUMMARY OF DEVELOPMENT EXPERIENCE

In 1966, the Government of Malawi established the Bunda College of Agriculture as a constituent member of the University of Malawi. To help the College train Malawi's agricultural manpower, A.I.D. provided a U.S. \$2.2 million grant from 1966 to 1970 and another U.S. \$4.6 million grant from 1976 to 1982. These grants financed construction of campus buildings, provision of long-term expatriate faculty and degree training of 25 Malawian faculty in U.S. institutions. Beginning in 1978, another donor project, sponsored by the United Nations Development Programme (UNDP) and the Food and Agriculture Organization (FAO), sent 28 Malawians from Bunda's faculty overseas for M.S. and Ph.D. training.

The core curriculum at Bunda College has remained basically the same since 1966 and provides three-year diploma students with a broad range of skills in applied agricultural sciences. Beginning in 1969, the top 25 percent of the diploma graduates were allowed to study two additional years to earn a B.S. degree. Total enrollment at Bunda in 1985 was 373 students.

A 1985 evaluation identified several key findings and lessons learned.

FINDINGS

- Bunda College has succeeded as a teaching institution. Over the past 20 years Bunda has operated at maximum enrollment capacity and efficiency in meeting many of Malawi's manpower needs in the agricultural sciences. Nearly all of the middle and senior level managers, researchers and extensionists in both the public and private sector are former Bunda graduates. Students and employees alike agree that the quality and relevance of Bunda's training is appropriate for Malawi.
- By 1985, almost all expatriate faculty had been replaced by Malawian nationals. Among 31 senior faculty members, 16 had Ph.D. degrees and 15 had M.S. degrees. Another 15 faculty members were scheduled to return from overseas training. The performance and rate of return of Malawian faculty studying abroad has been extraordinarily high. To retain this highly-qualified faculty, Bunda College will have to maintain competitive salaries and provide for their professional growth and advancement.
- The physical structures at Bunda College--classrooms, dormitories, offices and laboratories--are generally adequate for student and faculty needs, but additional faculty housing will soon be needed.

- A shortage of textbooks, a lack of photocopying facilities and a scarcity of study space in the library have restricted the learning experience at the College.

LESSONS LEARNED

- In small countries like Malawi, agricultural colleges maximize their contributions to national development by serving multifunctional roles. Bunda College has addressed most of Malawi's manpower needs at the diploma and B.S. level and the market for graduates is near saturation. But Malawi needs research to generate and transfer technologies to the smallholder sector. By acquiring a multifunctional teaching/research role, the College can adapt to changing conditions and continue to serve Malawi's needs.
- Donor projects designed to build any one component of a national agricultural education, research or extension system should also include the development of linkages among these individual functions. None of the projects supporting Bunda College addressed this issue.
- Agricultural universities need institutional linkages to their consumers in order to assure that they address relevant needs within the agricultural sector. Bunda College has few links with the Ministry of Agriculture. Budget cuts have eliminated other mechanisms for strengthening external linkages, namely, the external examiner process for examining B.S. candidates, the in-service training of government officials, the use of farm days for farmers to visit the campus, and the consultative council for Bunda, which consisted of leading representatives from the public and private sector.
- In small countries, the dispersion of university educational institutions can limit cooperation in teaching and research and impede faculty career development. The University of Malawi consists of four separate campuses which are a considerable distance from each other. Duplication of educational and research structures adds to the burden of recurrent costs, leaving each component with a small staff and few resources and thereby reducing faculty opportunities for advancement and professional growth.

ONGOING ISSUES

A Research Role for Bunda

With a large number of Malawian Ph.D. agricultural scientists and a growing faculty, Bunda should be able to supplement its teaching mission with a leadership role in agricultural research. An expansion of Bunda's research role will require major institutional adjustments because Bunda currently has no linkages with the Ministry of Agriculture and other potential sources of funding in the national government.

A Graduate Degree Program for Bunda College?

Should Bunda College develop a masters degree program in the agricultural sciences? Although there is some interest in this possibility, a graduate program could divert scarce resources (money and faculty) toward the training of a small number of graduate students and increase the potential for faculty in-breeding. A possible alternative would be to continue to use donor and Malawian-financed overseas training opportunities.

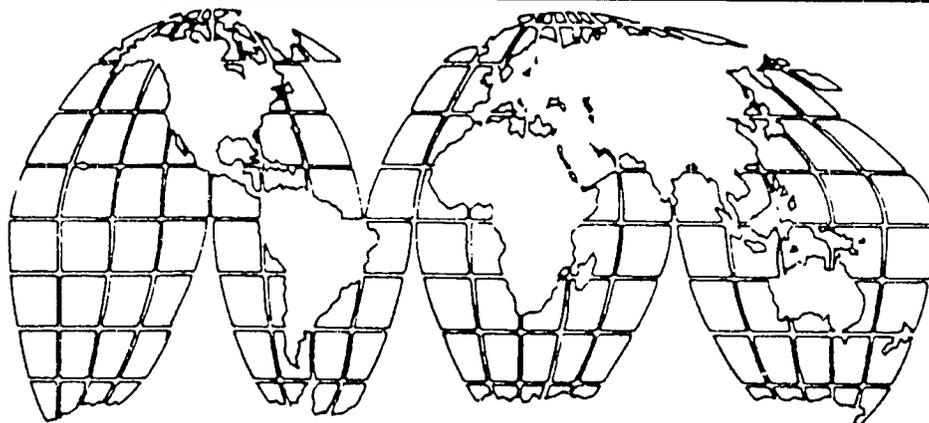
Opportunities for Women in Agriculture

Women students are underrepresented at Bunda College because in Malawi fewer girls than boys attend and remain in school. Bunda's female graduates have fewer job opportunities than its male graduates. Most female graduates are hired by the Ministry of Education as secondary school teachers. The private sector rarely hires female Bunda graduates. The Ministry of Agriculture tends to channel women into home economics jobs. There are few women in the extension system. Since approximately 28 percent of all farm households are headed by women, the dearth of women in the extension service probably reduces the flow of communication to this important segment of the farm population.

Physical Isolation of Bunda College

Bunda College's physical isolation and lack of infrastructure are major barriers to close interaction and communication between Bunda and other institutions and constituencies in the agriculture sector.

Copies of the complete report, A.I.D. Project Impact Evaluation No. 64, Malawi: Bunda Agricultural College, August 1987, (PN-AAL-094), may be obtained from the editor of ARDA, A.I.D. Document and Information Handling Facility, 7222 47th Street, Suite 100, Chevy Chase, Maryland 20815. The Center for Development Information and Evaluation welcomes comments on the report: Bureau for Program and Policy Coordination, Center for Development Information and Evaluation, Agency for International Development, Washington, D.C. 20523.

A.I.D. Project Impact Evaluation No. 67**Dominican Republic: The Superior Agricultural Institute:
Development of a Private Institution of Higher Agricultural Education**

U.S. Agency for International Development (AID) Washington, D.C. 20523

The Superior Agricultural Institute (ISA) was established in 1962 by a group of civic-minded businessmen and professionals in Santiago City. Its founders intended that ISA would train public servants and private entrepreneurs and technicians to contribute to agricultural modernization. A.I.D. provided initial assistance in constructing some campus buildings and through the early 1970s funded several resident U.S. faculty advisers along with support for ISA faculty training in the U.S. Throughout the 1970s and 1980s, A.I.D. continued to provide funding to ISA for specific outreach programs in research and training.

ISA was originally established as a four year agricultural high school, and then added a four year undergraduate program. Over the past two decades ISA has emerged as one of the most dynamic and innovative educational institutions in the Dominican Republic. From its inception, ISA has developed a curriculum which reflects current and future manpower needs in the food and fiber industry. Many employers rank ISA's training as superior to that received by graduates of other agricultural training programs.

ISA's leadership has established close linkages with government policymakers, and as a consequence current and former ISA faculty are vitally involved in national decision-making on agriculture and rural development. Likewise, ISA faculty have conducted innovative research on commodities and are engaged in numerous services to private sector agribusiness.

ISA's accomplishments can be attributed to the visionary and entrepreneurial leadership of the businessmen and professionals of the Santiago community who continue to serve as patrons and mentors to the institution. It can also be attributed to the progressive policy of the Government of the Dominican Republic which continues to provide financial assistance to ISA without infringing on its autonomy as a private educational institution.

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SUMMARY OF DEVELOPMENT EXPERIENCE

Since its establishment in 1962, ISA has grown in capacity and experience in a wide range of agricultural education and outreach endeavors. This growth can be attributed to the close cooperation between its leadership, the Santiago community leaders, the Government of the Dominican Republic, and the various donors (A.I.D., Ford and Kellogg Foundations) which have supported ISA.

At ISA's inception, the Santiago community leaders provided land for the campus, A.I.D. provided a loan for building construction, and the Ford Foundation contributed several long-term faculty advisers from Texas A&M University. In the early 1970s A.I.D. also funded the provision of faculty from Texas A&M, as well as fellowships for advanced study in the U.S. for 47 ISA graduates and faculty. Indirect A.I.D. assistance continued throughout the 1970s for training projects for small farmer development. In 1980, the Kellogg Foundation provided seed money for the establishment of the ISA Rural Development Management Center (CADER) to train mid-level officials and private entrepreneurs in rural development programs. A.I.D. has since provided assistance to this program and in 1986 awarded a grant to help establish an endowment that will represent a permanent financial base for CADER.

ISA's contribution to the agricultural sector has been notable in the areas of manpower development, research, and services to private agribusiness. Graduates from the vocational high school and the B.S. degree program have been in demand throughout the economy. CADER seminars and conferences have had a marked impact on agricultural policies, including those related to agrarian reform. ISA research has contributed to commodity gains in such crops as rice, sorghum, palm oil, and tomatoes. Numerous contract services are being performed for various agribusiness firms.

The 1986 evaluation of ISA identified factors contributing to the success of its development.

- The development of strong linkages between ISA and its primary bureaucratic constituency, the Ministry of Agriculture, was of crucial importance in assuring that ISA had access to a policy and institutional forum supportive of its research and outreach goals. ISA has been successful in building close ties with the Ministry of Agriculture and securing government financial and project support for its education and outreach programs.
- ISA was the first institution of higher agricultural education in the Dominican Republic to organize its curriculum around problem/subject matter areas in lieu of a

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general B.S.-degree curriculum. ISA currently focuses on five areas that it deems crucial for agricultural development: the administration of agricultural enterprises, horticulture, forestry resource management, irrigation systems, and animal production.

Donor agencies followed their efforts in creating ISA's institutional capacity with project-specific funding designed to build linkages in research and outreach activities in the rural sector. A.I.D. and other donor funding for the establishment of ISA was followed by a succession of projects, some of which remain active, to extend ISA's services and contributions to the rural sector. These funds were used to explore new areas of analysis and action in order for faculty to become directly involved in problem-solving activities. Many of these projects were funneled through the Ministry of Agriculture in order to build stronger support linkages between the Government and ISA.

Moderate levels of donor funding served to support institutional entrepreneurship at ISA. Except for an initial institution-building loan, donor funding for ISA has been supplemental and never overwhelming in scale. As a consequence, donor support has not served to dampen ISA's entrepreneurial spirit.

The high level of institutional entrepreneurship and innovation manifested at ISA appears to be associated with high levels of institutional autonomy vis-a-vis the national government and donor agencies. Institutional autonomy has provided an opportunity for institutional entrepreneurship. ISA leadership has seized this opportunity to control faculty appointments, set program agendas, redesign curricula, and mobilize resources from a multitude of national and international sources.

The institutional autonomy vested in ISA has been coupled with direct forms of accountability in ensuring college responsiveness to social needs. ISA has benefitted immeasurably from the continuous intellectual leadership and mentorship provided by the members of the Santiago City development association. As a community-based organization in its own right and through its representation on ISA's board of directors, many of its business and professional leaders have taken it upon themselves to ensure that ISA grows and prospers within the framework of rigorous programs dedicated to the solution of societal problems. Such problems have been defined both in broad terms, such as rural poverty and natural resource degradation, and in narrower terms, such as the need for cooking oils and higher yielding, more disease-resistant varieties of rice.

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ONGOING ISSUES

Domestic Funding and Service to Clientele Groups

ISA will continue to face the challenge of building stronger financial support from interest groups which are active in the agricultural economy. However, some private sector groups who are able to pay for ISA services may not have the interest of the small farm sector in mind. If ISA is to continue to address the needs of the small farmer, it will need to expand the mobilization of funds from a diverse range of sources.

Limited Applied Learning

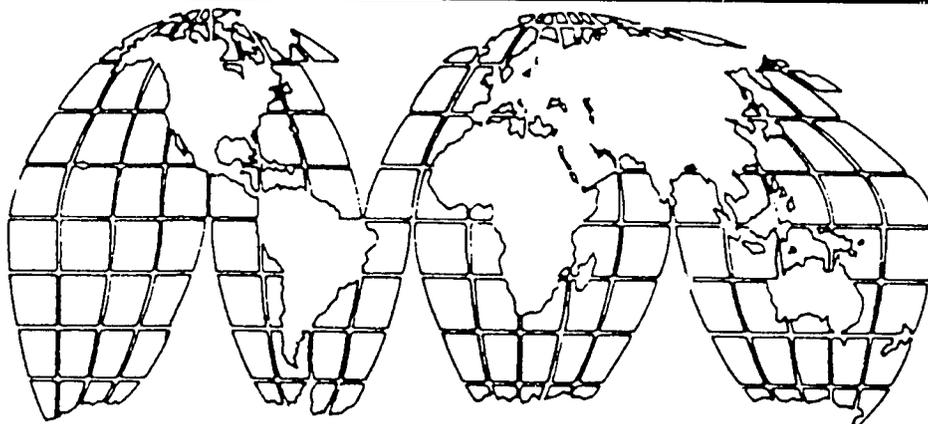
The practical aspects of the B.S. degree program do not give sufficient emphasis to applied-learning activities. Rather, there is an excessive reliance on the lecture method which reflects the limited availability of library materials and equipment for applied learning. Most professors consider available library materials to be out-of-date, as the library has been unable to make new acquisitions because of a lack of funds. Many holdings are not in Spanish, and therefore, cannot be read by the students. As a consequence, the library is not used extensively by either professors or students.

Scientism vs. Vocationalism

In many agricultural colleges a tension exists between forces pushing for greater scientific productivity with research along disciplinary lines and those pressing for greater short-run contributions to the agricultural sector, represented by vocational agriculture and extension/technical assistance efforts. ISA has experienced these tensions from its inception. The Dominican Educational Fund and various donor organizations have noted the relative over-education of Dominicans at the university level and the shortage of trained technicians at the secondary level. This situation suggests that ISA may want to maintain its focus on vocational/technical education.

Copies of the complete report, A.I.D. Project Impact Evaluation No. 67, Dominican Republic: The Superior Agricultural Institute: Development of a Private Institution of Higher Agricultural Education, March 1988, (PN-AAX-201), may be obtained from the editor of ARDA, A.I.D. Document and Information Handling Facility, 7222 47th Street, Suite 100, Chevy Chase, Maryland 20815. The Center for Development Information and Evaluation welcomes comments on the report: Bureau for Program and Policy Coordination, Agency for International Development, Washington, D.C. 20523.

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ISA will continue to face the challenge of building stronger financial support from interest groups which are active in the agricultural economy. However, some private sector groups who are able to pay for ISA services may not have the interest of the small farm sector in mind. If ISA is to continue to address the needs of the small farmer, it will need to expand the mobilization of funds from a diverse range of sources.

Limited Applied Learning

The practical aspects of the B.S. degree program do not give sufficient emphasis to applied-learning activities. Rather, there is an excessive reliance on the lecture method which reflects the limited availability of library materials and equipment for applied learning. Most professors consider available library materials to be out-of-date, as the library has been unable to make new acquisitions because of a lack of funds. Many holdings are not in Spanish, and therefore, cannot be read by the students. As a consequence, the library is not used extensively by either professors or students.

Scientism vs. Vocationalism

In many agricultural colleges a tension exists between forces pushing for greater scientific productivity with research along disciplinary lines and those pressing for greater short-run contributions to the agricultural sector, represented by vocational agriculture and extension/technical assistance efforts. ISA has experienced these tensions from its inception. The Dominican Educational Fund and various donor organizations have noted the relative over-education of Dominicans at the university level and the shortage of trained technicians at the secondary level. This situation suggests that ISA may want to maintain its focus on vocational/technical education.

Copies of the complete report, A.I.D. Project Impact Evaluation No. 67, Dominican Republic: The Superior Agricultural Institute: Development of a Private Institution of Higher Agricultural Education, March 1988, (PN-AAX-201), may be obtained from the editor of ARDA, A.I.D. Document and Information Handling Facility, 7222 47th Street, Suite 100, Chevy Chase, Maryland 20815. The Center for Development Information and Evaluation welcomes comments on the report: Bureau for Program and Policy Coordination, Agency for International Development, Washington, D.C. 20523.

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