

BRIEF SUMMARY OF AID IMPACT EVALUATION FINDINGS

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The Center For Development Information And Evaluation (CDIE) and its predecessors have published over 150 special evaluation studies since 1979.

Many of these studies are AID Project Impact Evaluations which were done by multidisciplinary teams examining completed projects during 3 to 4 week field visits.

The Program Evaluation Reports then synthesize the major findings and lessons learned from the Impact Evaluations on key sectors of AID funding such as irrigation or agricultural research. There are also Special Studies on themes or topics which transcend the boundaries of individual sectors and address cross-cutting issues.

The CDIE reports on which this report is based are only a portion of AID's total effort to document, analyze and synthesize the Agency's development experience. The impacts and lessons learned presented here are meant to be illustrative of AID's contribution to stimulating and sustaining international development. The limitations of this report do not permit a comprehensive summary of all AID impact.

This brief report is divided into the following major thematic categories and sub-topics:

AGRICULTURE:

- o Agricultural Research
- o Agricultural Extension
- o Agricultural Services (credit, inputs and marketing)
- o Irrigation
- o Rural Area Development and Settlement
- o Narcotics Control Programs

EDUCATION:

- o General Education
- o Agricultural Higher Education

HEALTH:

- o General Health (primary health care, disease control)
- o Potable Water

POPULATION

NON-PROJECT ASSISTANCE:

- o ESF Non-project Assistance
- o PL-480

CROSS-CUTTING ISSUES:

- o Women In Development
- o Technology Transfer
- o Policy Reform via Performance Disbursement

AGRICULTURAL RESEARCH

Between 1980-85 AID funded nearly two hundred agricultural research projects and obligated over \$874 million dollars to develop and expand agricultural research institutions.

The average annual expenditure during these years was nearly \$146 million, which represented about 19% of the Agency's total agricultural, rural development and nutrition funding. More than half of this funding supported research activities by LDC institutions.

Some examples of the impacts which have resulted from AID assisted agricultural research projects include:

- * The AID assisted Nepal project trained 600 researchers, built and expanded five research stations, and established a functioning national research system.
- * The AID assisted Thailand project provided advanced training in the United States for 118 Thai scientists.
- * In Tunisia, use of several new varieties of wheat increased production by over 5.3 million metric tons from 1971 - 81. Per capita wheat production increased from 104 to 160 kilograms per year.
- * In Kenya, the widespread adoption of hybrid maize resulted in the capability of self-sufficiency. Korea became self-sufficient in rice production by using high-yield seed.

Lessons learned from this experience include:

- * High levels of government support and commitment to research institutions are essential.
- * Close coordination between public and private agricultural institutions is essential.
- * Technological solutions alone cannot solve problems that have political, economic and social dimensions.
- * Researchers must understand existing farm systems, resources and agro-ecological conditions.

AGRICULTURAL EXTENSION

AID has funded some one thousand projects involving agricultural extension from 1975 to 1984. During the first five years of this decade, some one hundred extension projects received more than \$302 million dollars in AID funding.

The average annual AID expenditure during those years was about \$50 million, which represented nearly 7% of the Agency's total funding for agriculture, rural development and nutrition.

By the mid-1970s, most of AID's extension activities were aimed at disseminating specific research results. During the 1980s, AID began developing new extension approaches aimed at increasing private sector involvement and selectively strengthening public extension institutions.

These are some of the impacts which have resulted from AID assisted agricultural extension projects:

- * Since 1955 with AID help the Kenya Seed Company has become a primary source of extension information in connection with its efforts to sell more hybrid seed. Today, more than half the corn planted in Kenya is hybrid and a variety of other farm improvements have been stimulated.
- * In the Philippines, the Massagana 99 project combined a privately managed social marketing campaign, an agricultural credit program, and an extensive public extension effort to transfer improved rice growing technology to nearly 650,000 farmers in the first year.
- * In Honduras and Ecuador, farming systems research/extension (FSR/E) projects have included public extension agents as active participants on research teams. In Botswana and Mali, FSR/E projects have included formal liaison roles for senior extension officials that have facilitated the dissemination of technological innovations by extension agents

Lessons learned from this experience include:

- * AID is testing a variety of innovative approaches to agricultural extension involving an increased role for private institutions and mass communications technology.
- * AID studies have found that few extension efforts are coordinated with other agricultural development activities within an overall agricultural technology management strategy.
- * Extension alone cannot solve agricultural development problem that require increased agricultural inputs, improved agricultural technologies and more appropriate agricultural policies.

AGRICULTURAL SERVICES

AID has funded more than 80 agricultural services projects from 1980 through 1985 to provide credit, farm inputs and/or marketing services.

Since 1980, AID has invested \$16 million per year on farmer production credit programs. AID's investments in agricultural inputs, such as high yielding seeds and fertilizer, has averaged slightly under \$50 million per year. AID's funding of marketing, storage and price information projects has averaged about \$14 million annually since 1980.

AID's total investment during 1980-85 of \$487 million for agricultural services is approximately 10% of the Agency's total agricultural, rural development and nutrition assistance portfolio.

The combination of AID's fertilizer and high yielding seed programs has dramatically increased food production in many Third World countries. For example, after many centuries of famine India has achieved self-sufficiency in food grains.

These are some of the impacts which have resulted from AID assisted agricultural services projects:

- * In Paraguay, a system of thirty farmer-oriented credit unions has brought production credit and marketing assistance to villages previously untouched by formal lending agencies.
- * In Korea, AID assistance to the National Agricultural Cooperative Federation over several decades has been instrumental in development of the irrigation, seed and research services that have fueled Korea's dramatic agricultural growth even as its population has shifted to a predominantly urban base.

Some of the lessons learned from this project experience include:

- * Public policies concerning taxation of imports and exports, and commodity price controls, form the basis for success or failure of any agricultural development program.
- * Where direct contact with farmers is an element of project success (e.g. in distribution of seeds, credit or fertilizer), public and parastatal institutions are seldom efficient.
- * The indigenous systems for supply of agricultural services (village shopkeepers and wholesalers in the secondary cities) are a relatively untapped source for cooperation in AID programs that could be better utilized.

IRRIGATION

The most recent (August, 1983) evaluation report on "Irrigation and AID's Experiences" estimates that AID spent four billion dollars on 140 irrigation projects during the 1970's. AID obligated over \$344 million from 1980-85 in support of over 60 water development projects. This represents about 7% of total AID funding for agriculture, rural development and nutrition for that period.

Yet, AID is a comparatively minor funder of irrigation projects. For example, the World Bank had supported 285 irrigation projects through June of 1982 for a total of \$10.4 billion.

These are some of the impacts reported from AID assisted irrigation projects:

- * Under the AID assisted Sederhana small-scale irrigation project in Indonesia, major works were constructed in 600 locations. Increases in rice production were found in most project areas. For example, in the Sulawesi sub-project 750 tons of additional rice per year, valued at \$320 per metric tons, were grown with AID's help.
- * The AID assisted irrigation project helped Korea achieve rice self-sufficiency and farmer's incomes rose by \$412 annually in most cases. Average rice yields increased by 2 metric tons per hectare on all but the smallest farms.
- * Over 1000 irrigation systems have been built or rehabilitated since AID began funding the Philippine government's program in 1976.

Lessons learned from this experience include:

- * AID's irrigation project experience has caused governments and donors to develop an increased awareness of management capabilities as an essential factor determining success.
- * AID's irrigation project experience has illustrated the importance of developing local water users' associations capable of operation, maintenance and settling grievances.
- * AID has taken a leadership role in promoting policy dialogue with LDC governments on agricultural pricing and other potential incentives for irrigated farming.
- * AID has also informed LDC governments and donor agencies about potential ecological and health damage which can result from designing projects without adequate drainage.

RURAL AREA DEVELOPMENT AND SETTLEMENT

AID has funded over 100 rural area development and settlement projects since the late 1960s.

These projects were designed to increase the production and income of small farmers through an integrated approach to solving agriculture related problems. In most cases, the projects had significant positive effects on agricultural production, income and institution building. Impacts from these projects included:

- * In an AID project in Egypt, net agricultural income for rural households rose from LE 185 in 1962 to LE 1,150 in 1982.
- * An AID assisted project in Liberia resulted in improved access for small farmers to new cultivation techniques, improved seeds, credit and marketing facilities. The project was especially successful in achieving higher yields for upland rice. The net income of participating small farmers increased by about \$150 to \$200 a year.
- * An AID project in Ecuador assisted 64,300 farm families in private sector cooperatives to purchase land and obtain social and agricultural services. AID supported credit unions benefited 1.2 million families and mobilized significant rural savings.
- * A Bolivian resettlement project implemented by a PVO provided land, roads, agricultural services and wells to 10,000 people. The project remains successful after 10 yrs.

Lessons from this project experience include:

- * These projects should have fewer components and cover smaller geographic areas with similar ecological zones and farming systems. This will reduce the problem of coordination which has plagued them in the past.
- * Rural development projects can depend more on local entrepreneurs and less on the public sector for delivery of inputs and services needed for project success.
- * The projects need to be planned as long-term endeavors, with each successive phase building on the experiences and accomplishments of earlier phases.
- * Greater attention should be given to gender-based patterns of behaviour in the target population.

NARCOTICS CONTROL

AID's obligated funds for narcotics control increased from \$26.2 million in 1981 to \$50.8 in 1986.

AID only has narcotics control area development projects in five of the source countries, which do not cover the entire narcotics producing areas. AID has focused its attention on two types of activities:

- * Area development projects provide comprehensive agricultural services and improved infrastructure for farmers growing substitute crops. The objective is to provide alternative sources of income and employment for farmers in major narcotics growing areas.
- * Narcotics awareness programs seek to inform the public and decision-making elites in narcotics growing countries about the harmful effects of drug dealing and abuse in their societies.

AID Project Managers and Mission Directors face a wide range of obstacles beyond their control. For example:

- * LDC's inability or lack of commitment to formulate long-term narcotics control policies and programs;
- * The high profitability of narcotics relative to alternative crops;
- * Powerful illegal drug organizations which can threaten the safety of the project staff; and,
- * The faltering economies of narcotics growing host countries.

These are some of the impacts which have resulted from AID assisted narcotics control projects:

- * AID's program in the Northwest Frontier Province of Pakistan has created new income opportunities for farmers and allowed the government to enforce its ban on opium.
- * Cocaine eradication efforts are being carried out in Upper Huallaga, Peru because of AID's development project.
- * The Colombian government has undertaken cocaine eradication efforts in Chapare as part of its agreement with AID.

EDUCATION

AID has funded over 400 education projects from 1980-85, during which time the Agency obligated some \$766 million dollars for education and human resources. The major types of activities funded from 1980-85 have been: Administration / Managerial Education, Professional / Scientific Education, Labor Development and Elementary Education.

Since the mid-1970s, AID's contribution to the education sector has declined. Education and technical assistance for education components have been incorporated into programs in higher priority sectors.

These are some of the impacts which have resulted from AID assisted education projects:

- * AID helped Nepal's primary student enrollment ratio increase from less than 1% in 1951 to 77% in 1979, and helped contribute to increasing the female enrollment ratio in primary schools to 24% by 1979.
- * The AID assisted Korean Educational Development Institute improved average achievement scores by 27% in math, 20% in social studies and 21% in science. The institute has become a model research organization visited by professional educators from all over the world.
- * AID assisted rural school construction in Paraguay has now provided access to education for farm children previously excluded because they lacked transport and warm clothing.
- * Techniques used in the AID funded Ecuador Nonformal Education Project for teaching communications skills are now applied in Ghana, Guatemala, Swaziland, Thailand and Indonesia.

Illustrative lessons learned from education project evaluations include:

- * Training education professionals and institutions is most successful when job and career advancement opportunities and salary incentives support training.
- * Education planners must examine the capacity of the host county to absorb the graduates of an education program.
- * Prefeasibility studies and collaborative planning with recipient countries are essential when introducing innovative teaching methods and curricula. This is especially true in remote areas.

AGRICULTURAL HIGHER EDUCATION

AID provided major funding for the development of one or more agricultural universities in practically every Asian and Latin American country from the 1950s to the 1970s. In Africa, AID involvement has been in Nigeria, Ethiopia, Tanzania, Morocco, Malawi, Sierra Leone and Kenya.

AID's assistance utilized U.S. land grant universities as the primary contractors working closely with the host country universities. This was part of AID's program to strengthen agricultural research and extension and link the university more directly with these activities.

Nigeria and Brazil graduated from the AID program. The Bangladesh independence war in 1972 brought about the termination of the India program where there had been nine university programs. AID continues to be active in agricultural higher education in Cameroon, Pakistan, Central America and Morocco.

Based on preliminary data, initial observations on the impact of AID's agricultural higher education projects include:

- * The AID assisted Institute of Agronomic and Veterinary Sciences in Morocco and the University of the Philippines at Los Banos have taken regional leadership roles in research and education.
- * Most AID assisted universities have become the primary source of trained agricultural experts in those LDCs. Graduates have replaced most expatriate technicians. The need to spend foreign exchange for overseas training has also been substantially reduced.

Some of the lessons from this project experience include:

- * Institutional development projects for LDC agricultural universities need a minimum of 10 to 15 years to build faculty capacity. Building adequate linkages to larger research and extension systems takes an equal amount of time. Some "second generation" projects in places such as the Philippines, Thailand, and Sierra Leone are designed to produce those linkages.
- * There is an insufficient number of agricultural scientists with advanced university degrees to support LDC national research efforts. U.S. universities, international agricultural research centers, regional institutions and Third World university graduate training programs should supply this need.

HEALTH

AID has funded about 320 health projects during 1980-85, obligating a total of over \$1.9 billion for health. The major types of activities funded during 1980-85 have been: water supply and sanitation, health delivery services, disease control services and research. Recent emphasis has been upon selective interventions, particularly oral rehydration therapy (ORT) and immunizations aimed at increasing child survival.

Illustrations of impacts resulting from AID projects include:

- * A multi-donor project, encompassing parts of seven West African countries, has effectively controlled "river blindness." Some 27,000 cases of blindness were prevented, and three million children born since the program began are free from the effects of the disease. Also, some 15 million hectares of fertile lands have been made safe for development.
- * A project in Swaziland constructed a health sciences training institution, graduated about 150 health personnel and helped strengthen national and subnational capacity for health planning and administration.
- * A project in Morocco created 300 self-financing educational centers, and provided clear nutritional benefits, while a project in Colombia improved immunization levels and knowledge of good health practices. Both programs increased women's opportunities.
- * A project in Senegal provided residents of 370 villages with access to PHC services. By 1984, this project appeared to have achieved a high degree of sustainability and potential for replicability, due primarily to successful local financing and success in reversing negative government health policies through policy dialogue.

Valuable lessons from experience include:

- * The importance of developing local financing schemes for achieving sustainability. Health care funded exclusively by central governments may not be sustainable when donor financing ceases, and replication potential may be limited.
- * AID has been able, through policy dialogue, to influence national policies to expand the role of non-physicians and the private sector, and to achieve greater cost recovery through user fees and other local financing schemes.
- * Selected interventions, such as ORT and immunizations, appear to be more cost-effective than comprehensive approaches, for lowering infant and child mortality.

POLICY REFORM PROGRAMS VIA PERFORMANCE DISBURSEMENT

AID has recently initiated several programs to support policy reforms and associated institutional changes via performance disbursement.

In AID's performance disbursement model a schedule of gradual reforms by LDCs fulfills the conditions required for transfer of AID funds. The conditionally built into this arrangement provides AID with the means for sound management of policy and institutional reform programs.

The primary purposes of these reform programs are to:

- * Eliminate unnecessary government regulation of markets;
- * Reduce the size of the public sector and cut costs; and,
- * Encourage private sector development.

Policy reform programs can be targeted on removing critical impediments to accelerate economic growth, while also providing a mechanism for the controlled transfer of funds to LDCs.

These are examples of policy reform programs using a performance disbursement mechanism.

- * AID will provide \$32 million over five years to the Niger Agriculture Sector Development Program to implement a national de-regulation of commodity prices. These reforms are expected to remove policy imposed constraints on small farmer's production and stimulate the private sector by eliminating government monopolies.
- * AID will provide \$10 million over the next three years for the Economic Policy Reform Program in Mali which will reduce the government's size and operating costs. Reforms include tax collection, business registration and regulation as well as a more efficient and effective civil service administration. It is probable that the IMF and/or World Bank will support additional reform programs stimulated by AID's Economic Policy Reform Program.
- * AID has provided \$75 million for the Rural Finance Project in Bangladesh. The major objective of the project is to create a self-sustaining rural credit system. Policy reforms include a) reform lending and refinance rates to reduce or eliminate subsidies on rural loans, b) increase interest rates paid to depositors to mobilize additional savings, and c) reform banking procedures to improve loan management and institutional performance. Funding will be used to capitalize the rural banking system.

POTABLE WATER

During 1980-85 AID has obligated a total of \$937 million, or nearly one half of all health funds, in support of about 57 potable water and sanitation projects. Many of these activities are in Near East countries funded under the ESF account.

The Agency is a relatively minor funder compared with the World Bank and other funders of large scale systems.

These are some of the impacts reported from AID assisted potable water projects:

- * Women beneficiaries in Peru said that piped water saved them three hours a day and improved house and child care.
- * An AID funded potable water project in Haiti installed three major and several smaller systems operated and maintained by a local community development organization.
- * An AID assisted Thai community development organization planned and built 800 systems and now successfully administers a national piped water program.
- * The Government of Tunisia is focusing greater attention on potable water, using a design from an AID funded project whose average cost was only \$20 per beneficiary.

Lessons learned from this experience include:

- * Emphasize community development rather than health impacts and use more cost-effective options.
- * Pay special attention to the water needs, priorities and constraints of women who are primary users.
- * Stress the community's responsibility for operation, maintenance and paying recurrent costs.

POPULATION

(prepared by Office of Population)

Introduction: Over the last twenty years, AID has obligated more than \$2.7 billion for population assistance, making it the leading supporter of family planning programs in developing countries. The impact of AID's population program efforts are evident in a number of ways: (1) development of population policies, (2) development of family planning programs, (3) rising rates of contraceptive prevalence, and (4) reductions in levels of fertility and mortality.

Policy Setting: AID has furthered the policy development process in developing countries by supporting censuses and demographic surveys, educating national leaders on the determinants and consequences of rapid population growth, and assisting policy planning and evaluation efforts. During the past twenty years, a growing number of developing countries have embraced family planning as a means for lowering rates of population growth and for improving the health of mothers and children. Among countries receiving AID population assistance, 38 had explicit policies for lowering their rate of population growth as of 1983, compared with only 9 in 1966. An additional 17 countries directly support family planning programs for health or other reasons.

Program Activities: About 80 percent of AID's population program resources have directly supported provision of family planning services, including training of program personnel, provision of contraceptive commodities, and population education and information programs. In addition, AID is supporting numerous activities to make service delivery more effective and efficient. Private sector health systems in developing countries are being activated to add family planning to existing health care services. Operations research projects continue to test new service delivery mechanisms and to monitor program implementation. Finally, AID supports contraceptive technology research focusing on the development of safe and effective methods which have low infrastructural requirements.

Impact on Contraceptive Use:

In a number of developing countries where AID has invested significant population resources, the proportion of married couples currently using contraception has increased dramatically. Of the 18 AID-assisted countries with survey data on recent trends, 13 have experienced a substantial increase in contraceptive prevalence during the past decade. The most

dramatic increase has been in Thailand, where the prevalence rate rose from 36 percent in 1975 to 59 percent in 1981. Sri Lanka, Mexico and Peru also have recorded large increases in contraceptive prevalence since the introduction of organized family planning programs. Even in Kenya, prevalence increased from 7 to 17 percent in the seven years between 1978 and 1984.

Demographic Impact:

Between 1970 and 1985, the crude birth rate for developing countries declined from 41 to 36. Numerous scientific studies have documented the important contribution of family planning programs to this observed reduction in fertility. For example, a recent study found that in twelve of fourteen countries over half of the recorded decline in the crude birth rate can be attributed to increased contraceptive practice among married couples. Studies of fertility decline in Mexico, Tunisia, Thailand, and Indonesia show that the pace of fertility decline was much faster after the introduction of family planning programs than before.

It is clear that AID support to family planning programs in these and other countries have contributed to lowered birth rates. In addition, these programs contribute substantially to reductions in mortality rates -- since child-spacing practices reduce child and maternal mortality. Studies have shown that if couples in developing countries spaced births at least two years apart, child mortality would be reduced by about 20 percent. In addition, if women limited their childbearing to ages 20-39, maternal mortality would be reduced by 11 percent. Information and education activities supported by AID are emphasizing child-spacing as an important family health measure.

ESF NON-PROJECT ASSISTANCE

During the 1980s, non-project assistance (cash transfers, commodity support, economic stabilization) represented almost 65 percent of AID's ESF assistance; and nearly half of all U.S. bilateral assistance. By comparison, non-project assistance is a much smaller share of other donor aid: Canada 20 percent, Japan 19 percent, France 15 percent, Germany 15 percent and IBRD/IDA 7 percent.

AID has invested approximately \$10.9 billion in ESF non-project assistance from 1980 through 1985--roughly \$1.8 billion a year. The U.S. is far and away the leader. The next closest bilateral donors are Japan and France with each providing \$0.7 billion a year.

These are some of the impacts which have resulted from AID's non-project assistance:

- * In Zimbabwe, AID local currency programming supported substantial, additive investments in agriculture, health and education.
- * In Sudan and Somalia, AID non-project assistance has been successful in trade liberalization, exchange rate adjustments and agricultural price reforms.
- * AID non-project assistance is also attempting to influence institutional and management reforms in Kenya's Finance and Agriculture Ministries.

Some of the lessons learned and disseminated include:

- * Non-project assistance is AID's major policy reform tool. It has been most effective when used as part of a joint donor effort (including the World Bank and IMF).
- * An overvalued foreign exchange rate distorts economic decisions and misallocates resources. In such a case, a commodity import program (CIP) can end up financing the wrong commodities or supporting LDC industries that lack comparative advantage. In addition, it will create windfall profits for traders who are lucky enough to bring in CIP commodities. In a number of cases AID has been successful in using its CIP as part of a leverage package to encourage more appropriate exchange rates.
- * Counterpart generations can be programmed to have a major developmental impact. It allows AID an opportunity to become involved in an LDC's budget allocation process to assure that critical sectors receive adequate local currency funding.

PL-480 FOOD AID

AID's PL-480 Title I and Title II assistance totaled about \$8.2 billion during FY81-85, or an annual average of about \$1.6 billion.

The United States is the largest food aid donor by a very considerable margin. In the 1950s and 60s, nearly all food aid was provided by the U.S. While other donor assistance is increasing, in the 1980s the U.S. still provided over half the world's food aid, with some 25 other donor governments providing the balance.

These are some of the impact which have resulted from AID's food aid program:

- * AID used PL-480 food in Jamaica and Bangladesh as part of a larger reform effort to encourage policy changes that increased agricultural production.
- * Due in part to the availability of PL480 grains, Egypt's daily per capita food consumption rose from 2,750 calories in 1977 to over 3,000 calories in the early 1980s.
- * AID's food assistance has been instrumental in supporting government food distribution programs in Bangladesh and to a lesser extent in Sri Lanka. These programs assure the poor in those countries a minimum caloric intake.

AID has learned valuable lessons from this experience and has been able to identify needed agricultural reforms which have been accepted by other donors and LDCs. These include:

- * Higher crop prices paid to farmers.
- * Reforming inefficient state-run agricultural enterprises.
- * Reducing agricultural subsidies and liberalizing trade.
- * Increasing agricultural research and training.

The results of these changes are clearly visible:

- * Only 20 years ago India had a famine worse than Africa's current famine. After undertaking extensive agricultural reforms, India is now self-reliant in grain.
- * In drought stricken Africa, farmers in Malawi, Somalia and Zambia were able to dramatically increase grain production after their government's increased crop prices and placed greater reliance on the free market.
- * In Sri Lanka, AID influenced policy changes have moved the country to the point of self-sufficiency in rice production.
- * Reforms have been initiated in Bangladesh which have instituted agricultural and food policy reforms.

WOMEN IN DEVELOPMENT

AID's legislative mandate to "integrate women into the national economies of developing countries" was the first among development donors. It pre-dated the Decade for Women (1975-85) and the UN Declaration of International Women's Year (1975). AID has obligated over \$10 million annually for Women in Development (WID) since 1978.

AID's 1982 Policy Paper on WID first emphasized both the economic efficiency of including women in development projects as well as traditional equity concerns.

This AID Policy Paper served as a model for other donors which included:

- * The Canadian International Development Agency (CIDA);
- * The Asian Development Bank; and,
- * OECD/DAC's Guiding Principles on WID to its 17 member countries.

AID has been a catalyst for other donors and has developed innovative approaches to WID which include:

- * A pilot project in Yemen which uses a specially designed micro-computer simulation module to demonstrate to government officials the key role women can play in that country's economic development.
- * A worldwide loan guarantee program so that women operating small businesses can get credit from commercial banks.
- * Creation of a "WID Data Base" that compiles gender-disaggregated census data by country and sector for the developing world.

Some of the lessons learned from this project experience include:

- * A recent evaluation of AID's WID Program showed that failure to achieve expected agricultural project impacts was traced to false assumptions about gender roles in rural households.
- * The benefits of projects may be reduced as a result of false assumptions about women's responsibilities, their access to delivery systems and technical responses which are inappropriate to their needs.

TECHNOLOGY TRANSFER

AID has funded some one thousand technology transfer and generation projects from 1974 through 1984, which is one-fourth of the total AID portfolio. In agriculture, technology transfer projects accounted for \$273 million out of 4.4 billion obligated during the decade.

Recent project activities have emphasized energy and general science and technology development more than in the past, and funding has shifted from central to regional bureaus, especially Africa.

These are some of the impacts which have resulted from AID assisted technology transfer projects:

- * An AID funded program to assist small scale farmers adopt appropriate rice machinery has been successful in Thailand, Philippines and Indonesia enabling production increases through double and triple cropping.
- * An AID assisted fisheries processing and marketing project in Djibouti resulted in increased catches and privately owned processing as a result of technology transfers to a cooperative.
- * An AID funded horticultural marketing project in Brazil resulted in significantly reduced spoilage, more efficient wholesale marketing while strengthening the development of supermarket chains.
- * An AID funded transfer of low-cost extrusion cooking technology in Costa Rica was successful in adapting baby foods to local tastes utilizing locally produced soybeans.
- * AID funded transfer of social marketing technologies to the family planning organization in Egypt has brought about successful dissemination of contraceptive technologies.

Lessons learned from this experience include:

- * The importance of active private sector involvement in technology transfer projects.
- * The need to go beyond the hard technology to transfer soft technologies such as marketing and communication technologies to ensure widespread utilization and diffusion.
- * The role of strategic management of the transfer process in project success.