

PD-ABL-035

94603

The Impact of USAID Assistance on Baluchistan
1982-1987

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June 1987

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LIST OF ABBREVIATIONS

ACE	--	Agricultural Commodities and Equipment Program
AZRI	--	Arid Zone Research Institute
BALAD	--	Baluchistan Area Development Project
CIDA	--	Canadian International Development Agency
CIMMYT	--	International Wheat and Maize Improvement Center
CWM	--	Command Water Management Program
DSTP	--	Development Support Training Project
ECE	--	Energy Commodities and Equipment Program
EP&D	--	Energy Planning & Development Project
EPI	--	Expanded Program of Immunization
FATA	--	Federally Administered Tribal Areas
FP&D	--	Forest Planning and Development Project
FSM	--	Food Security Management Project
ISM	--	Irrigation Systems Management Project
MART	--	Management of Agricultural Research and Technical Project
MCII	--	Malaria Control II
NARC	--	National Agricultural Research Center
NGO	--	Non- Governmental Organization
NIMRT	--	National Institute for Malaria Research and Training
NIPS	--	National Institute for Population Studies
NRIFC	--	National Research Institute for Fertility Control
NRIRP	--	National Research Institute for Reproductive Physiology
NWFP	--	North- West Frontier Province
NWFPAD	--	North- West Frontier Province Area Development Project
OFWM	--	On-Farm Water Management Project
ORT	--	Oral Rehydration Therapy
PARC	--	Pakistan Agricultural Research Council
PFI	--	Pakistan Forest Institute
PHCP	--	Primary Health Care Project
PWP	--	Population Welfare Care Project
RE	--	Rural Electrification Project
RRM	--	Road Research Management Project
SMC	--	Social Marketing of Contraceptives
TADP	--	Tribal Areas Development Project
TIPAN	--	Transformation and Integration of the Provincial Agricultural Network
WAPDA	--	Water and Power Development Authority
WHO	--	World Health Organization

The Impact of USAID Assistance on Baluchistan (1982-1987)

Introduction

FY 1987 marks the last year of the six-year \$1.625 billion U.S. economic assistance commitment to Pakistan initiated in 1981. This paper provides a summary of specific USAID-funded development activities in Baluchistan during this period. As many projects will continue beyond 1987, on-going and anticipated activities are often included as well. Since some of the activities described are carried out by provincial implementing agencies, while others are federal projects having a direct impact in the province, figures should be regarded as "best estimates" suggestive of orders of magnitude rather than as concrete statements of actual disbursements.

The GOP as well as A.I.D. maintain a special interest in the development of Baluchistan. This interest stems from both strategic and economic concerns. Baluchistan's location, long coastline and large land mass give it strategic significance. The province's importance was further heightened by the Soviet invasion of Afghanistan in December 1979, leading to fears that the Soviet Union would support Baluchi separatist movements. Economically Baluchistan's status as a "lagging area" also constitutes grounds for special concern. Estimates indicate the provincial per capita income is between one-half and two-thirds of the national average. Similarly, the provincial literacy rate may be as low as 9 percent contrasted with a national average of 24 percent. Such discrepancies prevent Baluchistan from moving into the mainstream of Pakistan's economic and social life.

Official planning documents also underscore the need for more serious attention to the development needs of Baluchistan. Much is made of the agricultural potential of the province's "virgin lands" and the mineral wealth of its sparsely populated desert and mountain regions. Yet successive governments have been unsuccessful in transforming this potential into a dynamic and self-sustaining growth which makes a major contribution to Pakistan's economy.

Baluchistan's poor economic performance in the past can partly be traced to its unique physical characteristics which pose special development problems. It is Pakistan's largest province in terms of land area (347,200 square kilometers or 43.6 percent) yet contains the country's smallest population (4.3 million or 5.1 percent). Markets are limited and the few towns are separated by long distances. Despite a 720-kilometer coastline and despite reports of mineral wealth, the economy remains very much based on agriculture. Eighty-five percent of the population lives in rural areas, 65 percent of the labor force works in agricultural occupations, and 56 percent of the provincial GDP derives from the agricultural sector. Serious infrastructural weaknesses and scarce water resources are among the leading constraints standing in the way of more rapid economic growth.

Baluchistan has received approximately 7.3 percent of USAID funding under the 1982-1987 program. The composition of the program reflects prior agreement between the Governments of the United States and Pakistan on long-term development priorities and focuses on agriculture and irrigation, energy, and health and population. Part of this assistance comes in the form of such area-specific USAID projects as the Baluchistan Area Development and the Arid Zone research component of the Management of Agriculture Research and Technology Project. Elements of most other AID-funded projects include some activities which benefit Baluchistan. Specific sectoral activities and accomplishments are provided below:

Agriculture and Rural Development

The \$40 million Baluchistan Area Development (BALAD) Project is the centerpiece for A.I.D.-funded development activities in Baluchistan. Its emphasis on water and rural infrastructure responds directly to priorities shared by provincial and federal planning officials. The project focuses on Baluchistan's extremely poor and isolated Makran Division, the area most neglected by past development programs. Individual components provide for up-grading, maintenance, and construction of roads; water sector improvements, including the construction of small dams and the improvement of karez wells and water courses; and man-power training to strengthen management and administration in the area.

Because the Makran Division is seriously isolated from the other areas of the province and from the market center of Karachi, the BALAD project will improve and rehabilitate priority roads to assure adequate access into, out of, and within Makran. U.S. advisors and \$15,782 of financial assistance are helping the province's Communications and Works (C&W) Department improve up to 900 Kms of trunk routes: widening roads, easing curves, improving water crossings and realigning roadways. The 110 Km mountainous road from Bela to Awran is the major traffic bottleneck from Makran to Karachi. Sections are impassable in rainy weather and must be realigned and paved to allow year-round transportation to this remote area. Final design of this road scheme should be completed by March 1987, with construction beginning in August 1987. USAID has financed the design of a bridge over the Ketch River at Turbat, and is now moving forward to finance its construction cost. This bridge will link the town of Turbat with the Bela-Awaran/Hoshab-Mand Road.

As part of the roads component of BALAD C&W staff ranging from foremen to executive engineers will be trained in drainage design and construction, general construction practices in the field, quality control, planning and maintenance of roads, and operation of equipment. Plans for this training will be finalized as the project moves forward. The project is also helping the C&W Department improve its overall planning and operation techniques. Technical consultants are training management staff in planning road maintenance and development, generating income/increasing budget resources, and introducing cost-effective drainage techniques. A six week training course was arranged for 12 persons in the Planning and Development Department in March/April 1986 and a ten week course was conducted for 12 persons in January 1986.

Heavy equipment is being procured for the Departments of Communications & Works and Irrigation in the amount of about \$2.5 million under the ACE Program. Major items of equipment have been received and the rest are in shipment process.

Due to erratic rainfall in Makran water for irrigation is a constant problem. More than 90 percent of the district's irrigation water comes from 457 "Karezes", long sub-terranean tunnels that collect and transport underground water. With technical improvements the karezes could provide even more water. As part of BALAD, 95 Karez wells have been targeted for improvement to increase the channels' flow and operational lives. At the same time U.S. assistance will help the Irrigation Department to develop new surface water resources. Sites for the construction of small dams have yet to be identified. The program will also provide \$1.8 million to renovate 144 water courses to farmers' field and the precision leveling of 4,175 acres of land which will improve soil and water use. Work is expected to begin following major road and water interventions.

Strengthening the capacity to plan and carry out projects for Baluchistan as a whole, and for Makran in particular, is an important element of the Government of Baluchistan's development effort. Through BALAD, U.S. advisors are helping the Planning and Development Department to improve its systems for designing and analyzing new development projects. Monitoring, reporting, and evaluation systems within the department will also be improved. From January 1985 to October 1986 the Planning & Development Department received USAID technical assistance in areas of organizational survey, case studies of the Annual Development Plan and computer training. At the same time, another part of the project will help the Government of Baluchistan establish and train staff of the newly formed Project Planning and Management Unit (PPMU) located in Turbat. PPMU's purpose is to plan, monitor, supervise, and evaluate Makran's development programs. In addition, PPMU is receiving office supplies and equipment from the project's funds.

To improve management in the agricultural area BALAD provides short-term training for field assistants. The field assistants can extend the latest information and techniques in pesticides, water use, fertilizers etc. to the farmers. These assistants will also be provided with motorcycles, the lack of which has severely hampered their extension efforts. So far five motorcycles have been procured and five more are on order. These motorcycles are used for project work including a socio-economic survey being carried on in the Makran Division.

Finally, a special \$1 million supplementary fund will help Makran Division officials deal with current development problems. At present, this fund has helped finance the construction of several school buildings. Twenty-five other small development activities are underway which include small water projects and a marketing study to identify profitable crop alternatives for the province.

Agriculture, being the single largest sector of Pakistan's economy, employs more than half of the country's work force and contributes more than one-fourth of its GNP. Yet productivity per unit of land has not improved proportionately with the national GDP growth rate of six percent for the economy as a whole. Most of the gains that have occurred are the result of increasing acreage and cropping intensity. Yet studies have proven there is the potential for substantially raising crop yields in the short run through increased inputs combined with well-timed irrigation and improved farm practices. However, in the long run sustained agricultural growth will only be achieved through major efforts to strengthen the institutional framework for research, education, and extension.

The Management of Agricultural Research and Technology (MART) Project is part of an integrated USAID effort to help Pakistan strengthen its capacity to undertake agricultural research and generate and disseminate quality and relevant agricultural technology to the farmers of Pakistan. With the combined funding of USAID (\$30 million), the GOP (\$1.1 million) and other donors (\$0.75 million) the MART project is being implemented through the Pakistan Agricultural Research Council (PARC) at the federal level in collaboration with provincial institutions and agricultural universities.

The premise upon which MART is based is that breakthroughs in yields can only be brought about through the pursuit of a science-based agriculture. Pakistan has numerous institutions involved in agricultural research and agricultural universities and training facilities. Yet the inefficient utilization of these resources and the lack of sufficient emphasis on research management and administration acts as a constraint to improved agricultural research. Under MART's Research Management and Administration (RMA) component, Pakistani and American specialists are working with federal and provincial agricultural research and training institutions and agricultural universities to analyze and develop a system for better research planning and information dissemination, while improving financial and management systems.

In Baluchistan the following institutes are receiving training, technical and commodities assistance under the MART Project: Agriculture Research Institute, Quetta; Arid Zone Research Institute, Quetta; and Live Stock and Animal Husbandry Department, Quetta. Project funds are supplying vehicles, agricultural commodities and equipment, and computer hardware and software worth \$0.368 million for strengthening provincial research capabilities.

Communication of agricultural research findings to the farmer is essential if crop yields are to be increased. USAID is funding the construction and equipping of a multi-media studio at the National Agricultural Research Center (NARC) in Islamabad. The studio staff will create up to 100 documentaries, training tapes, and other programs in styles appropriate to the various provincial audiences, including farmers of Baluchistan.

To improve the capacity of the agricultural research community to identify their personnel needs and institutionalize in-service career development courses, USAID is financing the implementation of a personnel needs assessment, the development of in-country training courses, and training of provincial training facility staff. The \$1.6 million expansion of the NARC training facility in Islamabad is also planned which will benefit staff from all the provinces, including Baluchistan.

MART's Arid Zone Research component was designed to strengthen the capacity of the Arid Zone Research Institute (AZRI) in Quetta to generate and disseminate quality and relevant technologies aimed at increasing agricultural production in Pakistan's non-irrigated area. Under a collaborative agreement with the International Center for Agricultural Research in Dry Areas (ICARDA), USAID is financing technical assistance, training to upgrade the capabilities of AZRI staff, and research supplies and equipment. The project will supply fellowships in the U. S. for graduate degree training in areas such as range management, animal husbandry, plant breeding, agronomy, crop protection, soil science, and extension. Three in-country courses were arranged at AZRI and attended by 21 provincial research staff. \$570,000 of commodities have been ordered which include lab and office equipment, animal range equipment, and agronomy and meteorological equipment. Ten vehicles have been provided to AZRI for conducting research in rain fed areas. Field trials of Arid Zone research are planted on farmers' land at Dasht, Mangocher, Kovak and Khozdar in Kalat Division. Range land studies are being conducted at Zarchi in Kalat Division and Tomagh in Laralai Division.

Finally, USAID is supporting Pakistan's wheat and maize coordinated programs which focuses on constraints to increased production of wheat and maize. In collaboration with the International Wheat and Maize Improvement Center (CIMMYT), the GOP and USAID are working to improve research and outreach activities. Farm trials are being conducted to help identify higher yielding and better adapted varieties of wheat and maize to Pakistan's conditions. A detailed agro ecological analysis is being developed that will permit the identification of wheat and maize zones in Baluchistan and Pakistan as a whole. The increased use of farming systems research methods will help maximize the chance of adoption of new ideas and technologies by the farmers of Baluchistan and all of Pakistan. Under this component one individual from the Agricultural Research Institute has received short term training thus far.

Pakistan's growing population is consuming more of the nation's food even as the government hopes to build crop surpluses for increased exports. At the same time considerable amounts of food are destroyed by pests during storage. To meet the challenge of estimating food production needs and to protect crops once they are harvested the GOP and USAID are working together to improve Pakistan's food management and planning practices and build better storage facilities.

Essential to improved food management is reliable up-to-date crop data and sound economic and policy analysis based on those data. Under the \$35 million Food Security Management (FSM) Project it is estimated that approximately \$1.6 million of funds are targeted for Baluchistan to improve agricultural data collection activities and post harvest management practices. The introduction of the Area Sampling Frame (ASF) methodology developed and being implemented by the USDA/Statistical Reporting Service (SRS) will provide timely and accurate agriculture statistics in Baluchistan. Technical assistance is being provided by the USDA/SRS which will focus on sample frame development, sample selection, and data collection and processing. USAID has also agreed to finance new aerial photography equipment for the GOP. Long term degree and non-degree training will be provided for up to 24 persons from the Federal Bureau of Statistics and the provincial agricultural departments. Short term and incountry training programs in the new ASF system will be provided as the needs are identified. It is anticipated that approximately 408 individuals nationwide will receive training under the Agricultural Data collection (ADC) component by the end of the project in 1990. So far two individuals from Baluchistan are in training in the U.S., while ten have received in country training in statistics and computers. USAID is also providing automated data processing equipment, computers and calculators and field vehicles and motorcycles for enumerators to the Department of Food and Agriculture (DFA) Statistics Section. It is estimated that when the ASF system is operational the province would save about 75 percent of the cost of the current system of data collection. The savings could then be used to expand data collection to cover areas now neglected.

In Baluchistan project funds will not only be used to implement the ASF but to accelerate the institutionalization of agricultural data collection as well. USAID will finance the temporary hiring and training of personnel to establish regularized data collection activities in Baluchistan. These personnel will ultimately be hired by the DFA as the system becomes established. During the project life, approximately 45 professional and support staff will be recruited. Some of the positions have already been sanctioned and five professional staff and enumerators have already been deputed to the project.

The agricultural data collected at the provincial level will assist the GOP in its agricultural planning and policy analysis. USAID is working with the GOP at the federal level to establish a new Economic Analysis Network (EAN) which will increase the analytical capacity of Pakistan's institutions involved in agricultural data analysis. In Baluchistan the Baluchistan University/Social Science Department has membership in the EAN. Some of its various staff will receive training to upgrade skills in such areas as economic analysis, econometric techniques, writing skills, data management, and operation of microcomputers. Training of six participants has already taken place. USAID will also supply a computer to the university in June 1987.

There is an urgent need to improve the management of public grain storage facilities to reduce losses, increase efficiency, and halt the physical deterioration of storage systems. Public sector storage losses are estimated to be 5.1 percent for wheat and 3.8 percent for rice, figures well above acceptable industry standards of 1.0 to 1.5 percent. USAID is funding technical assistance and training to assist facility managers in improving quality and inventory control, accounting and management of plants, equipment and personnel. So far two individuals from Baluchistan have been nominated for short-term training in the U.S. in post-harvest management related fields. Meanwhile, USAID plans to rehabilitate storage facilities and develop a more effective pest control program for storing grains to improve Pakistan's overall food security. The rehabilitation of 750,000 MT Storage godowns of wheat will begin in FY1988 at a cost of \$7.5 million. Out of this, \$232,000 will be spent to rehabilitate grain storage facilities in Baluchistan.

The dependence of Pakistan's agriculture on irrigation is well-known. With 30 million acres of farmland draining water from the Indus River and its far major tributaries, Pakistan has one of the world's largest and most complex irrigation systems, a system of major dams, barrages, large canals linking rivers, tubewells and irrigation canals and watercourses, of various capacities, bringing water to the farmer's field. Yet, irrigated cropland is producing low average yields, through research evidence has indicated that agricultural production could be increased five fold or more. This situation is due to a number of constraints which are being addressed by the USAID-sponsored Irrigation Systems Management Project and the On-Farm Water Management Project.

The \$90 million Irrigation Systems Management (ISM) Project aims to increase agricultural production and farmer income by improving the management of irrigation water resources. By increasing the capabilities of the institutions involved in irrigation planning, design, research, operation, and maintenance, dependable irrigation water will be available equitably to all farmers. Under ISM emphasis is placed on the rehabilitation and maintenance of 8,400 miles of canals and 2,100 miles of surface drains nationwide, the improvement of overall institutional management skills, the improvement of water management planning and research capabilities, and the development of the Command Water Management program.

In Baluchistan, the USAID/ISM Project is financing the rehabilitation of 85 kms of canals. A total of 9 schemes have been identified for rehabilitation. To be completed in June of 1987 is the Saliaza scheme at a cost of \$329,000. USAID has provided earthmoving equipment, such as bulldozers and dump trucks, to aid in these rehabilitation activities.

A strategy has been developed to link the canal and drain rehabilitation with an operation and maintenance program under the Provincial Irrigation Department (PID). This includes efforts to computerize the operations and maintenance budgetary process and to establish an inspection and management information system for insuring timely operation and maintenance.

USAID is funding the purchase of computers for the PID's operation and maintenance activities. New equipment and spare parts will be procured to increase the PID's machinery stocks. This addition of new machinery will expand the capacity of the PID to keep ahead of continuing maintenance tasks. Meanwhile, the PID equipment maintenance workshop in Quetta has been renovated and reequipped with repair tools and equipment, such as wrenches, welders, hydraulic jacks, and cranes, to maintain the new equipment on a schedule which will permit efficient use. Improved control systems are being instituted for the management of this machinery to facilitate its efficient assignment to areas of greatest maintenance need. Training of the technicians who repair and maintain the equipment is also underway.

Under this project assistance is also being given to improve the PID's ability to deal effectively with design-related maintenance problems. An extensive hydraulic data collection and analysis has been conducted under World Bank financing and now USAID consultants to the PID are helping to design rehabilitation works that will minimize future maintenance problems. USAID has equipped the PID Canal Engineering Design office in Quetta with computers to facilitate the use of modern engineering methods in their rehabilitation design work. Drafting tables, survey equipment, and engineering reference books are also being provided.

As part of the overall effort to improve the PID's operation and maintenance capabilities, USAID funds are being provided to conduct management training programs for PID personnel. In Baluchistan irrigation staff will receive training in their respective field of specialization through formal and inservice training. An inservice management training program that draws on indigenous institutions is being developed which will allow for the widest possible dissemination among various management levels even after the life of the project.

To strengthen the capability of the PID to engage in the planning process for future water sector projects, USAID advisors are working with PID management personnel to transform policy guidelines into action programs. Planning and management seminars are being conducted to examine constraints of the existing system and to seek solutions to recurring problems. The planning process is focusing on how to utilize available resources to achieve maximum productivity. Research activities on water management and engineering and hydraulics are being supported to aid the PID in its decision-making process. Another major planning exercise under this activity is the involvement of the PID with WAPDA and USAID in the design of the Command Water Management Program.

The rehabilitation works, institutional improvement and planning and research components of ISM are laying the foundation for the improved delivery of water through the canal system. Yet in order to repair and maintain a system as large as Pakistan's, the government must also rely on the farmers themselves. The successful implementation of the GOP/USAID On-Farm Water Management (OFWM) pilot project to teach the farmers how to improve watercourses, the small canals that feed their fields, has led to the commitment of USAID funds for the Command Water Management (CWM) Program. Co-financed with the World Bank this component of ISM aims at improving irrigation services in selected areas through community participation and more efficient water management which will in turn increase agricultural productivity. CWM activities include institutional improvement, training, water management improvement, physical improvements, and monitoring and evaluation.

In Baluchistan the command area (i.e. the area served by a respective irrigation system) which is receiving USAID assistance under the ISM/CWM program is the Las Bela Branch. Civil works on the Command Area have already begun. A Sub-Project Management Office (SMO) has been established at Las Bela to implement activities with the assistance of ISM consultants and a CWM Technical Assistance Team. USAID will finance instrumentation for water management, communication equipment, computers, and various measurement equipment for the SMO. The officials who staff the SMO will receive irrigation management training and participate in a study tour.

The SMO is preparing plans for implementing physical and operational improvements and monitoring and evaluating CWM activities. They are also encouraging local Water Users Associations (WUAs) to participate in the planning process. Field workers will also receive training to help the farmers develop a viable WUA.

The \$18.4 million USAID On-Farm Water Management (OFWM) Project was designed to decrease the losses of water in the farmer-operated section of the irrigation system through the improvement of their watercourses. Also, precision leveling of fields could permit application of water uniformly to all parts of the field. Training of farmers in improved crop and water management techniques would also help increase agricultural yields.

In Baluchistan \$1.96 million of OFWM Project funds have been targetted for the improvement of 5 watercourses, the precision leveling of 510 acres, and the strengthening of institutions essential for a water management program through training and technical assistance. The watercourse improvement and precision land leveling activities in Baluchistan have saved approximately 11 acre feet of water on an annual basis and increased cropping intensities by an average of 15 percent. Approximately 300 farmers have benefitted from these improvements.

In Baluchistan a directorate of OFWM within the Provincial Department of Agriculture has been established and staffed by 231 individuals in order to direct the implementation of the OFWM Project. This directorate receives federal coordinating support through the OFWM cell in the Ministry of Food and Agriculture and assistance from a team of technical experts. To improve the provincial capability to deliver and coordinate water management services USAID is providing computers and the technological training to operate them. Through seminars, workshops, and joint research closer coordination is being achieved between agricultural, irrigation, and water and power institutions in an effort to achieve more efficient water management.

Actual field operations are being carried out by fifteen OFWM Field Teams, comprised of engineers, land development and agricultural officers, and field assistants. These teams are responsible for designing watercourse improvements, and promoting and encouraging farmer participation in water course rehabilitation and maintenance and farmer education in water and crop management. Long and short term training has been provided to 24 officials and staff in management skills, water management extension, engineering and computer science. On the job, short term training has also been provided to nine individuals. Water Users Associations (WUAs) have been formed and their members/officers have received training in water management technology. An On Farm Water Management training center/demonstration farm has been established at Quetta. USAID is supplying field equipment to this center.

The success of the OFWM project which is winding down this year has played a major role in focusing the attention of all donors on the need to reduce watercourse losses at the farm level. USAID is continuing its assistance in the improvement of irrigation systems, however, under the Irrigation Systems Management Project in cooperation with the World Bank.

Trees play a major role in Pakistan's economy. The great majority of people depend on them for heating and cooking. They are also used for fodder in the rural areas and for timber products. Yet the nation's productive forests, which make up less than four percent of the country's total land base are being consumed faster than new trees can be grown. In addition, an increasing population and rise in the price of kerosene is putting even greater pressure on decreasing wood resources. The \$25 million USAID-funded Forest Planning and Development (FP&D) Project is aimed at helping reverse the decline in Pakistan's fuelwood and timber inventories through growing trees on farms (private lands) in a big way and thus transfer the activity to farmers. Approximately \$2.5 million of FP&D funds are targeted for Baluchistan to improve operations of the Provincial Forest Department and to support planting of tree crops for fuel on marginal lands.

To improve the capabilities of the Office of Provincial Chief Conservator of Forests (O/PCCF) in Baluchistan, USAID is providing technical assistance and training opportunities for the O/PCCF staff. Planning, project design, budgeting, monitoring and evaluation skills will be improved to enhance the capabilities of these staff in assisting with responsibilities that growth in the farm and energy forestry activities will require. Long-term training will be provided to one senior professional member in policy, planning, and administration. Short-term training has enhanced the monitoring and evaluation skills of one other O/PCCF staff member. These programs are being supplemented by study tours within Pakistan and elsewhere in Asia. Incountry tours have been given to two officers while a study tour to U.S.A. was given to the Baluchistan Chief Conservator of Forests. In addition two incountry training workshops were attended by fifteen forest officials from Baluchistan.

USAID is providing \$850,000 of assistance in farm and energy forestry field operational activities in Nasirabad District of Baluchistan. The project area includes three of Nasirabad's five tehsils (Jhat Pat, Usta Muhammad, and Dera Murad Ismail). In these areas there is an excess of irrigation water which could support tree growth as supplemental crops on private irrigated farmland. The FP&D project will provide technical assistance, training, commodities and financial support to the Baluchistan Forest Department to enable it to establish and implement a program to assist farmers in producing tree crops on suitable farmland. Because of the critical need for fuelwood to free up cowdung for use as fertilizer and soil conditioner, the objective of the project will be to help each farm family achieve a minimum of self-sufficiency in fuelwood production. Thus, the program is designed to encourage 3,130 farm families to establish, at a minimum, the equivalent of one acre block plantation of a fuelwood-producing species, such as A. arabica. Because the market for wood mining timbers is strong in this district some families may wish to establish larger quantities of trees for use as a commercial timber crop.

Under the project USAID is supporting the establishment and initial operation of an efficient farm forestry staff for the target area. Long and short-term training is being provided in outreach program design and implementation, agroforestry systems and management. USAID will assist in the construction of essential office space and warehouse facilities to support this staff. In Baluchistan construction is scheduled to begin in the fall of 1987 on one district forest office and two range offices located in Nasirabad District.

Training of farmers in the target areas will also be conducted. The emphasis will be on increasing knowledge about the advantages and disadvantages of farm forestry and to develop skills in tree planting and management. USAID will assist in the preparation of educational materials and events that will inform the farmers of the benefits of farm forestry and instruct them in its practice. Study tours will also be an important means of encouraging the adoption of farm forestry practices. Beginning in June of 1987 the first four farmers from Baluchistan will be sent for training to U.S.A.

USAID is also subsidizing the cost of seedlings for farmers and assisting the private sector in establishing seedling nurseries to provide planting stock for fuelwood and fodder production.

To promote increased agricultural production and to provide needed balance of payment support in Pakistan USAID is financing the import of needed agricultural commodities, particularly fertilizers, edible oils, and irrigation machinery. Funding is provided annually through the Agricultural Commodities and Equipment Program and the PL480 Food for Peace Program and is based on projected needs in the agricultural sector and according to declared policies of the GOP.

Between 1982-87 under the \$475 million Agricultural Commodities and Equipment (ACE) Program USAID has financed the nationwide importation of \$141.5 million of phosphatic fertilizers (DAP and TSP), \$98.9 million of wheat due to crop shortages, \$24 million of raw cotton, \$47.3 million of essential irrigation canal rehabilitation equipment, and \$16.2 million of agricultural commodities

for other AID-assisted projects (such as FP&D) Baluchistan has benefitted from the importation of all these items as well as from the availability of \$30 million for private sector imports of equipment and commodities. (This part of the program is handled along commercial lines by participating banks.) By the end of the ACE program in 1991 it is anticipated that \$14.9 million worth of fertilizer (\$2.9 million), irrigation equipment (\$6.5 million), and other equipment (\$5.5 million) will have been provided to Baluchistan.

Between 1982-1987 under the \$309 million PL480-Food for Peace Program USAID has financed the nationwide importation of about 380,000 metric tons of soybean oil, which provides an essential ingredient for the manufacture of ghee (a key food staple). Distributed according to population, Baluchistan received \$15.3 million (or 5.1 percent) of the total amount of edible oil. Local currency generated through the sale of the oil (approximately \$50 million per year) provides financing for priority development activities and promotes policy dialogue. Accomplishments in the policy dialogue area have included the removal of edible oil import restrictions and major deregulation in the domestic oil industry.

Energy

Demand for energy in Pakistan has outstripped supply in recent years and continued demand supply imbalances pose a clear threat to Pakistan's continued economic growth. The U.S.-assisted energy program in Pakistan is addressing the issues of increasing energy availability and developing indigenous energy resources so that oil imports can be reduced. The program aims to improve the structure of the country's energy institutions and to provide loans, grants, technical assistance and training in four areas: overall energy planning, development of local and other indigenous resources, rural electrification, and the modernization of energy equipment.

Under the Energy Planning and Development (EP&D) Project, Baluchistan will benefit directly from (a) up to \$1 million in improvements in private industrial energy conservation opportunities, (b) up to \$1 million in coal exploration and up to \$750,000 in coal mining/power applications and (c) up to \$250,000 in renewable energy demonstration and commercialization. The four private industries below have already participated in, or will participate in, preliminary energy surveys conducted under the USAID assisted National Energy Conservation Program with ENERCON (Pakistan's national energy conservation center):

Baluchistan Foundry	Hub Chowki
Baluchistan Glass Ltd	Hub Chowki
Habib Arkady Ltd	Hub Chowki
Pakland Paper	Hub Chowki

Most of these plants will continue under ENERCON and USAID assistance to have detailed energy surveys and the factories with greatest potential will have bankable feasibility studies prepared.

In most cases, the above industries will be given recommendations for no cost/low measures so they can save 10-15 percent or more on their energy related costs of production. Most of the measures will have paybacks of less than one year. Training and low cost demonstration equipment will be provided wherever appropriate to help the industries carry out the savings. Other energy conservation activities will promote more efficient agriculture pumps and machinery.

Renewable energy offers significant potential for isolated populations in Baluchistan. In collaboration with the Directorate General for New and Renewable Energy Resources (Federal Ministry of Petroleum), USAID expects to work with the Baluchistan Development Authority and other entities to promote commercialization of solar water heating, solar crop drying, solar photovoltaic power, solar and wind water pumping, and improved energy efficient traditional cookstoves, primarily through technical assistance, training, and limited commodities.

USAID efforts underway with the Pakistan Council for Scientific and Industrial Research (Federal Ministry of Science and Technology) will help develop and commercialize smokeless coal briquettes. Baluchistan is a key target area for application of these, in an effort to substitute for very scarce and expensive woodfuel, charcoal, dung and kerosene.

In another important coal related area, USAID in collaboration with the Geological Survey of Pakistan (Federal Ministry of Petroleum and Natural Resources) will conduct coal exploration drilling and geology work in the Sor, Degari and other Baluchistan coal fields. Coal mines in these fields already supply coal for the 15 MW coal power station in Quetta built by USAID in the 1960's, the coal briquette industry, and the brick industry of Baluchistan. Together, these coal mining and coal consumers employ over a hundred thousand workers. This further coal resource exploration funded by USAID will help support private sector coal mine developers in their efforts to produce more coal for industry and further power applications in Baluchistan. Already dozens of primarily private coal mines have had coal samples scientifically analyzed for them for the first time under USAID, an important step for later coal sales to new industrial users and to power. USAID may be assisting Baluchistan with further coal power, mining, and other utilizations, in collaboration with WAPDA and other entities.

Finally, Baluchistan will benefit indirectly from \$42 million in additional energy planning, power, coal, oil gas and renewable activities made available through the other aspects of the EP&D Project (underway elsewhere in Pakistan) via its share of national energy delivery systems.

Two thirds of the country's villages are now without electric power. The GOP plans to electrify 90 percent of them by 1990. USAID assistance through the Rural Electrification Project will help the GOP reach this goal by expanding electric power generation and the rural distribution system, reducing energy losses, providing technical assistance and training, and strengthening of the Water and Power Development Authority (WAPDA).

USAID has helped the GOP expand electric power generation through its contribution to the construction of the 400 MW first phase of the \$360 million combined cycle thermal power plant at Guddu (in Sind). The plant will eventually add an additional 200 MW to the Pakistan grid as construction on a second phase has begun. This 600 MW Guddu Power Plant will increase the nation's electrical generation capacity by eight percent. USAID has invested approximately \$13 million in the feasibility studies for developing the Lakhra coal field in the Sind, and plans are now underway to build a \$12 billion coal field plant at Lakhra adding 500 MW to the national grid. Completion is expected by 1993 under funding from USAID, private sector financing, and other donors. Though these expanded electrical generating capacity activities are located in the Sind, benefits will be reaped by all the provinces including Baluchistan.

Each year almost a third of Pakistan's generated electricity is lost before reaching paying customers. Losses are due to overload distribution systems, lack of proper metering, pilferage, and outdated and poor equipment. To attack a full range of efficiency and distribution problems, USAID is providing technical assistance, training and commodities to WAPDA. In addition to the development of a master plan for rural electrification and energy loss reduction, USAID is also advising WAPDA personnel on customer services, collection and analysis of statistics, and staffing and administrative policies. USAID is supplying WAPDA and its distribution facilities with computers and office equipment, feeders maps, training aids, and vehicles. To further reduce the heavy energy losses incurred in the distribution systems, the RE project is purchasing \$22 million of tools, measuring instruments, connectors, capacitors, and similar energy loss reduction commodities to be used throughout the nation, including Baluchistan.

Lack of trained staff, inadequate career advancement incentives, and defective staff selection procedures also obstruct the electrification process. USAID will help WAPDA develop a comprehensive training program that will provide short and long term technical training, literacy training, aptitude

testing and a special career development and incentive program to recruit and retain key personnel. Of the total 36,554 persons to receive in country training in safety, inventory, technical courses, and business and management, it is expected that 1,454 will be from Baluchistan. Out of country short term training is being given to nine individuals from Baluchistan in electrification systems, management concepts customer services, and financial management. Long term academic training in the U.S. is being provided for one individual from Baluchistan in vocational technical education, computer management, inventory and stores, and general management.

USAID and WAPDA are also establishing a separate \$7 million Distribution Training Institute to be located in Islamabad with construction beginning in mid- 1987. The training institute, currently operating in Lahore, receives students from all the provinces solely for the improvement of distribution skills. The Distribution Training Institute currently trains 1,500 students annually. It is estimated that four percent of those students are from Baluchistan.

Finally, a "sister utility" program will enhance the other training programs. WAPDA and American Electric Power will exchange staff, allowing a trade of information and ideas on how to organize and manage electricity distribution most efficiently. The total number of exchanges planned are 154 of which Baluchistan's share is estimated at six.

Improving the production, distribution, and conservation of energy from all fuels oil, gas, coal, sun, water will require Pakistan to import large quantities of hardware. Such equipment as steam generators, solar photovoltaics panels, and thermal insulation are needed to conserve energy, convert industries to lower cost fuels, improve electricity production and distribution, mine and process coal, explore for indigenous oil and gas, and exploit renewable energy sources. These equipment purchases and the dependence on imported oil due to underdevelopment of domestic energy resources severely burden Pakistan's international balance of payments.

Therefore USAID has been providing both government ministries and the private sector with \$100 million in loans and grants under the Energy Commodities and Equipment (ECE) Program to ease this balance of payments burden and to help fuel Pakistan's growing economy more efficiently and from a greater share of its own energy resource base.

In Baluchistan, coal geophysical logging, exploratory drilling and analytical laboratory equipment valued at \$8 million is being provided to Geological Survey of Pakistan (GSP) which is headquartered in Quetta. The equipment will permit the rehabilitation of most of GSP's exploratory drilling capability with two new deep (3,000 feet) drilling rigs intended primarily for use in Baluchistan and never before possessed by GSP. Other new technology transferred to GSP will be two rotary drill rigs for faster and less costly drilling and two new coal geophysical logging trucks, also never before possessed by GSP. Spare parts and drilling consumables will be provided for at least two years of exploration work in Baluchistan, as well as in Sind and Punjab. It is expected that this equipment will greatly contribute to revival of exploration for coal in Sor, Degari and other fields in Baluchistan. This is important because the coal industry employs over 50,000 miners and an equivalent number of people in local associated support industries, such as coal transport and brick kilns.

Under ECE USAID is also providing up to \$7 million of oil and gas exploratory drilling equipment to the Oil and Gas Development corporation, for use in Baluchistan, either in collaboration with private Pakistan Oilfields Limited or for downstream sale to private power stations or other private industry. New wells to be drilled include the fields of Rodho and Uch. Rodho gas will come on stream when Dhodak gas and other nearby fields are commercialized; Uch will have the potential for up to 250 500 MW of on site power or equivalent gas use. This oil and gas drilling employs hundreds of local Baluchistan workers and others associated with small support industries.

Baluchistan will eventually also benefit from \$10 million of USAID funded oil and gas seismic and geophysical equipment currently used in Punjab. Taken together, an additional \$85 million of oil and gas exploration and electric power equipment funded by USAID in the Sind and Punjab will benefit Baluchistan through improvements in supply to its share of the national electric power, oil and gas supply systems.

Health & Population

USAID activities in the health and population area reflect three main objectives of the GOP: (1) reducing extremely high infant mortality rates; (2) reducing the burden of preventable diseases such as malaria; and (3) reducing a population growth rate that is the highest in Asia and among the highest in the world. Addressing these issues are four USAID Projects: Primary Health Care, Malaria Control II, Population Welfare Planning, and Social Marketing of Contraceptives.

The \$20 million Primary Health Care Project (PHCP) addresses the need to improve and expand the delivery of health care services, particularly in rural areas, and to reduce infant mortality through an Expanded Program for Immunization and Oral Rehydration Therapy measures which combat preventable diseases. Grant assistance is being provided to the GOP's Basic Health Services Program and the Accelerated Health Program managed by the National Institute of Health. The project seeks to strengthen management of the health facilities, and includes the expansion of the number of mid level Medical Technicians (MT) in selected health facilities where they carry out clinical and preventive services and community outreach. The PHCP began in 1982 with a completion date of 1987. An extension of the project life is now planned to March 1989 with an additional \$10 million of funds obligated. Baluchistan is receiving \$2.6 million of the total project funds.

USAID is presently funding \$0.2 million in Baluchistan to strengthen management systems in the rural health services by providing training to medical officers to upgrade and acquire management skills. Under the management component of the project USAID is helping health care personnel to redesign patient record and drug inventory control procedures. Two management training courses for 58 medical officers and administrators from all districts have been held. The PHCP is currently assisting the Baluchistan Health Department plan for coordinated in service, province wide medical officer training programs which would bring health administration and technical training for vertical programs under one umbrella. Technical assistance from project staff will help the Rural Health Centers in the districts of Quetta, Pishin, Loralai, Nazirabad, Kacchi, and Lasbela to introduce a monitoring system and improve record-keeping and drug inventory control. The health information system is just underway and USAID has supplied registers and forms for this activity. An operations manual is being drafted to aid in the management of the rural health facilities. The development of better management systems will improve the delivery of basic health services in Baluchistan.

Public health skills along with management skills will also be improved under the project. Advisors are helping health officials revise the training curriculum and training materials for health technicians and health workers to give more emphasis to preventive medicine and community health. In Baluchistan USAID is funding the building and furnishing of two medical technician training (MT) schools, in Quetta and Khuzdar. Designs have been completed and construction is to begin in June 1987. Previously there was only one MT school in Baluchistan which was located in Quetta's Public Health School. The new MT schools will consist of student hostels, tutor residences, libraries, and classrooms. USAID will supply textbooks, desks, supplies and other necessary furnishings at an approximate cost of \$300,000. The school at Quetta will train 50 students (25 female and 25 male) while the school at Khuzdar will train a total of 25 students every 18-24 months. Training will be in all essential health services and in basic maternal and child health care. Upon completion of the course these health technicians will be able to extend promotive and preventive health care to the people of Baluchistan.

In an effort to help the GOP decrease the child mortality rate nationwide (at present one child in ten dies before its fifth birthday), USAID is providing support through the Expanded Program for Immunization (EPI) and the Oral Rehydration Therapy Program (ORT).

Under the EPI Program several donor agencies (USAID, CIDA, UNICEF and WHO) are working together with the GOP to achieve 100 per cent immunization coverage by 1990. Nationwide 3.7 million infants and 3 million children 12-23 months will be immunized against six preventable diseases: diphtheria, pertussis, tetanus, poliomyelitis, tuberculosis and measles. In addition 2.6 million women of childbearing age will be immunized with tetanus toxoid vaccine in a phased program beginning with pregnant women, married women, and then other women of childbearing age. USAID's support for the national EPI program totals \$2.5 million over the next two years.

In the Baluchistan USAID will help purchase 36 vehicles, 170 motorcycles, and 300 bicycles for use by mobile and outreach teams of EPI for travel to remote areas. The purchase of injection equipment (syringes, needles, and destruction devices for single use syringes and needles) and equipment to provide tetanus toxoid vaccine are other USAID contributions to the expansion of the EPI in Baluchistan. Training of medical officers is also being planned.

Diarrheal disease kills an estimated 200,000 children in Pakistan each year, yet can be controlled through simple and inexpensive Oral Rehydration Therapy (ORT) measures. USAID is supporting the GOP in its efforts to increase ORT awareness and use throughout Pakistan. Baluchistan will receive the benefits from the national ORT communications and publicity campaign. USAID funds are being used for printing educational materials which are distributed to health centers, health workers, and pharmacists in the province. Programs will be broadcast over radio and T.V. and in the cinema to increase ORT awareness. Training in Control of Diarrheal Diseases for medical officers and health workers at teaching hospitals and District Hospitals, and for health staff at rural health facilities is planned.

Malaria has been identified as a major disease in Pakistan since ancient times and still persists as a serious threat to the country's economic and social well being. The large size of the country, the variety of geographic and demographic conditions, the large refugee population, and the mobility of the population contribute significantly to the malaria control problem. In addition, mosquitoes have developed resistance to the most common insecticides and the disease has become resistant to drug treatment. Since the 1960's USAID has helped Pakistan fund its malaria control program. With continued USAID assistance in FY 1982-87 it is hoped up to 21 million malaria cases will be avoided by 1987. Under the \$41 million Malaria Control II Project (MCII) USAID will be funding provincial and municipal health service personnel training in program management, epidemiology, entomology, parasitology, operational research surveillance, urban malaria control, and safe handling of insecticides. Other components of the program include budget support for basic and operational malaria research, support for the purchase, renovation and equipping of a new buildings for the National Institute for Malaria Research and Training (NIMRT), and the procurement of insecticides, research equipment, urban malaria control vehicles, spraying machines, and other necessary equipment.

The project is also helping the GOP carry out a health education campaign via radio and other media techniques (like posters) to increase public knowledge of spray operations, ways to prevent infection and avoid insecticide toxicity and to encourage use of the nearest health post to obtain blood examinations in case of fever. Plans are under discussion for use of T.V. for that purpose. The use of voluntary collaborators to help with case detection and treatment is under trial implementation. These VCs will receive training work kits and a training manual already prepared for their use.

In Baluchistan the incidence of malaria is currently 0.28 cases per 1,000 population. Under the MC II project \$2.1 million is targeted for Baluchistan to reduce malaria incidence. Training has been provided for 34 individuals from Baluchistan. Up to five urban malaria control personnel from Quetta will receive in-service training in such topics as entomological monitoring, malaria case detection, larviciding, ultra-low volume (ULV)/fogging space spray machines, adulticiding (ULV), ULV equipment maintenance and insecticide safety measures. It is expected 20 individuals from Baluchistan will receive incountry training to develop expertise to carry on an effective malaria control program. Eight individuals will also be trained in malaria control skills through third country observational visits. Under the commodities component of MC II, Baluchistan has received approximately \$.63 million of insecticides and spraying equipment for use in selected localities determined through provincial spray planning meetings each year.

For the Health Education Campaign Baluchistan has received 180,900 posters for a value of \$8,430, while 1,064 spots of health education messages have been broadcast through radio stations in Baluchistan till February 1987. In addition, six individuals have been trained so far through two-week observational visits to third countries under the MC II Project.

With a rate of population increase of about 3 percent a year and a decline in mortality by more than half since 1900, Pakistan's population could double in 25 years. Combined with the facts that nearly 45 percent of the population is under the age of 15 and moving into the reproductive age group, that one in five of the present 103 million population is a female already in the reproduction age group, and that the average age at marriage is less than 20 years, high levels of fertility will continue unless the determinants of fertility are somehow influenced. Two projects - Population Welfare Planning (PWP) and Social Marketing of Contraceptives (SMC) have been developed to deal directly with Pakistan's high rate of population growth.

The Population Welfare Planning (PWP) Project was designed to assist the GOP in its efforts to slow the rate of population growth and fertility as part of the ultimate goal of achieving national social and economic development. Its purpose is to strengthen the GOP's capabilities in the planning, evaluation, research, motivation, logistics supplies and performance of the national population welfare program. Although this USAID assistance is for overall and general institutional development, each province will derive benefits from even those activities which are visibly federal. Under the PWP project Baluchistan is receiving \$3.8 million based on population of the total project funding of \$74 million. The funds are being used to aid provincial population related activities in the areas of program monitoring and analysis, and the delivery of contraceptive goods and services. And as part of the national effort to increase the knowledge and use of contraceptives, Baluchistan receives the benefits from a mass media campaign on population and fertility.

In an effort to decentralize population planning activities, the GOP is giving individual provinces the responsibility for monitoring and implementing the nation-wide family planning effort. Project funds are being used to improve the contraceptive logistics system so as to ensure continued availability of the needed contraceptive supplies. The provincial, district and field staff are also being trained in operating an effective logistics system. In addition, to expand and improve the capabilities of the provincial and district population offices, in monitoring the program performance and collecting and analyzing the inventory and performance-related statistics, the USAID project is also funding the purchase of necessary computer equipment, photo copiers and other supplies.

In order to increase the supplies and types of contraceptives available nationwide, the bulk, approximately 80%, of the AID project assistance is for procurement of contraceptive supplies, mainly condoms and oral pills and IUDs, to be distributed through Family Welfare Centers, Reproductive Health Centers, Community Distributers, other sale agents and through the service facilities of the Non-Governmental Organizations (NGOs) and other provincial line departments.

With the decentralization of the programs field activities, the provincial government has the responsibility for the distribution of these contraceptives. The people of Baluchistan will have greater access to contraceptive goods due to this program.

Current statistics indicate there is an increased desire for voluntary sterilization as a means of contraception. Under the PWP project USAID is providing \$5.1 million to support GOP efforts to expand the availability of these services in Baluchistan and all the provinces. Funds are being used to finance health service building renovations, equipment, and staff training.

To complement the public effort to increase contraceptive services USAID is also supporting voluntary efforts in family planning. Working through the NGO Coordinating Council (NGOCC) \$3.8 million will be channelled towards general family planning service projects in Baluchistan and throughout the nation.

The project also provides \$0.6 million for professional development of future managerial staff throughout the broad range of Pakistani institutions engaged in family planning activities. Under this component 96 person months of long term and 54 person months of short term training will be provided in areas of population education, program planning, evaluation, management and operations, sociology and demography, community based distribution, financial management, community participation, social planning, analytical skills development, etc. A number of these training areas are relevant and suitable for training of the provincial, district and field staff personnel. Each provincial office will assess its staff training needs and will nominate appropriate persons to be trained in the specified field. Since the needs of each province will differ, the offered training facilities have not been pre quantified. However, like other provinces, NWFP program staff will directly benefit from the AID project assistance.

USAID is providing \$5.7 million over the next 3 years to finance a mass media campaign for population program publicity. Through the mass information channels of T.V, radio, and press, the GOP will promote themes focused on the determinates of fertility e.g. "marriage at a later age", "importance of female education", "parental responsibilities". The aim is to reach individuals with a potential, latent need for contraceptive goods and services. Market research and evaluation studies will ensure that messages are appropriate and effective for different segments of the population.

GOP population policies include increasing the availability and access to contraceptives through both the public and private sector. Under the \$20 million Social Marketing of Contraceptives (SMC) Project existing nationwide commercial sector talent is being utilized to promote and sell contraceptives at affordable prices. Through the project's support, the number of retail outlets carrying contraceptives will increase at least 100% (from 27,000 to 54,000). Over the life of the project USAID will supply 209 million condoms for packaging under the "Sathi" ("companion") brand label. Similarly about 10.5 million cycles of oral contraceptives will be provided for similar marketing efforts. The provision of over 2 million couple years of protection and the prevention of 450,000 births due to the sale of these SMC contraceptives should help the GOP meet its goal of slowing the population growth rate to 2.6 percent by 1988. Under the SMC project it is expected 7 percent of contraceptive sales will occur in Baluchistan.

Other

The world's largest USAID training program operates in Pakistan. During the 1982-87 program over \$25 million was spent on training under the Development Support Training Project, while \$75 million of additional funds was allocated for training under fourteen of USAID's twenty development projects. In the past five years approximately 3,200 Pakistanis have received or were processed for overseas education and training in such varied fields as business management, public administration, chemistry, food technology, agriculture, public health, and engineering.

USAID also supports in-country training through scholarships in local universities and by setting up training programs staffed by Pakistani or U.S. technicians. It is anticipated that 1600 people per year will receive training in the 1988-93 USAID educational package.

The primary goal of the USAID training program is to upgrade the management and technical expertise of Pakistanis in the Federal and Provincial Governments as well as the private sector who are involved in the implementation of Pakistan's priority social and economic development programs. The goal is being achieved through long and short term training programs for both men and women and through support to a number of Pakistani training institutions. Intensive English language training programs are being supported to improve language skills for those attending courses overseas and for those attending many of the incountry courses. Under a special target program for women, efforts are being made to inform women's business and professional organizations of the opportunities for management training or scholarships under the DST. Women in the civil service are also being kept informed.

Both women and men employed in the private sector are being invited to participate in two innovative scholarship programs, one involving business management related fields, and the other encompassing agriculture related occupations. These unique programs designed for the private sector are providing 200 scholarships per year to the business sector and 70 appointments to agriculture. Out of these over sixty scholarship have gone to women from all over Pakistan.

Baluchistan has actively benefitted from a wide range of programs offered under the FY 1982-87 USAID program. 143 individuals from Baluchistan have been sent overseas under USAID sponsored training programs and another 227 are expected to go in 1987. In the area of support to training institutions USAID gave books and equipment to the Pakistan American Cultural Center (PACC) in Quetta, aided in English course design, and held teacher training seminars. Future plans include support to National Institute of Public Administration in Quetta, University of Baluchistan, and the Railway Academy.

Another potentially important and innovative academic training program was introduced last year. Fifty-three young men from Makran, a sub division of Baluchistan, were selected to attend vocational and technical training schools in the U.S. These students underwent preliminary training in a newly established language and cross cultural training center in Islamabad and are now undergoing further language training in Singapore and the United States in preparation for their vocational training at U.S. Junior College and vocational Technical Training Institutions. The objective of this pilot project is to provide training for promising young men and women from the less developed areas of Pakistan. The next proposed group of candidates may be selected from NWFP and/or the program may be extended to cover additional areas of Baluchistan.

ANNEX A

PROVINCES BY AREA, POPULATION AND OTHER BASIC INDICATORS, 1981

<u>Province/ Division</u>	<u>Area (1,000 sq.km.)</u>	<u>% of total</u>	<u>Population (million)</u>	<u>% of total</u>	<u>% Increase, 1972 1981</u>	<u>Density (person/ Sq.km.)</u>	<u>% urban</u>
Baluchistan	347.2	43.6%	4.332	5.1%	77.2%	12	15.6%
NWFP	74.5	9.4	11.061	13.0	29.8	148	15.2
FATA*	27.2	3.4	2.198	2.6	12.7	81	
Sind	140.9	17.7	19.028	22.6	34.0	135	43.4
Punjab	205.3	25.8	47.292	56.2	25.3	230	27.5
Islamabad	0.9	0.1	.340	0.4	42.6	376	60.2
TOTAL	796.0		84.253		28.3	106	28.3

*Federally Administered Tribal Areas

Source: Finance Division, Pakistan Basic Facts, 1984-1985
Population Census Organization

Annex B - Baluchistan

USAID Funded Activities Benefitting Baluchistan, 1982 1987

1. AGRICULTURE AND RURAL DEVELOPMENT

A. Baluchistan Area Development Project

Major Implementing Agencies: Provincial Department of Agriculture, Planning and Development, Communication and Works, and Irrigation and Power.

Planned Life of Project: FY1984 1989

	<u>Amount Authorized FY84 90</u>	<u>Amount Spent to Date</u>
Technical Assistance	\$ 4,148,000	\$ 779,053
Training/Institutional Dev.	681,000	8,096
Commodities/Equipment	1,165,000	481,887
Civil Work/Construction	27,106,000	1,709,911
Other/Contingency/Evaluations	6,900,000	154,996
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Total	\$ 40,000,000	\$ 3,133,943

B. Management of Agricultural Research and Technology Project

Major Implementing Agencies: Pakistan Agricultural Research Council.

Planned Life of Project: FY1984 1990

	<u>Amount Authorized FY82-87</u>	<u>Amount Spent to Date</u>
Technical Assistance	\$ 588,250	\$ 104,100
Training/Institutional Dev.	465,850	22,319
Commodities/Equipment	146,650	62,517
ACE	368,809	
Other/Contingency/Evaluations	131,600	35,372
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Total	\$ 1,332,350	\$ 593,117

C. Food Security Management Project

Major Implementing Agencies: Pakistan Agricultural Research Council; Federal Ministry of Food and Agriculture; Federal Bureau of Statistics Division; Provincial Food and Agriculture Department; Survey of Pakistan.

Planned Life of Project: FY1984 1990

	<u>Amount Authorized FY82-87</u>	<u>Amount Spent to Date</u>
Technical Assistance	\$ 413,000	\$ 95,000
Training/Institutional Dev.	302,000	33,000
Commodities/Equipment	164,000	43,000
Civil Work/Construction	232,000	
Other/Contingency/Evaluations	472,000	8,000
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Total	\$ 1,582,000	\$ 178,000

D. Irrigation Systems Management Project

Major Implementing Agencies: Federal Ministry of Water and Power; WAPDA; Provincial Irrigation Department; Irrigation Drainage, and Flood Control Research Council.

Planned Life of Project: FY1983 1991

	<u>Amount Authorized FY82 87</u>
Technical Assistance	\$ 3,565,000
Training/Institutional Dev.	1,213,000
Commodities/Equipment	596,000
Civil Work/Construction	765,000
Other/Contingency/Evaluations	416,000

Total	\$ 6,555,000*

*1985 figure

E. On Farm Water Management Project

Major Implementing Agencies: Water Management Wing, Federal Ministry of Food and Agriculture; Provincial OFWM Directorate.

Planned Life of Project: FY1977-1987

	<u>Amount Authorized FY82-87</u>
Technical Assistance	\$1,318,000
Training/Institutional Dev.	74,000
Commodities/Equipment	458,000
Civil Work/Construction	111,000
	<hr/>
Total	\$ 1,961,000

F. Forestry Planning and Development Project

Major Implementing Agencies: Office of Inspector General of Forest, Federal Ministry of Food and Agriculture; Pakistan Forestry Institute; Provincial Forest Department.

Planned Life of Project: FY1983-1991

	<u>Amount Authorized FY82-87</u>
Training/Institutional Dev.	1,654,000
Research	155,000
Field Activities	844,000
Commodities	207,000
Other/Contingency/Evaluations	22,000
	<hr/>
Total	\$ 2,882,000*

*1985 figures

G. Agricultural Commodities and Equipment Project

Major Implementing Agencies: Federal Ministry of Food and Agriculture; Ministry of Water and Power; Ministry of Finance; Agricultural Development Bank of Pakistan.

Planned Life of Project: FY1982-1991

	<u>LOP Funding</u>	<u>Amount Authorised FY82-87</u>	<u>Amount Spent to Date</u>
Total	\$14,871,000	\$ 12,178,000	\$ 7,157,000

H. PL-480 - Food For Peace Program

Planned Life of Project: FY1982-87

Total \$ 15,300,000*

*Figure is based on Baluchistan percentage of population.

2. ENERGY

A. Energy Planning and Development Project

Major Implementing Agencies: Federal Ministry of Planning and Development; Federal Ministry of Petroleum and Natural Resources; Federal Ministry of Science and Technology; Ministry of Water and Power.

Planned Life of Project: FY1983-1990

	<u>Amount Authorised FY82-87</u>
Coal Exploration	\$ 1,000,000
Coal Mining/Power	750,000
Energy Conservation	1,000,000
Renewables	<u>250,000</u>
Total	\$ 3,000,000

B. Rural Electrification Project

Major Implementing Agency: WAPDA.

Planned Life of Project: FY1982- 1989

	<u>Amount Authorized FY82- 87</u>	<u>Amount Spent to Date</u>
Training/Institutional Dev.	\$ 200,000	\$ 100,000
Commodities/Equipment	700,000	200,000
Local Reimbursement	900,000	
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Total	\$ 1,800,000	\$ 300,000

C. Energy Commodities and Equipment Program

Major Implementing Agencies: Federal Ministry of Planning and Development;
Federal Ministry of Finance and Economic Affairs.

Planned Life of Project: FY1984 1989

	<u>Amount Authorised FY82- 87</u>	<u>Amount Spent to Date</u>
Total	\$15,000,000	\$ 15,000,000

3. HEALTH AND POPULATION

A. Primary Health Care Project

Major Implementing Agencies: Federal Ministry of Health; National Institute of Health; Provincial Health Department.

Planned Life of Project: FY1982- 1987 (Extension planned to 1989)

	<u>Amount Authorized FY82 87</u>	<u>Amount Spent to Date</u>
Training/Institutional Dev.	\$ 201,071	\$ 201,001
Commodities/Equipment	839,200	71,392
Civil Work/Construction	1,531,540	149,048
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Total	\$ 2,591,811	\$ 421,511

B. Malaria Control II Project

Major Implementing Agency: Directorate of Malaria Control; Provincial Malaria Department; National Institute of Malaria Research and Training (NIMRT)

Planned Life of Project: FY1982- 1987

	<u>Amount Authorized FY82- 87</u>	<u>Amount Spent to Date</u>
Training/Institutional Dev.	\$ 32,900	\$ 8,064
Commodities/Equipment	1,972,500*	624,273
Other/Contingency/Evaluations	94,550	
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Total	\$ 2,100,000	\$ 631,337

*One million dollars will be shifted to the federal level to acquire a building to house the National Institute for Malaria Research and Training.

C. Population Welfare Planning Project

Major Implementing Agencies: Population Welfare Division; Federal Ministry of Planning and Development; Provincial Population Welfare Planning Department.

Planned Life of Project: 1982- 1989

	<u>Amount Authorized FY82- 87</u>
Technical Assistance	\$ 253,000
Training/Institutional Dev.	173,000
Commodities/Equipment	2,377,000
Civil Works/Construction	129,000
Other/Contingency/Evaluations	974,000

Total	\$ 3,803,000

D. Social Marketing of Contraceptives Project

Major Implementing Agency: Population Welfare Division; Federal Ministry of Planning and Development.

Planned Life of Project: FY1984-1989

	<u>Amount Authorized FY82-87</u>	<u>Amount Spent to Date</u>
Technical Assistance	\$ 82,750	\$ 19,380
Training/Institutional Dev.	2,060	570
Commodities/Equipment	625,790	137,440
Other/Contingency/Evaluations	317,400	26,620
	<hr/>	<hr/>
Total	\$ 1,028,000	\$ 184,010

4. OTHER

A. Development Support Training Project

Major Implementing Agencies: Federal Economic Affairs Division; Provincial Planning and Development Department.

Planned Life of Project: FY1983-1990

	<u>Amount Authorised FY82-87</u>
Total	\$5,000,000