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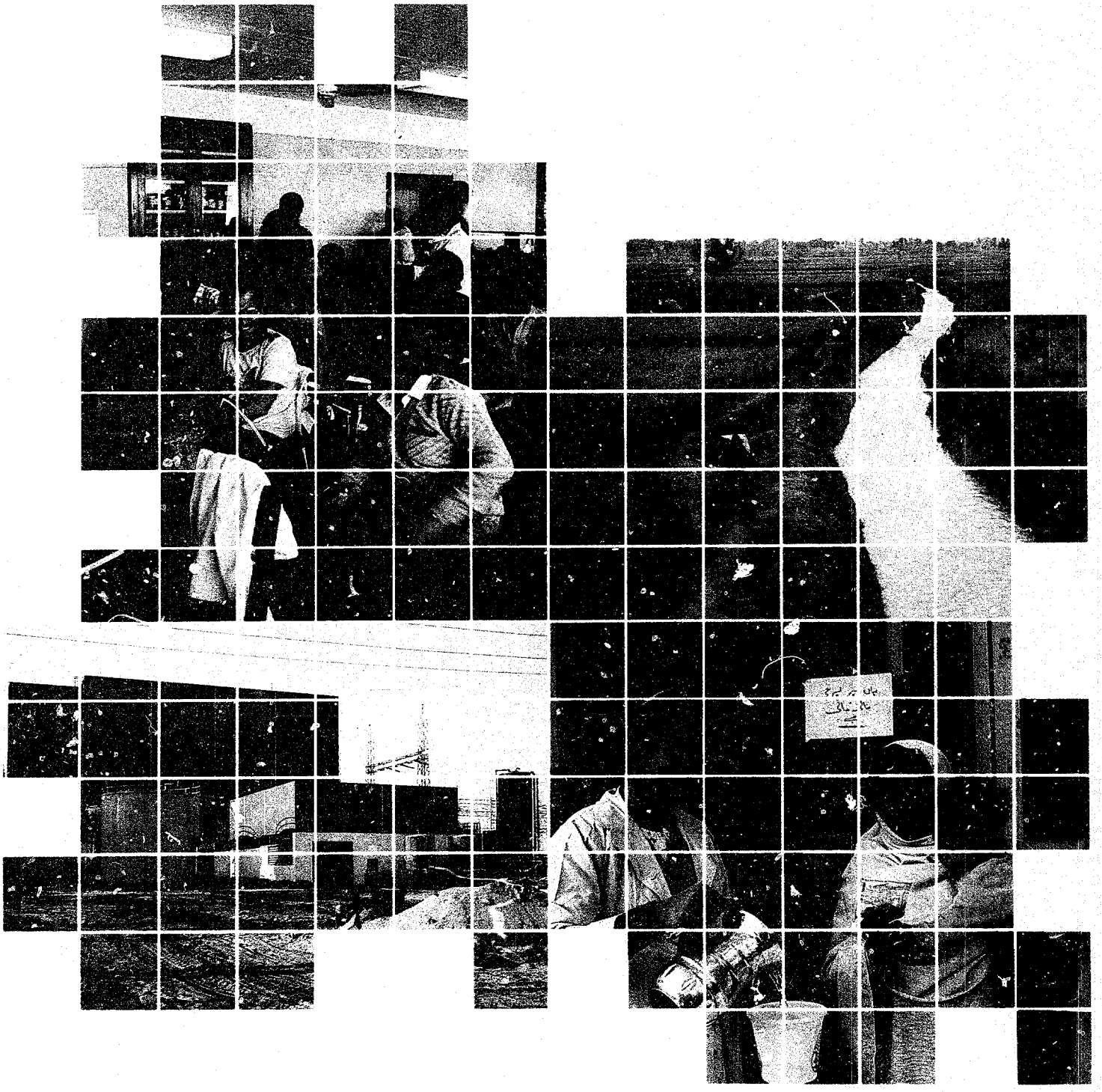
USAID IN PAKISTAN



USAID IN PAKISTAN

PHOTOGRAPHS ON FRONT COVER

Upper left: *Baluch students from Makran prior to their departure to the United States for training*

Upper right: *Completed irrigation rehabilitation work in NWFP*

Lower left: *View of thermal power plant recently constructed with USAID assistance at Guddu in upper Sind*

Lower right: *Demonstration of oral rehydration salts preparation at a USAID-financed health center near Lahore in Punjab*

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INTRODUCTION

United States-Pakistan friendship is based on a strong network of economic and cultural cooperation that has developed over the past four decades. These ties continue to grow both at the government-to-government as well as at the people-to-people level.

Over the years, the size of the permanent Pakistani community in the United Sates has increased dramatically and now numbers in the tens of thousands. Many of these new American citizens are highly successful doctors, professors, engineers, and scientists who still maintain family ties with their country of origin. Many more go to America to visit or go to school, returning home with new experiences and knowledge to help Pakistan.

Trade ties are strong. The United States has become one of Pakistan's leading trading partners, accounting for about 10 percent of Pakistan's exports as well as imports. There is also growing interest in investment in each other's country.

Economic assistance has played an important part in strengthening the cooperative relationship. The United States Agency for International Development (USAID) has channeled nearly $7 billion in support of Pakistan's development efforts since 1951.

Clearly the most important measure of any such relationship is the impact it has on people. Training programs provide direct benefits that can last for decades. Technology transfer and institution building have a long-lasting impact on the pace and quality of economic and social development.

The following pages describe some of the work supported over the years which has contributed to economic development in Pakistan. The discussion mainly focuses on the 1982-1988 period. Additional background on earlier programs is also provided, along with a perspective on future plans which should carry United States-Pakistan economic cooperation well into the 1990s.

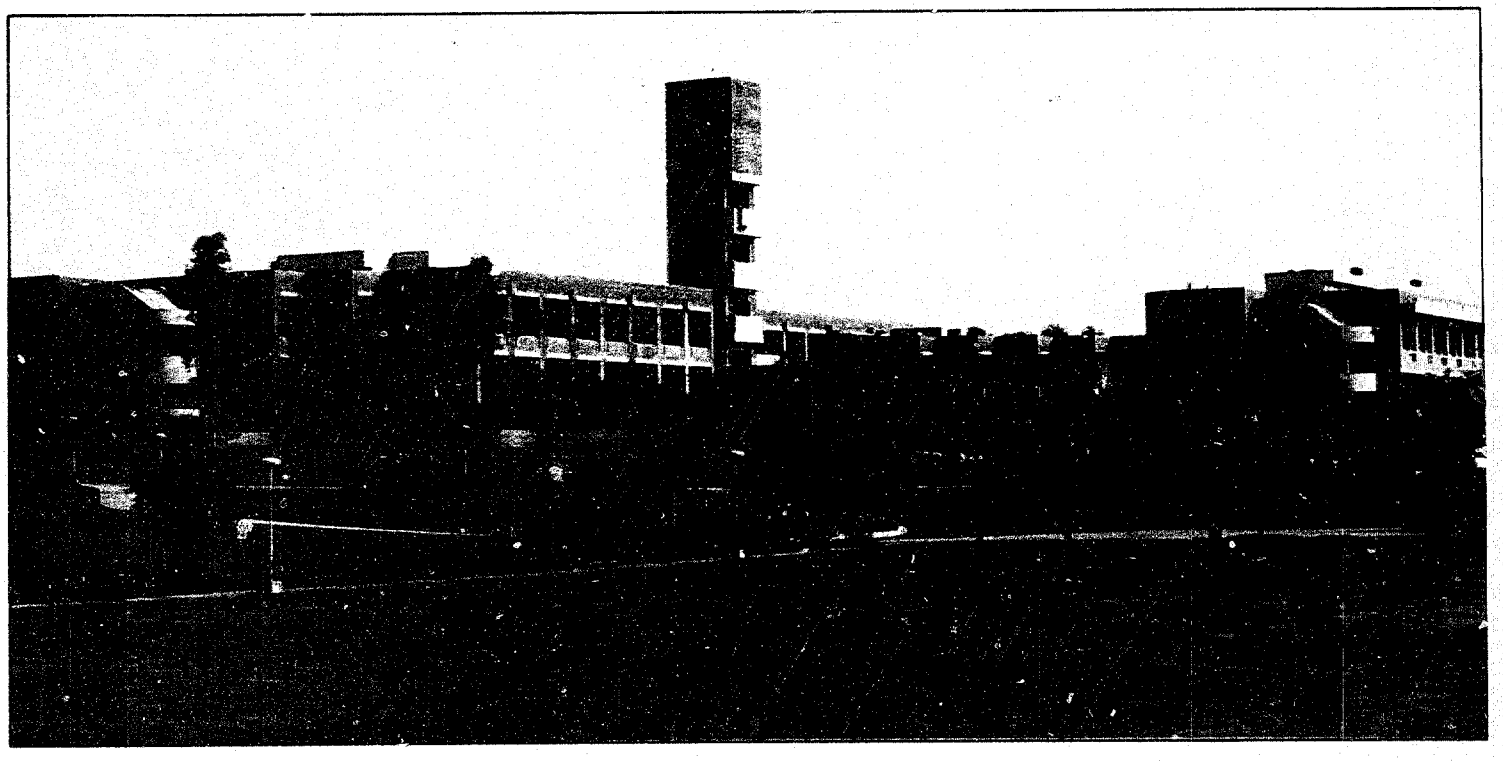
1

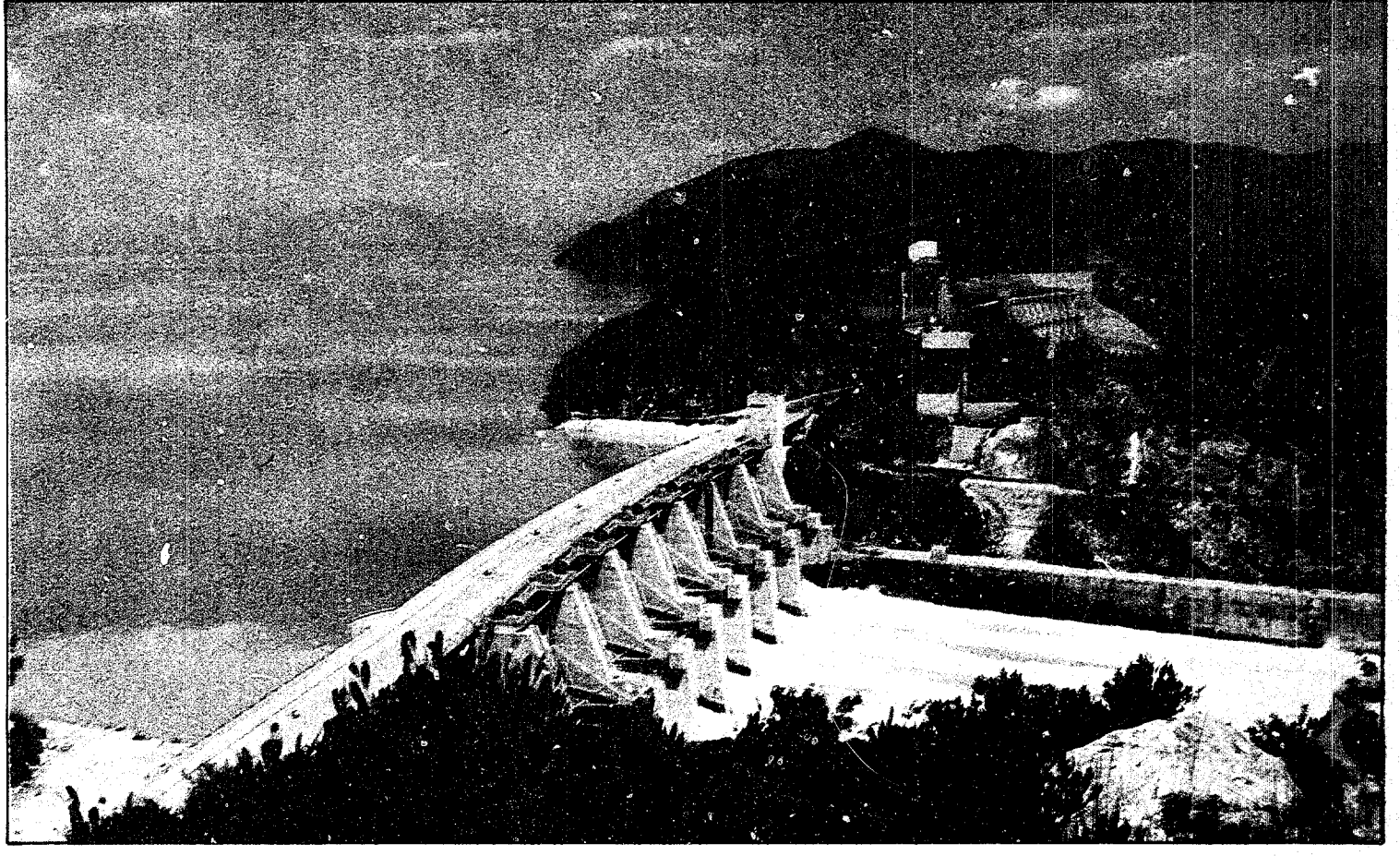
THE FIRST THIRTY YEARS
1951 – 1981

From a modest beginning in 1951, U.S. bilateral assistance to Pakistan grew to annual commitments approaching $400 million in the early 1960s and total commitments of approximately $5.1 billion through 1982. The U.S. has also made significant contributions to Pakistan's development through financial support to the World Bank, Asian Development Bank, and United Nations programs.

During the 1950s, U.S. assistance for the newly independent country focused on helping Pakistan overcome the economic consequences of partition. Capital assistance for infrastructure, technical support to ease skill shortages, and food assistance which generated local currency for public investment were provided. A start was made in helping to establish the conditions for future agricultural and industrial growth.

The National Agricultural Research Center (NARC) in Islamabad, established with USAID assistance, is one of the leading centers for agricultural research in Pakistan



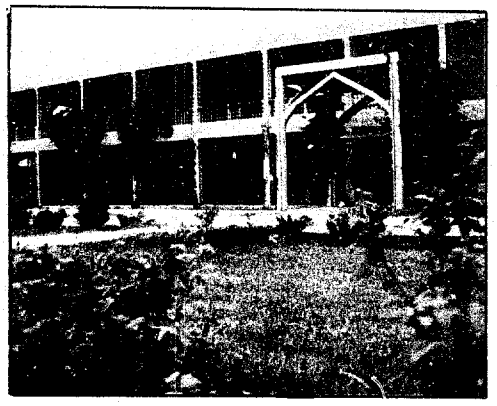


A view of the Tarbela Dam. As the single largest contributor to the Indus Basin Development project, United States played an important role in the construction of both Mangla Dam and Tarbela Dam

During the 1960s, U.S. assistance reinforced GOP efforts to stimulate agricultural growth and promote a rapidly expanding industrial sector. Significant investments were made in water, power, transportation, and communications. At its height during the first half of the 1960s, the U.S. provided more than half of all foreign aid received in Pakistan, covering one-third the development budget and financing one-half the import bill.

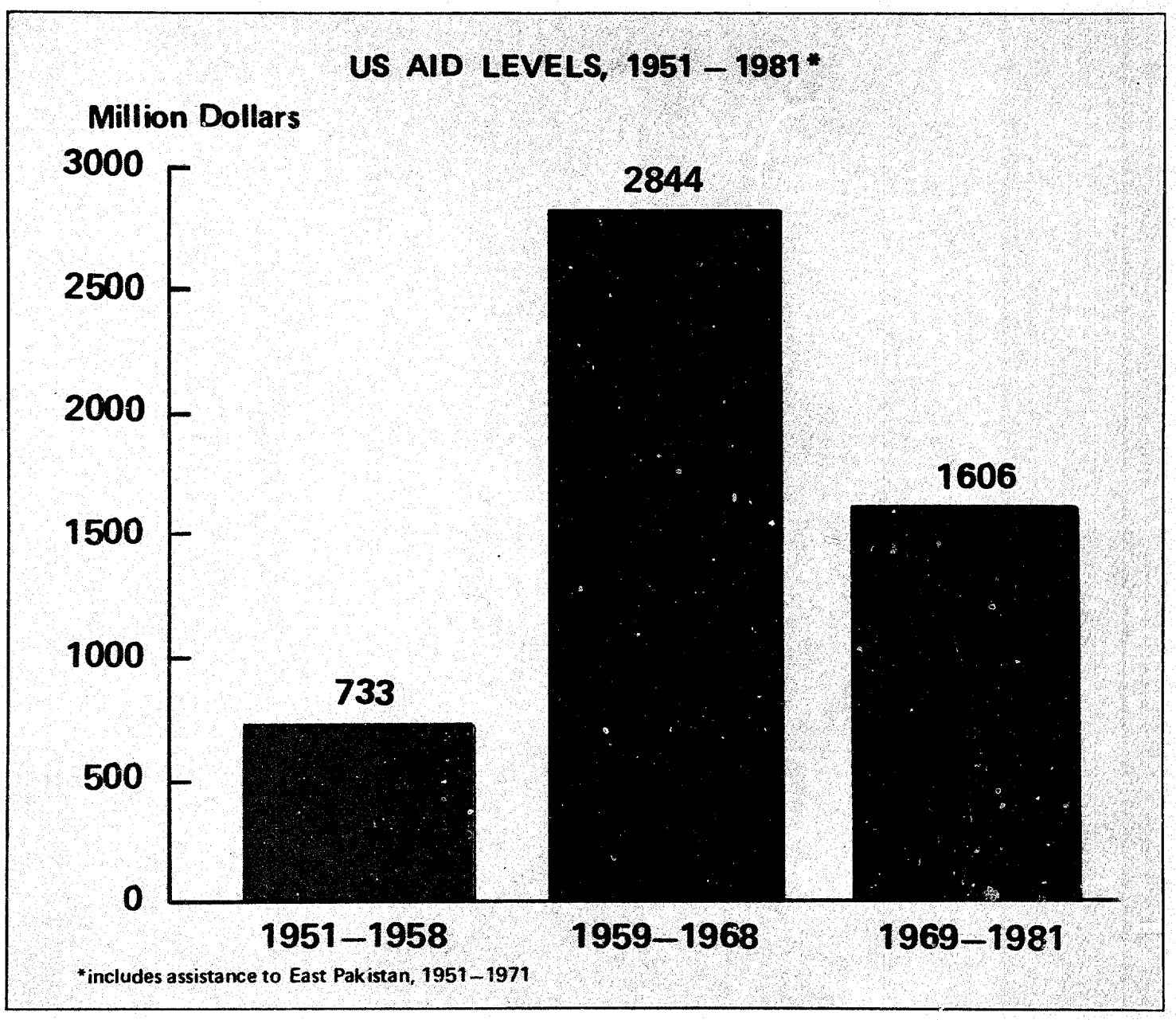
During the 1970s, U.S. assistance renewed its emphasis on agriculture with special attention to water management and fertilizer imports, along with help in increasing Pakistan's own domestic fertilizer production capacity. Support for nutrition research, malaria control, population planning, and rural health was also provided.

The legacy of the early assistance programs is still visible in many areas of the Pakistan economy. For example, USAID was involved from the beginning in the introduction of high yielding food grain varieties (the "green revolution") that have helped make Pakistan usually self-sufficient in wheat and one of the world's leading exporters of rice. It also played an important role in helping to bring about the widespread use of fertilizer on a commercial basis.



The Agricultural University in Faisalabad is one of many institutions that have received support under the USAID program in Pakistan

In irrigation, USAID worked with Pakistani agricultural scientists and engineers to help develop On-Farm Water Management programs, later adopted throughout Pakistan and by other countries and other donors. As the single largest donor ($712 million or 31 percent of all contributions) to the Indus Basin Development project, the U.S. played a leading role in the construction of Mangla and Tarbela dams which continue to make significant contributions to Pakistan's energy and agricultural sectors.



HIGHLIGHTS OF USAID PROGRAMS IN PAKISTAN, 1951-1981

Institutional development and the introduction of new technology have always been central to USAID efforts to improve the lives of people. Rather than leaving "monuments" behind, the goal is to work with the Government of Pakistan to bring about economic and social change that continues long after the need for assistance in a particular project or sector ends. Elements of this strategy are visible throughout Pakistan as a result of U.S. assistance and support in numerous areas:

- Early support for introduction of high-yielding food grain varieties (HYVs)

- Early support for introduction of commercial fertilizer use on a widespread basis

- Early support for Pakistan's Salinity Control and Reclamation Program (SCARP), including installation of nearly 4,000 tubewells

- Development of On-Farm Water Management program, subsequently adopted throughout Pakistan and by other countries and other donors

- Largest contributor to Indus Basin Development project (including Mangla and Tarbela Dams)

- Early support for extensive construction or rehabilitation of power lines, highways, railways, airports, and telecommunications throughout Pakistan

- Construction of thermal power plants at Quetta and Faisalabad

- Early support to reduce incidence of malaria and help Pakistan develop rural health care and family planning initiatives

- Early support for Geological Survey of Pakistan in Quetta, Agricultural University at Faisalabad, Institute of Public and Business Administration at University of Karachi, National Institutes of Public Administration (NIPA) in all four provinces, Pakistan Institute of Development Economics (PIDE) in Islamabad, National Agricultural Research Center (NARC) in Islamabad, National Institute of Cardio-Vascular Diseases (NICVD) in Karachi and a variety of other leading institutions in Pakistan

2

START OF A NEW PROGRAM 1982–1987

Training and research are key links in the effort to control the spread of malaria in Pakistan

The 1982-1987 program of economic assistance to Pakistan is a milestone in U.S.-Pakistan relations. The "package" was negotiated in 1981. The $1.62 billion program coming out of those negotiations has been characterized by close cooperation between the two countries. About $920 million of the aid provided was actually spent during the 1982-1987 period. The balance is now being expended for ongoing activities in energy, agriculture, area development, and the social sectors.

Most activities are carried out by Pakistani institutions with the assistance of USAID. Almost all projects are national in scope, with activities underway in all the four provinces. In response to GOP requests, several region-specific "area development" projects have also been funded to help meet pressing needs in less developed regions of the country. The goal is to respond directly to development priorities set by the Government in its annual and five-year development plans.

About 70 percent of the program is used to buy needed items such as fertilizer, edible oils, and heavy machinery and equipment. In many cases the money the Government earns from the sale of these items is further used to support important projects in agriculture, education, and other areas.

Much of the assistance is used to directly fund local costs, especially for constructing or improving canals and watercourses. Training is also an important part of the program. Finally, about 11 percent of the funds go for technical assistance. Much of the technical support funds is spent on services provided directly by Pakistani contractors.

The economic assistance program has been highly concessionary. About 55 percent of the 1982-1987 program was pure grant and the remainder consisted of soft loans. Given

the concessionality of these loans, the overall grant element of the portfolio is estimated at about 85 percent. Throughout the period, the terms of U.S. assistance have been the most concessional of those offered by any major donor. The economic assistance program planned for 1988-1993 is even more concessional.

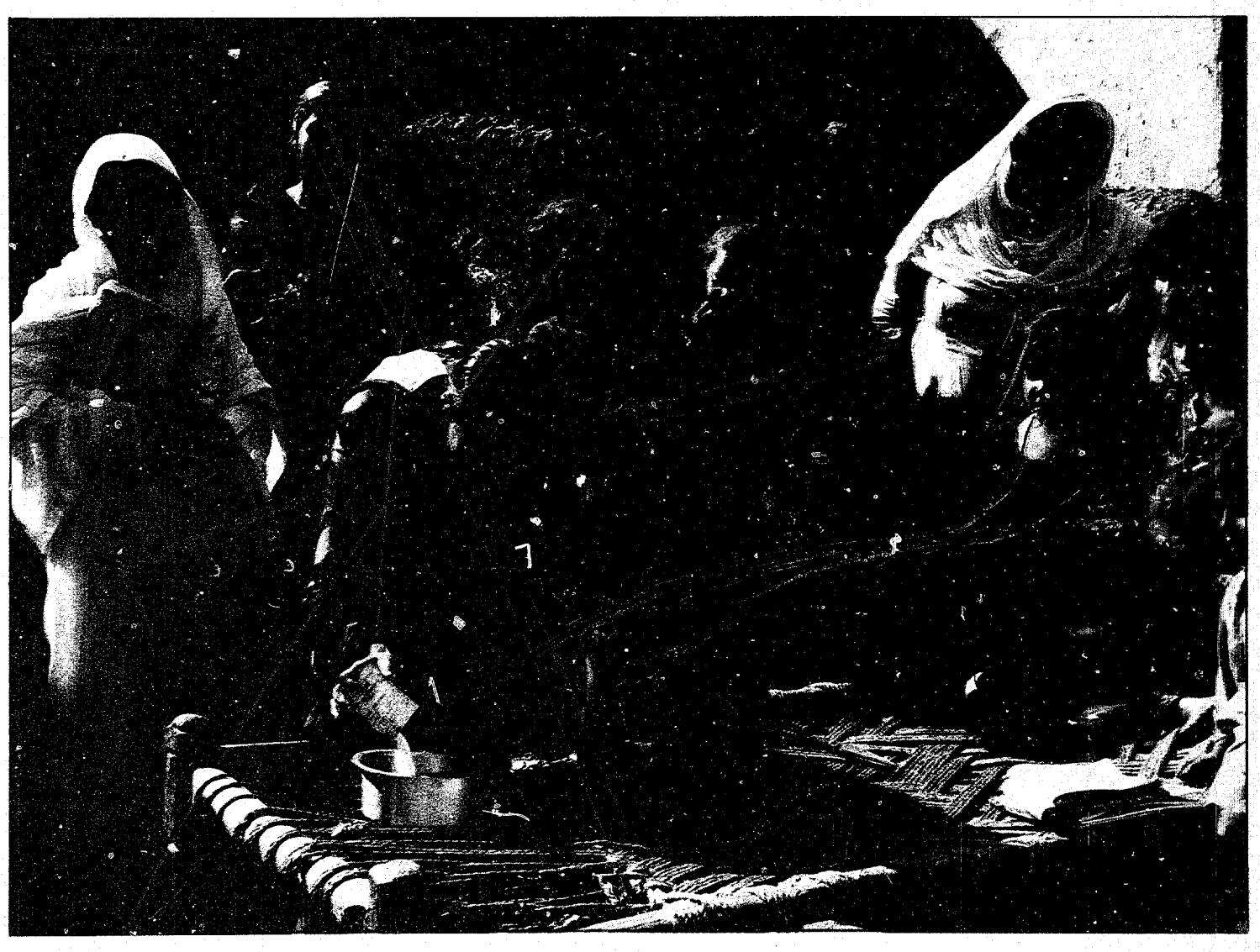
SOCIAL SECTORS

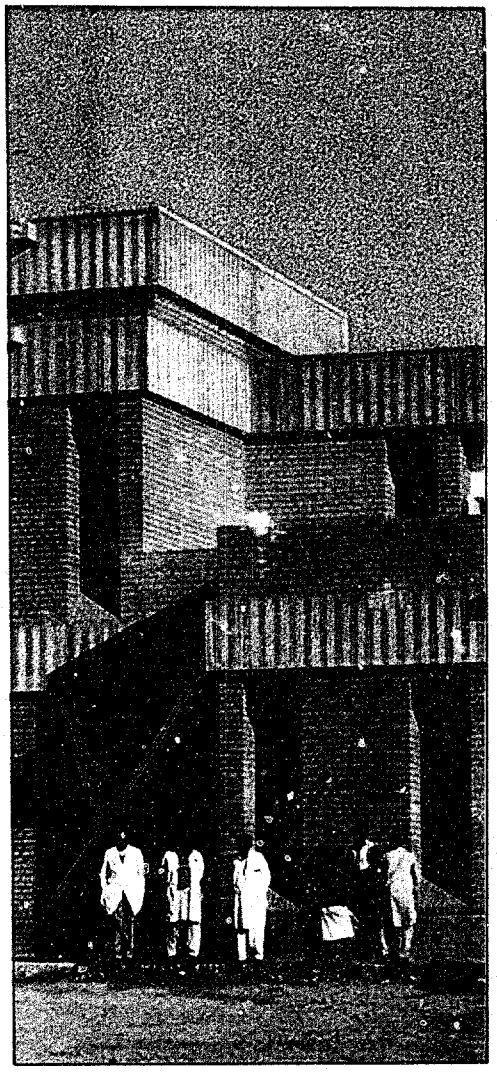
A central element in the Pakistan Government's Five Point Program is to improve access to health, education and other areas for Pakistanis everywhere. Several USAID activities are directly supporting this important initiative.

Health

The USAID program supports improved access to rural health care – particularly preventive, community-oriented services – as a way of dealing with Pakistan's pressing health concerns. In collaboration with the Ministry of Health and

A mother in NWFP mixes oral rehydration salts for her dehydrated daughter while a student trained under the USAID-supported Primary Health Care program provides guidance





Thirteen health technician training schools are either completed or underway in all four provinces, including this one in Sukkur.

Classes underway at the health technician training school in Jhang, Punjab

other donors such as UNICEF and the World Health Organization, support has been provided to Pakistan's national program for immunization which increased coverage in children from under 5 percent in 1983 to 67 percent in 1987. Another child survival initiative focusing on immunization and oral rehydration therapy for diarrheal diseases planned for the 1988-1993 period could save the lives of as many as 100,000 children each year.

Other activities seek to improve health services in Pakistan's rural areas. Management systems are being introduced in rural health complexes. Mid-level health workers, called health technicians, are being trained in community health. Simultaneously, eight health technician training schools and hostels which provide safe accommodation for much-needed female students are nearing completion. Five more will be built and equipped soon, extending coverage to all four provinces of Pakistan.

Finally, throughout the 1982-1987 period, USAID made significant contributions to Pakistan's malaria control efforts by providing overseas training opportunities in malaria control technology, assistance in establishment of a National Institute of Malaria Research and Training (NIMRT), and needed pesticides. Approximately 21 million malaria cases are estimated to have been prevented as a result of this program, which successfully controlled what could otherwise have become one of Pakistan's major health problems.

Population

Pakistan's annual population growth rate of approximately three percent – one of the highest in Asia – severely constrains the country's ability to provide needed jobs and social services for its enormous younger generation. At the Government's request, USAID is working with the Population Welfare Division to strengthen family planning services in Pakistan. Innovative communications and social marketing activities are being developed, along with support for important institutions such as the National Institute for Population Studies (NIPS) in Islamabad and the National Research Institute for Fertility Control (NRIFC) in Karachi.

Training

A major accomplishment of the 1982-1987 program has been the rebuilding of a strong participant training program. During the last year of the program (1987) more than 1,300

Pakistanis — both government servants and private citizens — participated in various training programs in the United States. Between 1982-1987 over 3,500 Pakistanis participated in such programs in the United States or third countries, including more than 800 in connection with long-term degree training courses.

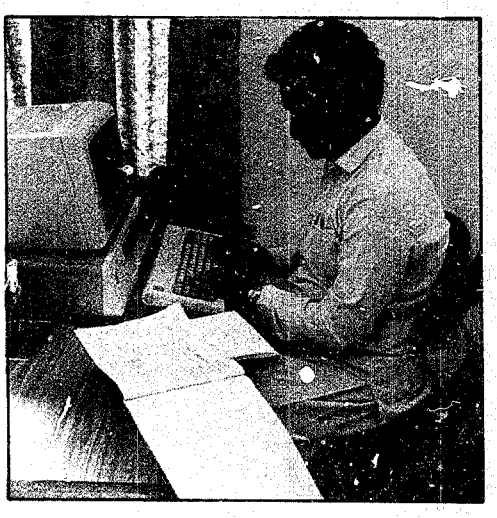
Other USAID activities aim at strengthening in-country management and training programs. Several institutions including the Management Association of Pakistan and National Institutes of Public Administration in all four provincial capitals have received support under the program. Other institutions such as the newly-established Lahore Graduate School of Business Administration, the new National Assembly Library in Islamabad, and the Punjab Ministry of Social Welfare in Lahore have also benefited.

Innovative programs such as this private sector social marketing program of the contraceptive "Sathi" are supported as part of the Government of Pakistan's initiative in improving family planning services

HIGHLIGHTS IN THE SOCIAL SECTORS, 1982-1987

- Provided $5.2 million in equipment and commodities in support of Pakistan's Expanded Program of Immunization
- Construction of eight health technician training schools nearly complete and construction of five more underway, or about to commence, in all four provinces of Pakistan
- Supported establishment of National Institute of Malaria Research and Training (NIMRT) in Lahore
- Supported establishment of new National Institute of Population Studies (NIPS) in Islamabad
- Provided $33 million for anti-malarial operations covering about 80 percent of Pakistan's "at risk" population, contributing to avoidance of an estimated 21 million malaria cases and preventing what would otherwise have become a major health problem in Pakistan
- Provided overseas training for more than 3,500 Pakistani professionals, including about 800 in long-term degree courses

Computer training is an important activity in many USAID supported projects in Pakistan. More than 400 computers were supplied to Pakistani institutions by USAID during the 1982-1987 period



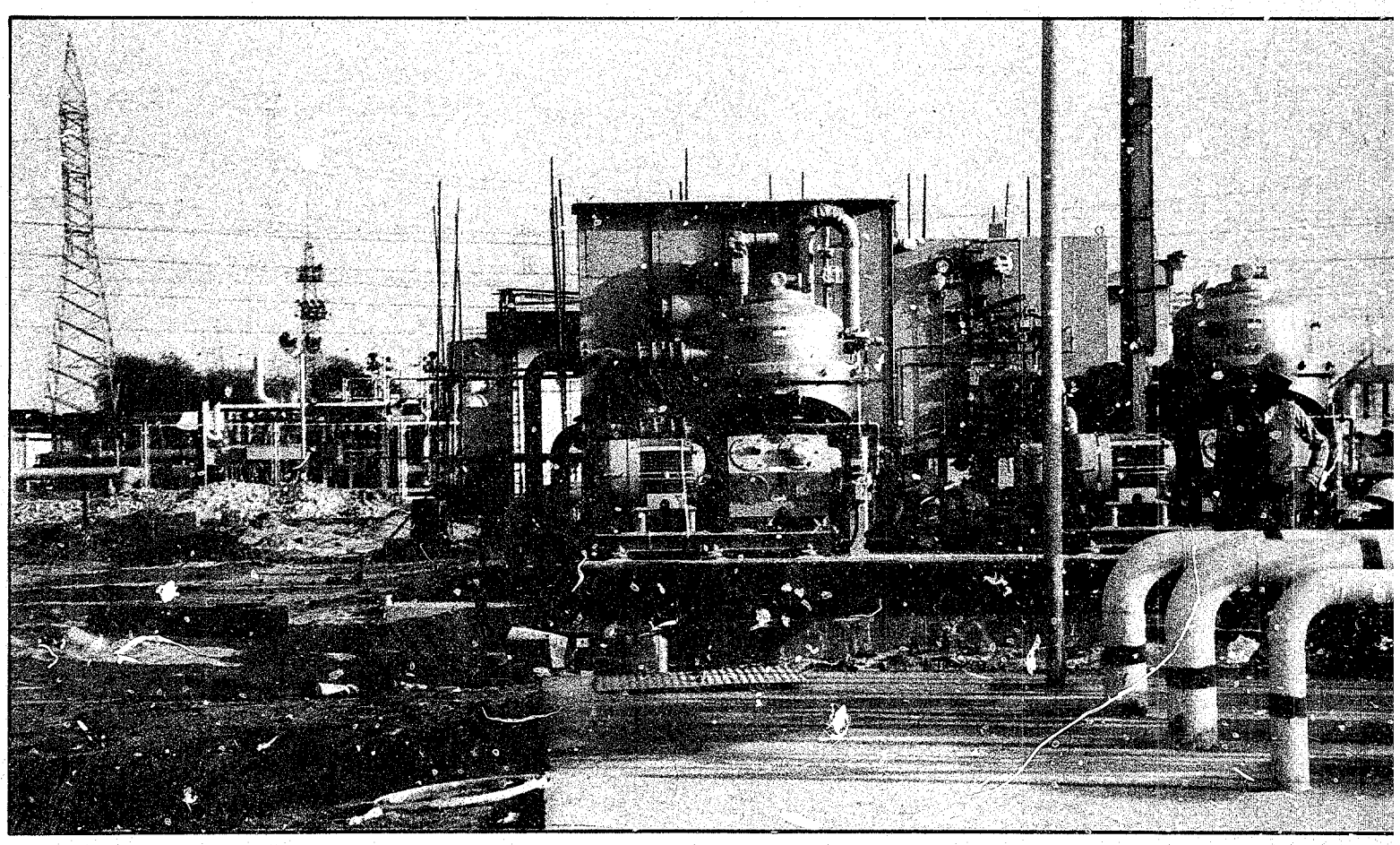
ENERGY

Pakistan's development depends on meeting a growing demand for energy. Because Pakistan uses more than 30 percent of its foreign exchange earnings to import energy, there is a special need to use energy more efficiently and to more rapidly develop indigenous energy sources. About one-fourth of the overall economic assistance under the 1982-1987 program was targeted toward Pakistan's energy sector.

Power

USAID, together with WAPDA and Asian Development Bank, is working to build a major new 900 MW combined cycle power plant at Guddu in upper Sind. The first phase of the project, completed ahead of schedule in early 1986, provides 400 MW of thermal power to Pakistan's electricity-starved national power grid. Phase Two, scheduled for completion in early 1988, uses waste heat from the now operative gas-fired turbines to produce an additional 200

The highly efficient gas-fired power plant at Guddu in upper Sind will eventually generate 900 MW for Pakistan's national electricity grid.

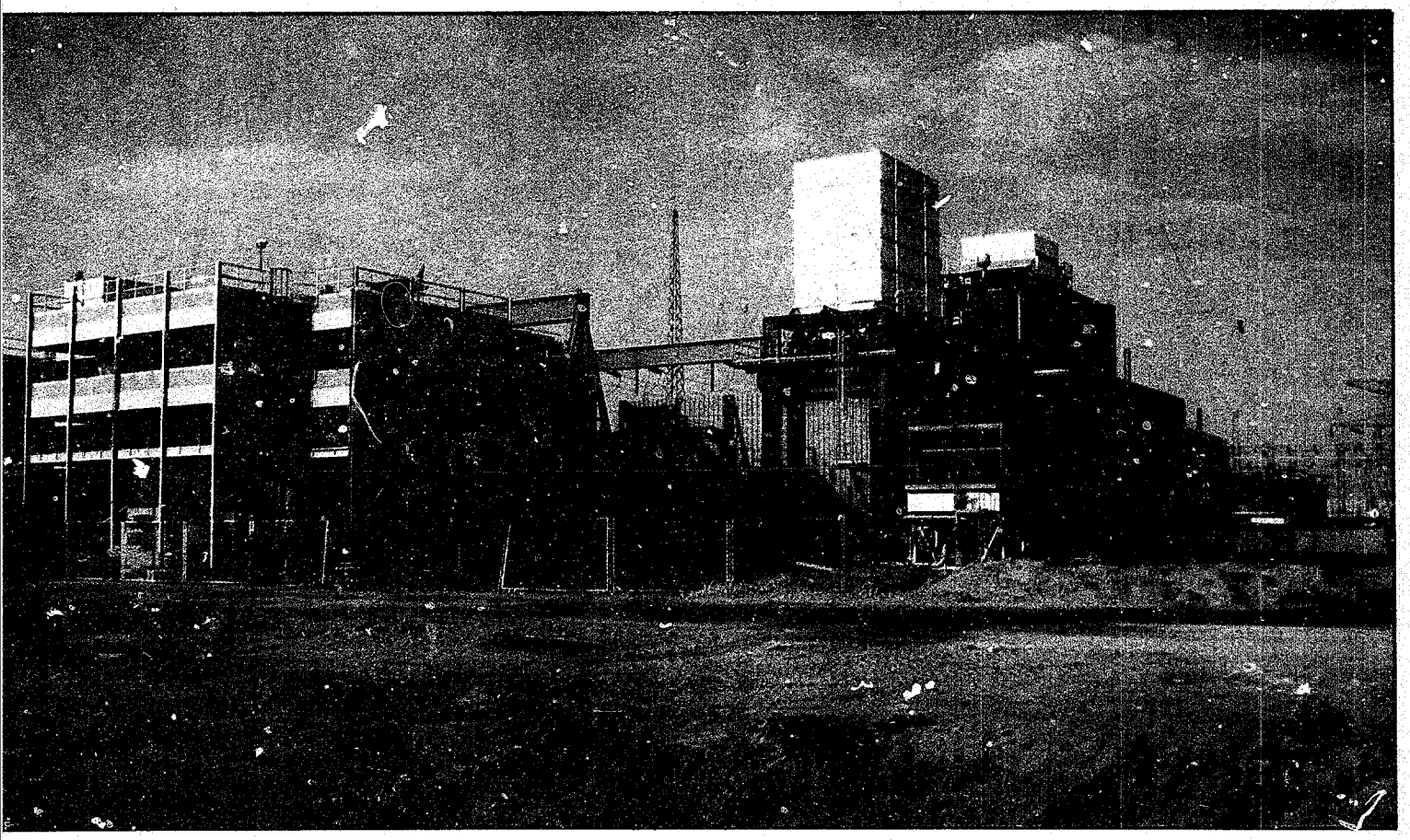


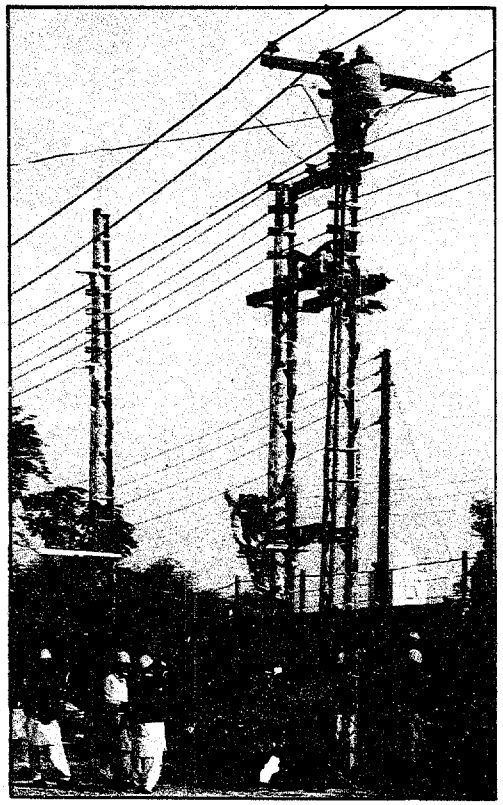
MW of power. Phase Three, fully funded by USAID, is expected to generate another 300 MW of combined cycle power. The highly efficient power plant serves as a particularly good example of technology transfer.

USAID is also working with WAPDA to improve the efficiency of its new Power Distribution Wing. A $6 million computer system has been introduced for computer-aided planning and design – another technology transfer activity. A Distribution Training Institute has been established in temporary facilities in Lahore, with plans underway for constructing a permanent facility in Islamabad. Already more than 30,000 WAPDA personnel have received in-country training as part of this effort to improve operational efficiency.

Finally, $8 million in equipment is being provided for WAPDA's energy loss reduction program to rehabilitate power distribution feeders. Another $11.3 million in equipment is being used to improve the efficiency of thermal power plants at Faisalabad, Multan, Kotri and Quetta.

Another view of the Guddu power plant which introduced combined-cycle power generation technology to Pakistan





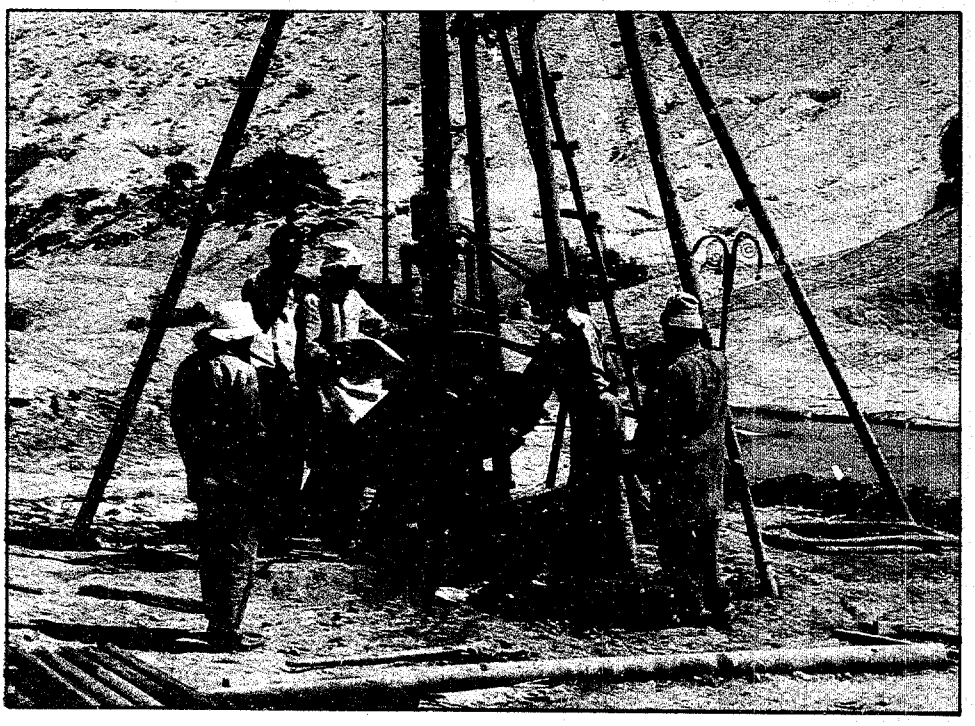
The WAPDA linemen shown here are among the many thousands that have benefitted from USAID supported training programs aimed at improving efficiency and safety practices

Indigenous Sources of Energy

Domestic coal is increasingly seen as an energy resource for the future. Exploratory drilling by the Geological Survey of Pakistan, assisted by the United States Geological Survey, is dramatically increasing estimates for coal availability in Pakistan. In the Lakhra and Sonda-Thatta areas of southern Sind alone, these reserves are now estimated at more than 130 million tons. Feasibility studies for Pakistan's first coal-fired power plant at Lakhra have also been completed as has USAID-funded drilling work to prove reserves.

A Geodata Center has been established at the Geological Survey of Pakistan, along with the provision of $3.3 million in additional coal-related equipment provided to the Pakistan Hydrocarbon Institute in Islamabad and Karachi and $4.5 million to the Fuel Research Center at the Pakistan Council of Scientific and Industrial Research laboratories in Karachi.

Along with this big initiative in coal development, USAID assists Pakistan in developing other indigenous sources of energy. For example, under a special energy equipment import program, USAID financed $16.5 million in new oil and gas development and seismic equipment for the Oil and Gas Development Corporation (OGDC) and its private joint ventures. Similarly, the efforts of provincial forestry departments to encourage and assist farmers to grow more fuelwood crops receive support. The overall goal of these and related projects is to increase Pakistan's energy independence and reduce reliance on imported sources of energy.



Coal exploration and assessment activities in the Sonda-Thatta area of southern Sind are dramatically increasing estimates on the availability of coal in Pakistan

Energy audits and other programs aimed at improving energy efficiency in Pakistan under the national energy conservation program have attracted wide-spread private sector interest. Picture shows energy audit underway in a private sector factory

Energy Planning and Conservation

Planning and conservation are important in any country's national energy development strategy. Under the 1982-1987 program, USAID helped initiate a national energy conservation program as well as the establishment of an energy conservation center (ENERCON) in Islamabad. Similarly, an Energy Wing was established within the Ministry of Planning to coordinate Pakistan's national energy strategy under the Seventh Five Year Plan.

HIGHLIGHTS IN ENERGY, 1982-1987

- Completed first phase of combined cycle thermal power plant at Guddu, adding 400 MW to national power grid, and initiated rehabilitation of four other thermal power stations

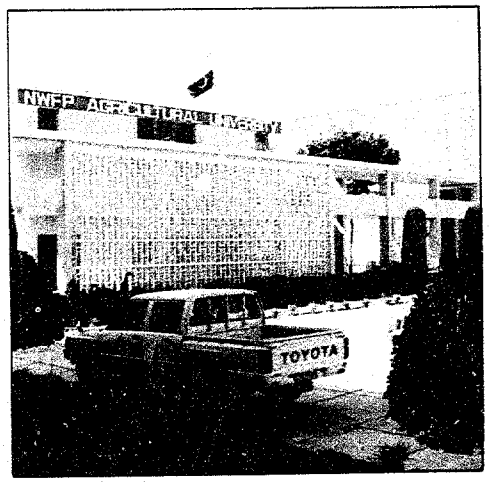
- Established a Distribution Training Institute under WAPDA in temporary facilities in Lahore and initiated plans for constructing permanent facilities in Islamabad

- Provided $6-million computer system and introduced a computer-aided planning and design program at WAPDA

- Supported establishment of WAPDA Power Distribution Wing, and began power line rehabilitation

- Supported establishment of National Energy Conservation Center (ENERCON) and Energy Wing within the Ministry of Planning

- Initiated National Coal Assessment Program with Geological Survey of Pakistan, including nearly 8,000 meters of coal drilling and discovery of Pakistan's thickest coal seam in Sonda-Thatta area



Major agricultural institutions receiving assistance under the USAID program in Pakistan include the Arid Zone Research Institute (AZRI) in Quetta, the Sind Agricultural University at Tando Jam and the NWFP Agricultural University at Peshawar

AGRICULTURE

Improved agricultural productivity is essential for Pakistan's development. The sector employs half Pakistan's work force and contributes more than one-fourth of its Gross Domestic Product. Most of Pakistan's industries and exports are also dependent on agriculture. Nearly half the USAID program is targeted toward increasing productivity in this important area which directly benefits farmers throughout Pakistan.

Agricultural Research and Education

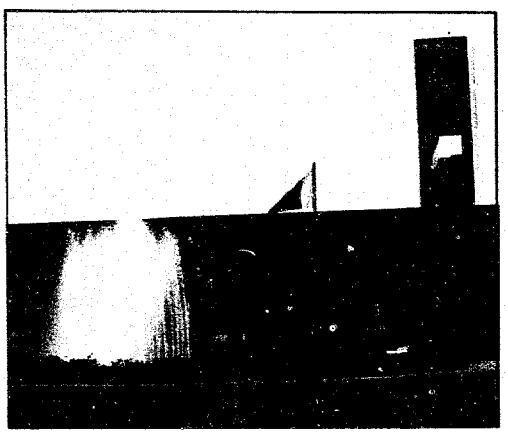
USAID's historic involvement in helping Pakistan strengthen its agricultural institutions is continuing. One activity, focused on the Agricultural University in Peshawar, integrates for the first time field research and teaching programs. The goal is to make agricultural research and education directly relevant to farmers. Nearly 70 staff have already participated in overseas training programs. Major construction activity at the Peshawar campus will begin soon.

The Pakistan Agricultural Research Council (PARC) is the primary conduit for USAID support in improving agricultural research throughout the country. Through PARC, both provincial and federal institutions are being assisted through staff training, equipment, and management improvements.

Elsewhere, USAID is supporting the Arid Zone Research Institute (AZRI) in Quetta, which operates primarily in Baluchistan but has substations in other provinces aimed at improving agricultural productivity in dry areas. Equipment and other support are going to the Pakistan Forestry Institute in Peshawar, including funds for construction of a new hostel. Institutions such as agricultural universities at Faisalabad in Punjab and Tando Jam in Sind are also benefitting. More than $4 million in equipment has already been provided.

Using USAID funds, long-term relationships have also been established between Pakistani agricultural scientists and those of internationally renowned research institutions such as the International Center for Wheat and Maize Improvement (CIMMYT) in Mexico City, the International Food Policy Research Institute (IFPRI) in Washington, and the International Center for Agricultural Research in Dry Areas (ICARDA) in Aleppo, Syria. Initial "seed" funding from USAID is also being used to help establish a branch of the International Irrigation Management Institute (IIMI) in Lahore.

The chairmen of six Water Users Associations (above) gather for the inauguration of a newly rehabilitated minor (below) at Haroonabad in Punjab. The water courses shown were also constructed under the program aimed at helping farmers use water more efficiently



Front view of the National Agricultural Research Center (NARC) complex in Islamabad. USAID is helping to establish a multi-media studio to better publicize research findings

Finally, USAID is working with the National Agricultural Research Center (NARC) in Islamabad to establish a multi-media studio aimed at better publicizing and bringing to the farmer the agricultural breakthroughs made by scientists both in Pakistan and abroad.

Irrigation

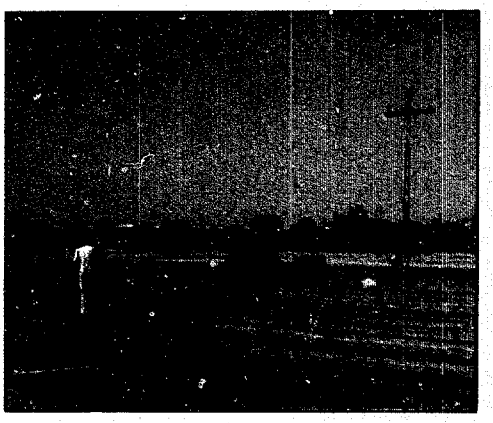
Irrigation concerns have always figured high on Pakistan's development agenda, given that the country has the largest contiguous irrigation system in the world.

During the 1982-1987 period about 4,000 kilometers of canals and watercourses were improved throughout Pakistan, along with the upgrading of provincial irrigation workshops and the introduction of computer-aided design techniques. More than $50 million in computers, vehicles, heavy machinery, and other equipment has also been provided.

Approximately 4,000 kilometers of canals and drains throughout Pakistan were rehabilitated under USAID supported program during 1982-1987. In addition, some $50 million in computers, vehicles, heavy machinery and other equipment was provided to provincial irrigation departments

The ten-year On-Farm Water Management project which officially concluded in June 1986 is widely regarded as an especially innovative and successful program. By the end of the project, 1,319 watercourses had been improved, 75,000 acres of land precisely levelled, and training centers and demonstration farms had been established in all four provinces. Much more importantly, the success of the on-farm water management concept in providing for more efficient water delivery and use had been repeatedly demonstrated and widely adopted.

A special initiative is now underway in cooperation with the World Bank based in part on innovations made under the earlier on-farm water management program. This "Command Water Management" initiative aims at integrating within a single command area the activities of provincial irrigation and agricultural departments, along with the establishment of local water user associations to ensure more efficient and equitable water distribution and use.



Precision land levelling is an important activity under On-Farm Water Management program

Other Areas

Accurate data collection is essential for informed policy-making. With USAID support, the Agricultural Data Collection Cell of the Statistics Division is improving and computerizing its statistical reporting efforts. Simultaneously, an Economic Analysis Network was established to strengthen the analytical skills of Pakistani researchers throughout the country.

HIGHLIGHTS IN AGRICULTURE, 1982-1987

- Rehabilitated or constructed 4,000 kilometers of canals and watercourses throughout Pakistan
- Provided approximately $50 million in computers, vehicles, heavy machinery, and other equipment to provincial irrigation departments
- Upgraded and equipped six provincial irrigation workshops and introduced computer-aided design techniques
- Supported strengthening of NWFP Agricultural University in Peshawar, including overseas training for 70 professionals, establishment of computer laboratory and completion of construction plans for new campus facilities
- Provided more than $4.5 million in research equipment to various agricultural research institutes in different provinces as well as Arid Zone Research Institute (AZRI) in Quetta
- Provided 626,000 tons of fertilizer valued at $135 million
- Provided 643,000 tons of edible oil valued at $309 million
- Provided 565,000 tons of wheat valued at $100 million during temporary wheat shortfall in 1985

During the 1981 aid negotiations, Government of Pakistan representatives requested that part of the economic assistance program should be directed specifically toward rural development in some of the least developed regions of Pakistan. Several "area development" projects were developed in direct response to that request.

Baluchistan

Under the Baluchistan Area Development (BALAD) project, a number of small-scale rural infrastructure activities are underway in Makran, including improvements in schools and irrigation facilities. Construction contracts have also been signed for the 101-kilometer Bela-Awaran road and the Kech River bridge outside of Turbat. Design work is expected to commence shortly on the 255-kilometer Awaran-Turbat road which, when complete, would significantly reduce the travel time between Turbat and Karachi.

North-West Frontier Province

Two area development projects are being implemented, one focused on Tribal Areas and the other on poppy-growing regions such as Gadoon-Amazai and Dir. Here too, over 400 small and medium-scale infrastructure improvements are

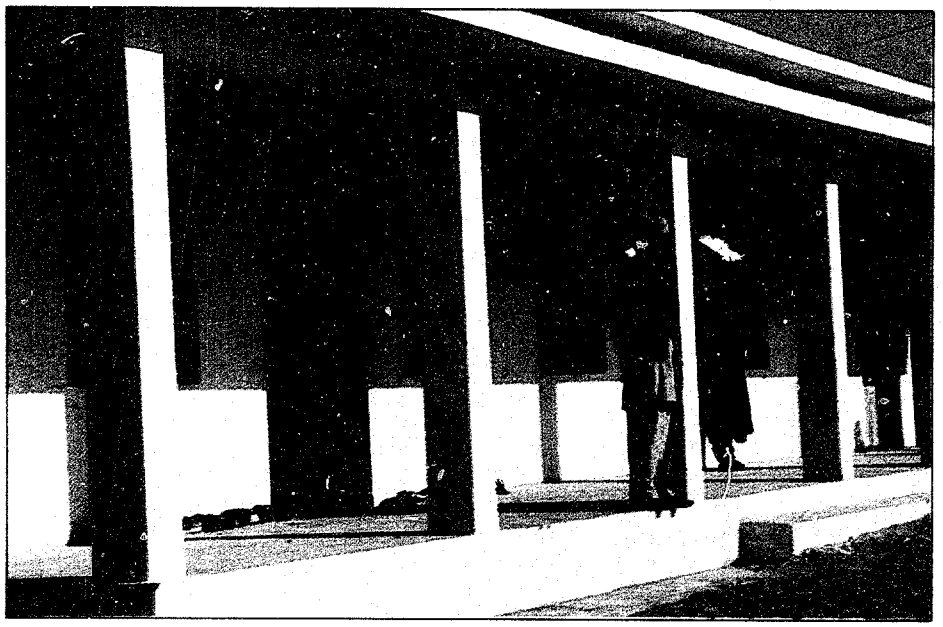
New roads such as the one shown here in a rugged area of Gadoon are improving access to isolated villages in the NWFP

underway. In the Gadoon-Amazai area alone, dozens of such schemes including roads, schools, village electrification, skills training programs, tree-planting, water supply systems and irrigation improvements have already been completed.

Irrigation improvements such as this one in the Tribal Areas of the NWFP are an important activity in USAID supported Area Development projects

Sind

One of the last activities started during the 1982-1987 period aims at improving rural roads in the interior of Sind. Although the impact of the project will not be evident for some time, long-range goals include the rehabilitation or reconstruction of nearly 4,000 kilometers of rural roads, along with the establishment of an improved system for operation and maintenance.



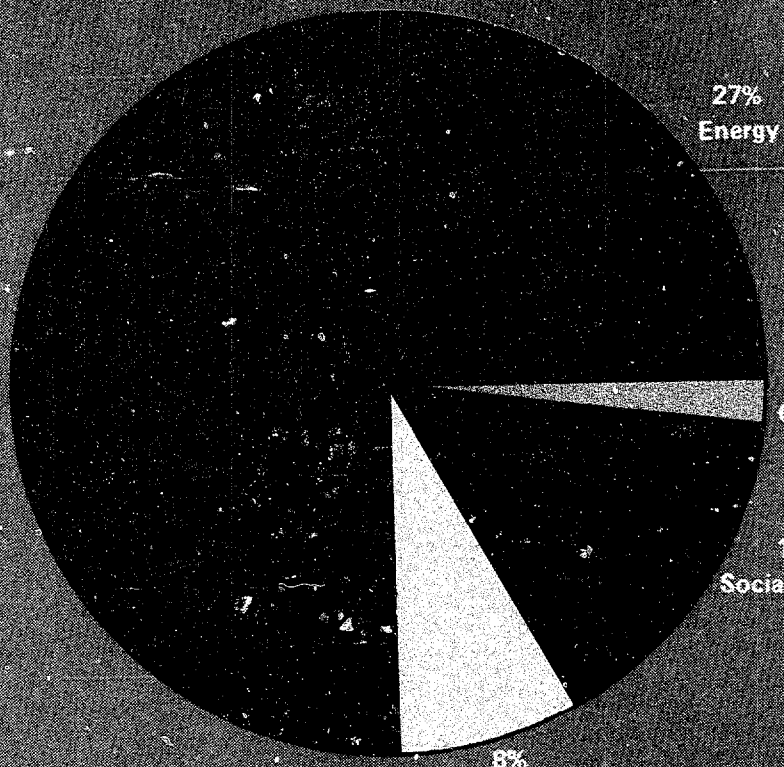
Many new schools such as this one in Makran have been constructed or improved under the Baluchistan Area Development project

HIGHLIGHTS IN AREA DEVELOPMENT, 1982-1987

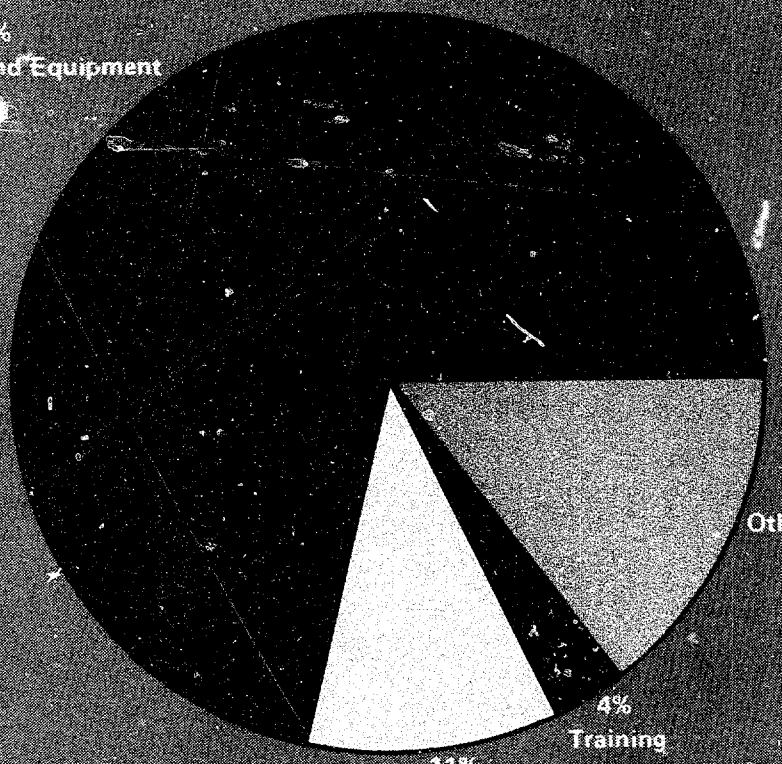
- Initiated several hundred small-scale rural development and infrastructure schemes, including schools, health facilities, irrigation works, and water supply systems.

- Constructed more than 50 kilometers of roads in remote areas and initiated construction of approximately 200 kilometers more.

US PROJECT AID BY SECTOR, 1982 – 1987



US AID BY TYPE OF EXPENDITURE, 1982 – 1987



*includes construction

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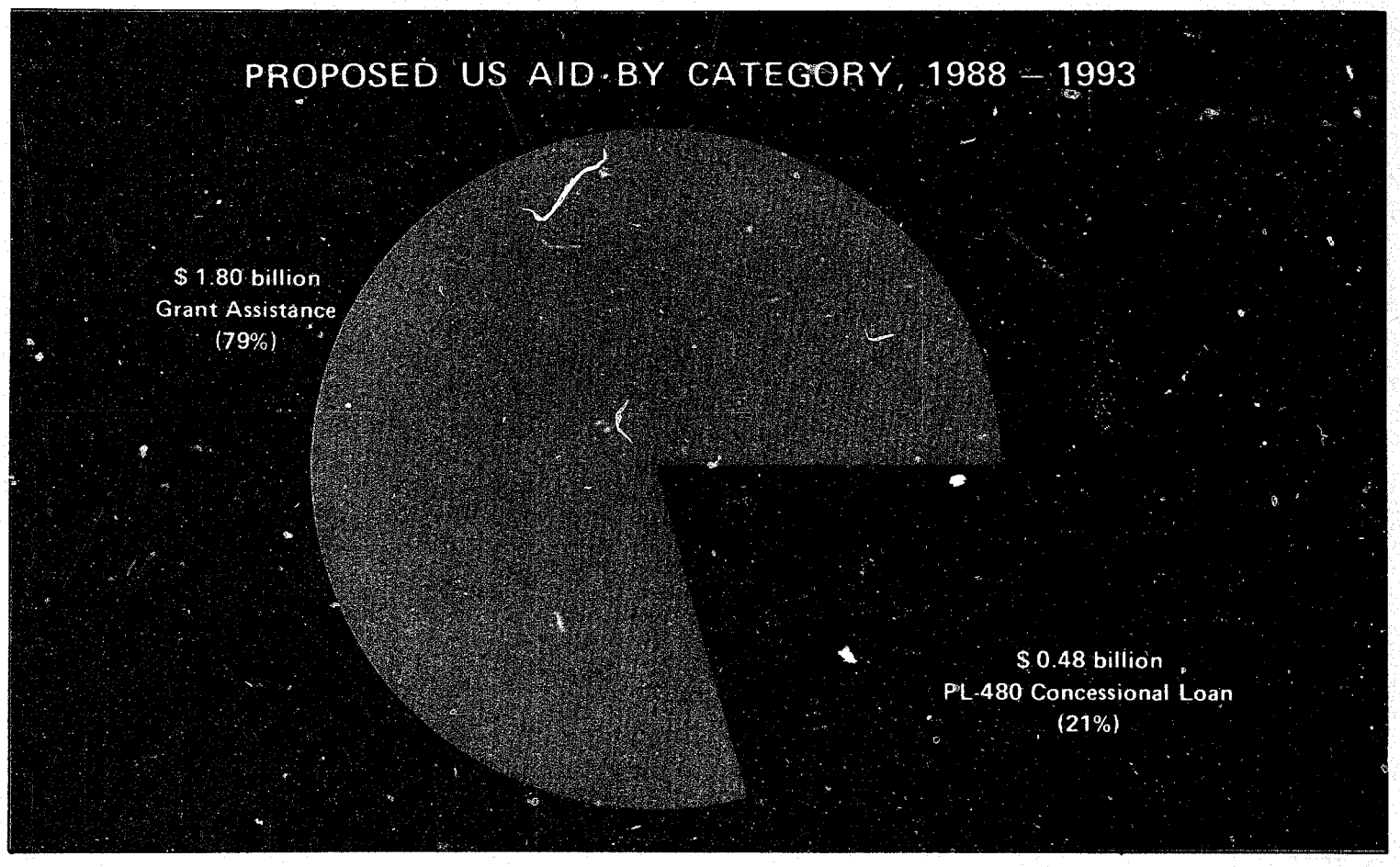
A CONTINUING RELATIONSHIP 1988–1993

Under an agreement signed in Islamabad in March 1986, the United States renewed its economic assistance commitment to Pakistan for an additional six-year period. During 1988-1993, subject to annual Congressional approvals, the agreement will result in an additional $2.28 billion for funding development projects in Pakistan including $1.8 billion in the form of outright grant assistance. The remaining $480 million will be used to import needed agricultural items under the highly concessional PL 480 program.

The new program supports Government of Pakistan initiatives developed as part of the Seventh Five Year Plan. Ongoing



activities build on accomplishments achieved during the 1982-1987 period. Energy, agriculture, area development and the social sectors are emphasized. Most of the activities already described continue to be supported under the new program. Particularly successful initiatives will be expanded. Quick-disbursing assistance mechanisms are also being explored to support balance of payments and provide needed rupees for government development programs.

At the same time, the two countries are exploring ways to make the new program even more responsive to Pakistan's development needs. In particular, USAID expects to allot more funds to support high priority government initiatives in the social sectors.

Assistance for maternal and child health care as well as primary education – especially in rural areas – is particularly needed and will receive special attention. Training opportunities will also be expanded, along with continued institution-building activities in a variety of areas. The strengthening of human resources has always been central to USAID programs, and will remain so into the 1990s.

Among the several new projects now under design is an initiative aimed at supporting primary education, especially in rural areas

Private trucks and buses, especially those plying the cross-country routes, are showpieces of Pakistani "folk art on wheels". It is not uncommon to find the familiar USAID handclasp sign integrated into the art. The picture here shows a profusely decorated and neatly painted truck at a gas station in Sakrand, Sind