

UNCLASSIFIED

DEPARTMENT OF STATE  
AGENCY FOR INTERNATIONAL DEVELOPMENT  
WASHINGTON, D.C. 20523

PROJECT PAPER  
PAKISTAN - TRIBAL AREAS DEVELOPMENT  
391-0471

AUGUST 1982

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<b>PROJECT DATA SHEET</b>		1. TRANSACTION CODE <b>A</b> A = Add C = Change D = Delete		Amendment Number -	DOCUMENT CODE <b>3</b>
2. COUNTRY/ENTITY <b>PAKISTAN</b>		3. PROJECT NUMBER <b>391-0471</b>			
4. BUREAU/OFFICE <b>ASIA</b>		5. PROJECT TITLE (maximum 40 characters) <b>TRIBAL AREAS DEVELOPMENT</b>			
6. PROJECT ASSISTANCE COMPLETION DATE (PACD) MM DD YY <b>09/30/87</b>		7. ESTIMATED DATE OF OBLIGATION (Under 'B.' below, enter 1, 2, 3, or 4) A. Initial FY <b>82</b> B. Quarter <b>4</b> C. Final FY <b>85</b>			

**8. COSTS (\$000 OR EQUIVALENT \$1 = RS 12.16)**

A. FUNDING SOURCE	FIRST FY <b>82</b>			LIFE OF PROJECT		
	B. FX	C. L/C	D. Total	E. FX	F. L/C	G. Total
AID Appropriated Total	2,665	335	3,000	3,441	11,559	15,000
(Grant)	( 2,665 )	( 335 )	( 3,000 )	( 3,441 )	( 11,559 )	( 15,000 )
(Loan)	( - )	( - )	( - )	( - )	( - )	( - )
Other U.S. 1. Rupees	-	-	-	-	9,046	9,046
2.						
Host Country						
Other Donor(s)						
<b>TOTALS</b>	<b>2,665</b>	<b>335</b>	<b>3,000</b>	<b>3,441</b>	<b>20,605</b>	<b>24,046</b>

**9. SCHEDULE OF AID FUNDING (\$000)**

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH CODE		D. OBLIGATIONS TO DATE		E. AMOUNT APPROVED THIS ACTION		F. LIFE OF PROJECT	
		1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan
(1) ESF	223	210	-	-	-	15,000	-	15,000	-
(2)									
(3)									
(4)									
<b>TOTALS</b>				-	-	15,000	-	15,000	-

10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each)						11. SECONDARY PURPOSE CODE	
022	023	064	091	820		263	
12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)							
A. Code	BR	BL	BS	LAB	TECH		
B. Amount							

13. PROJECT PURPOSE (maximum 480 characters)

To strengthen the capability of government institutions to implement development programs in the Tribal Areas and to construct basic infrastructure (roads and irrigation works) to support the continued development of the region.

14. SCHEDULED EVALUATIONS				15. SOURCE/ORIGIN OF GOODS AND SERVICES			
Interim	MM YY 03/84	MM YY 09/85	Final	MM YY 06/87	<input checked="" type="checkbox"/> 000	<input type="checkbox"/> 941	<input checked="" type="checkbox"/> Local <input type="checkbox"/> Other (Specify)

16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a \_\_\_\_\_ page PP Amendment.)

17. APPROVED BY	Signature Donor M. Lion <i>M. Lion</i>	Date Signed MM DD YY 07/26/82	18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION MM DD YY 08/02/82
	Title Director, USAID/Pakistan		

TRIBAL AREAS DEVELOPMENT PROJECT

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LIST OF ABBREVIATIONS AND DEFINITIONS

AA	Assistant Administrator
ADP	Automated Data Processing
ARD	Agriculture and Rural Development
C&W	Communications and Works
EADA	Extra Assistant Director of Agriculture
E&E	Energy and Engineering
ESF	Economic Support Fund
FAA	Foreign Assistance Act of 1961, as amended
FAR	Fixed Amount Reimbursement
FATA	Federally Administered Tribal Areas
FATA-DC	Federally Administered Tribal Areas Development Corporation
FX	Foreign Exchange
FY	Fiscal Year
GOP	Government of Pakistan
IBRD	International Bank for Reconstruction and Development
IMF	International Monetary Fund
INM	International Narcotics Matters
IQC	Indefinite Quantity Contract
LC	Local Costs
PAAD	Program Assistance Approval Document
PACD	Project Assistance Completion Date
P&D	Planning and Development
PDM	Project Development and Monitoring
PASA	Participating Agency Service Agreement
PIDs	Project Identification Documents

PIOs      Project Implementation Orders  
ProAg     Project Agreement  
SAFRON   States & Frontier Regions Division  
TADP     Tribal Areas Development Project  
TT        Tribal Territory  
USG       United States Government  
WAPDA    Water and Power Development Authority

## PREFATORY STATEMENT

The region known as the Tribal Areas separates Afghanistan and Pakistan. The origins of the inhabitants of the area, the Pashtuns, are lost in history, but they have remained socially and culturally distinct from their neighbors. Importantly, they trace their conversion to Islam to a meeting between a founding ancestor, Qais, and the Prophet Mohammad.

In the long history of changing dynasties in the sub-continent, the inhabitants of this isolated and rugged country were never conquered. They were able to negotiate treaties and payments for the right to cross their territory. This tradition continued through the British Raj when treaties established the right of the tribes to manage their own affairs.

At the creation of Pakistan in 1947, the new republic inherited the Tribal Areas and the deeply embedded administrative arrangements. Trying to establish closer ties with the tribes, the Pakistan Government withdrew garrison troops from the area. The basic political-administrative structure remained largely untouched, however. Roads were constructed in some areas after agreement with the tribes, but the pace of development activity did not pick up until about ten years ago. Changing economic conditions in the areas around the tribes and population growth contributed to pressures for change. Seasonal migration to Karachi for work as laborers introduced money and luxury goods into the tribal society. The demand for labor in the Middle East added to the allure of cash income to the point where today, most families have a son or a close relative working there. There is a growing demand for public services but always under the terms and conditions dictated by strong traditions.

The isolation of the Tribal Areas is breaking down. Thousands of Afghan refugees have poured into the region from across the border and are said to outnumber the local population in some Tribal Agencies (Kurram and Bajaur). These refugees are reminders that the mountain fastness of the Pashtun could easily become an international no-man's land. At the same time, the outmigration of Pashtuns has increased greatly with employment opportunities elsewhere. The Pashtun world is undergoing a transition, and the advent of development has set into motion a process which is irreversible.

Amidst this changing environment, however, are deeply-rooted cultural, social, internal, and geopolitical traditions and practices. These characteristics of the region present a rare development challenge. Failure to be sensitive to these characteristics of the Tribal Areas would assure that the important planned benefits of this project would not be achieved. In this setting, assistance interventions which attempted to break or alter these deeply-embedded socio-cultural practices and patterns would be rejected and fail and would be infeasible. It is therefore important to understand as much as possible of this unusual if not unique area, the better to understand the nature of the proposed interventions and the planned approach to implementation. For this reason, a reading of the Background and Social Soundness Analysis sections of this paper is particularly useful.

## I. SUMMARY AND RECOMMENDATIONS

### A. Recommendations

#### 1. Funding

USAID/Pakistan recommends that an ESF grant of \$15 million and Rs 110 million (or the equivalent of approximately \$9.05 million)<sup>1/</sup> be authorized for the Tribal Areas Development Project, which has a Project Assistance Completion Date of September 30, 1987.

#### 2. Geographic Code

The project authorization should specify that, except as A.I.D. may otherwise agree in writing:

a. Goods and services financed by A.I.D. under this project shall have their source and origin in countries included in A.I.D. Geographic Code 000 or Pakistan.

b. Ocean shipping for all commodities financed by A.I.D. under this project shall be only on flag vessels of the United States or Pakistan.

### B. Summary Project Description

The Tribal Areas Development Project is designed to support the GOP policy to accelerate the pace of socio-economic development in the less developed areas of the country. Although this policy has been underway in the Tribal Areas since the early 1970's, renewed emphasis was given to this effort with the publication of the GOP's Special Development Plan for the Tribal Areas<sup>2/</sup> early in 1982. The proposed development activities in the project are drawn from the Special Development Plan. In addition to providing support for the construction of basic infrastructure (roads, irrigation works), this project will enhance the capability of government institutions to implement development programs in the Tribal Areas.

1/ At the exchange rate of \$1.00=Rs 12.16 as of 7/18/82

2/ The Special Development Plan is in addition to the regular Annual Development Plan and budget for the Northwest Frontier Province in which the Tribal Areas are located. A Special Development Plan also exists for Baluchistan. The existence of these Plans underscores the priority accorded by the GOP to these least developed areas in Pakistan.

Project activities fall within three major areas :  
(1) water resources development with related agricultural assistance in land development activities; (2) road construction; and, (3) selected rural development activities. Approximately \$10 million or 42 percent of the total recommended project funding of \$24,046,000 has been earmarked for specific activities which have already been identified for implementation. Based on established criteria, additional activities, which fall under the first two components listed above, will be identified by the end of the first project year. Those activities which have already been identified are as follows :

1. Improvement or construction of 160 watercourses at Bara in Khyber Agency coupled with technical assistance in water management practices and irrigated agricultural development;

2. Upgrading of technology for groundwater investigations and for drilling and operating tubewells, including the drilling of 20 wells and the adoption of monitoring and water budget techniques;

3. Construction of 25.6 kms. of a road from Sadda to Marghan in Kurram Agency; and,

4. Support for small self-help rural development activities in areas targeted for other project-financed activities.

#### C. Summary Findings

This project is considered socially, financially, and economically sound, and administratively and technically feasible, and is ready for implementation.

#### D. Project Checklists and Mission Director's Certifications

This project meets all applicable statutory criteria. Appropriate checklists are included in Annex B.

Two certifications signed by the USAID/Pakistan Mission Director are included in Annex C:

1. a FAA 611(e) certification, which certifies that the GOP has the capability to implement and maintain the project; and,

2. a FAA 611(b) certification, which certifies the disbursement of dollars in lieu of U.S. owned excess rupees to cover local currency costs.

### E. APAC Concerns and Design Guidelines

Four concerns were raised at the APAC review of the PID for this project. Although these are addressed in various sections of the project paper, some comments are in order here.

1. GOP - Tribal Relationship: Is the Political Agent an effective liaison between the GOP and Tribal Leaders? Is the Federally Administered Tribal Areas Development Corporation (FATA-DC) an effective channel of communication between the two? Are the on-going projects in the Tribal Areas ones that the leaders and the people really want?

GOP Tribal Policy is to accelerate the pace of socio-economic development in the region by bringing the Tribal Areas into the economic, political and social mainstream of the country while, at the same time, respecting existing ethnic and tribal identities and structures. A Political Agent appointed by the GOP heads the administrative-political system in each of the seven Tribal Agencies. He is responsible for maintaining a positive relationship between the tribals and the government and is generally highly attuned to local needs and desires for and against individual development projects. The effectiveness of Political Agents varies as a function of the personality and characteristics of the individuals occupying the position at any one time. Some are more interested in development and more responsive to the needs of the tribals than others. The opportunity for a Political Agent to function effectively, however, exists in most parts of the Tribal Areas.

Most development activities in the Tribal Areas are the result of local demands, and no development activities are instituted without explicit approval and usually direct participation of the tribals via the Political Agent administrative system. Government-financed development projects for the Tribal Areas are in constant demand by the tribals and far exceed the development budget. The publication of the "Special Development Plan" is a result of these increased demands as well as a reflection of the GOP policy to assign high priority to these areas.

FATA-DC is an autonomous federal government organization with the mandate to implement approved development schemes in the Tribal Areas. It works primarily on projects dealing with water resources development, small industries and mineral exploration. Most of its staff are tribals

in origin and are highly motivated and very active in the field. They maintain a positive relationship between the tribals and the government by acting as an effective channel of communication.

2. Are there reliable and feasible institutional mechanisms for implementation?

This project will support development activities already planned and at varying stages of implementation by existing government organizations. The two main government implementing organizations, FATA-DC and the FATA Development Division of the provincial Communications and Works (C&W) Department, function effectively within the existing government administrative network and regulations. No changes or additions within this network are planned as the institutional mechanisms required for the implementation of this project are already well established.

The FATA-village level relationship and mechanisms for development activities are also well established and highly structured, although somewhat flexible in application. There is a clear government-village division of labor and mutual expectations regarding the type and size of planned development activities. Tribal segments maintain very strong territorial rights that must be taken into account during project implementation. They must give permission to proceed with a development activity. This "permission" concept has to some degree changed to request/demands for development projects. The localized tribal segments are given the first option on all construction contracts. Outside contractors and labor are brought in only if required skills and labor are not locally available.

The consultants financed under this project will have to function within a relatively strict administrative structure where their primary relationship will be with their government counterparts. Direct contact with tribals will be limited because of political considerations and language differences. Travel into the Tribal Areas will be ultimately controlled by the Political Agent of each Tribal Agency with security considerations being the prime factor in determining access.

3. What is the relationship between this project and INM activities in the NWFP?

For the past two years, INM has had an outreach program in the Provincially Administered Tribal Areas (PATA) where the GOP has more control than in the Federally Administered Tribal Areas (FATA) where this project will be located. INM has designed an area development project for the Malakand Agency in PATA which will be implemented

beginning in FY 1983 and under which an agreement has been reached with the GOP to enforce the GOP's ban on opium poppy cultivation. The INM project is clearly separate and distinct from this project. INM will be working in an area where poppies are the main cash crop with its elimination as an explicit goal of the project. The INM project is aimed specifically at poppy cultivators. Monitoring and enforcement will be explicit features of the INM project which is more feasible in PATA than in FATA, given the different political-administrative structures in the two regions.

4. How can this project advance GOP and USG objectives with respect to opium poppy?

Federal and provincial authorities fully understand and agree that no project activity will be initiated in any area growing opium poppies. Should any poppy growing be undertaken after a project activity has commenced, remedial measures will be taken. These conditions are described in the opium poppy clause language which will be a part of the Project Agreement. (See Annex Q. which also contains a GOP letter to USAID describing its fully supportive position on these matters.) In other words, the process of project preparation and the prospect of USAID assistance have acted to put government officials operating in the project area in a cooperative stance concerning narcotics suppression.

Beyond this initial pre-project effort, the project, if successful, will : provide its beneficiaries with improved opportunities for income, employment and services, thereby offering incentives to eschew poppy-growing; provide a demonstration to other portions of the Tribal Areas that development can happen without the necessity of growing poppies; and, strengthen the will and authorities of government officials in connection with narcotics suppression efforts.

F. Project Issues

There are four major issues to be addressed in this project :

1. Will the GOP be able to fund the recurrent costs of maintaining and operating the infrastructural improvements financed under this project?

FATA-DC will have maintenance and operating responsibility for all irrigation schemes and tubewells constructed under this project. FATA-DC's operating policy is to employ workers to maintain irrigation ditches, canals

and tubewells constructed under its authority. For example, historically, two such employees are assigned to each tubewell. Since the earliest projects implemented by FATA-DC till the present time, the GOP has continued to increase FATA-DC's budget to cover the recurrent costs of its expanding portfolio. In PFY 1981/82, FATA-DC's irrigation systems' maintenance budget was also increased to include irrigation works constructed in the Tribal Areas before FATA-DC was established. These old systems had been neglected for over 10 years. The Acting Additional Chief Secretary of Planning and Development, who is also Secretary of Finance, readily affirmed that this policy would continue to be implemented.

The provincial C&W Department will have maintenance responsibility for the roads constructed under this project. Again, assurances were provided by both provincial and federal government personnel that adequate funds have been and will continue to be provided in the C&W Department's budget for road maintenance.

2. Are the existing contracting procedures in the Tribal Areas which will be followed under this project acceptable to A.I.D.?

The contracting procedure employed in the Tribal Areas is a joint effort carried out by the Political Agent within whose Agency the work is to be done, the government organization responsible for the work, i.e., FATA-DC or the provincial C&W Department, and the tribals within whose territory the activity will occur. The process is defined in terms of tribal territorial rights and does not necessarily involve competitive bidding. When the government undertakes work in the area, local inhabitants are hired as paid laborers. This will be the procedure employed for all irrigation works and tubewells under this project. When work is contracted out, either the tribals receive the contract to undertake the construction (and they may subcontract out the work) or outside contractors or government organizations are contracted to do the work. In the latter case, it is standard government administrative practice to pay the tribals a commission. This procedure takes into account tribal territorial rights, and, in the sense of eminent domain, pays the tribals for infringement of their property. All road construction financed under this project will be contracted out by the C&W Department.

The Fixed Amount Reimbursement (FAR) system will be used for all local works financed under this project. Specifications and cost estimates will be jointly developed by the government agencies and the project-financed consultants and approved in advance by A.I.D. The actual construction will be closely monitored by the advisors, and spot checks will be

carried out by Mission engineers. Reimbursement will be made only after the work has been certified by A.I.D. inspectors and found to be satisfactory. No adjustments will be made for cost overruns, and no payment will be made unless the work is undertaken in accordance with agreed upon standards and procedures. This approach has been discussed with and agreed to by the agencies which will be responsible for project implementation.

3. Will limited access to project sites be a barrier to project implementation?

It is expected that security precautions will periodically limit access to some project sites. However, the United Nations High Commission for Refugees (UNHCR) has been working in the Tribal Areas for the past two years without major delays due to inaccessibility. The project design team received open-ended clearances to work in the region during the design phase. Few delays were encountered, and cooperation was received from all persons contacted, both governmental and tribal. Project sites have been carefully chosen so as to minimize access difficulties. This policy will be followed throughout the life of the project. Flexibility to shift work sites has also been built into the project. Thus access is not considered a major barrier to project implementation, given changing local attitudes, the nature of project design, and careful project management.

4. Maintenance and repair of the watercourses and tubewells constructed under this project will be the responsibility of the government. Are water users associations and private ownership of tubewells feasible in the Tribal Areas?

While both A.I.D. and the GOP believe that user charges for water and other services should be adopted, and, in fact, the GOP is moving in this direction, the Mission does not believe that it is reasonable nor prudent to insist on this for this project since it will represent a radical change in the political-administrative relationship and in the structure of doing business in the Tribal Areas. The same point applies to the issue of public versus private ownership of tubewells. Efforts will be made during the course of the project by FATA-DC staff to encourage the tribals to play a role in maintenance and repair of local works. However, the attitudes referred to above are deep-seated, and insistence upon their modification would be infeasible.

G. Contributors to Project Development

The following individuals contributed to the development of this project :

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-----------------------	---

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## II. BACKGROUND

### A. USG-GOP Negotiations

The United States Government and the Government of Pakistan are embarked on a renewed and strengthened effort to increase their economic and development cooperation. This effort was marked by high level USG-GOP consultations in August 1981 which culminated in the negotiation of a \$ 3.2 billion package of military and economic assistance which the U.S. will seek to provide to Pakistan between FY 1982 and FY 1987. As part of these negotiations, both governments agreed to assign priority to the less developed provinces. This project responds to that agreement.

### B. Socio-Economic Setting

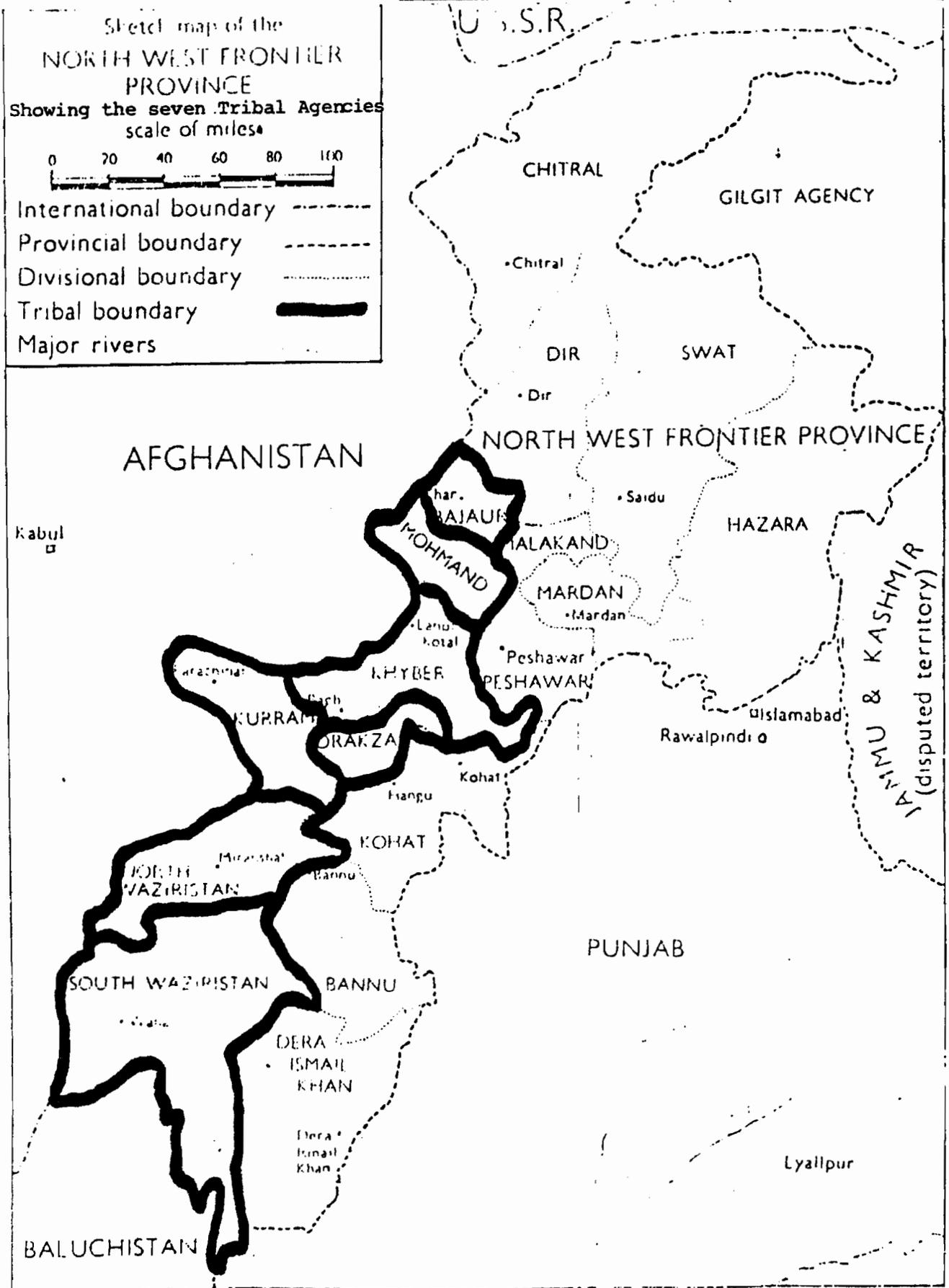
The Tribal Areas, located on Pakistan's northwestern border with Afghanistan, consist of about ten thousand square miles of generally arid valleys, hills and mountains. The people, estimated at about two million, are scattered in isolated hamlets, villages and towns, and are involved mostly in subsistence-level agriculture (grain). The rough, broken-up terrain limits the land resources for farming to a series of valleys. The scarce and uncertain rain and snowfall combined with high evaporation rates make agriculture dependent to a large degree on irrigation. The population density is roughly 80 people per square kilometer with hardly any urban settlements, in comparison with 169 persons for the rest of the country (excluding Baluchistan with 12). The population is, however, concentrated in the inhabitable valleys.

The Tribal Areas have special legal status, emanating from the British colonial period, and, until recently, have remained largely excluded from development activities of both the federal and provincial governments. The special status of the Tribal Areas was acknowledged and accepted by the Government of Pakistan at the time of partition in 1947. The basic unit of administration in the Federally Administered Tribal Areas (FATA) is the Agency, of which there are seven: Bajaur, Mohmand, Khyber, Orakzai, Kurram and North and South Waziristan (See Figure 1).

The Tribal Areas are inhabited by several tribes of Pathan origin who jealously guard their tribal identification and even now indulge in inter-tribal feuds. The Tribal Areas are still largely outside the jurisdiction of the federal or provincial governments of Pakistan. Government structure and laws are replaced by local tribal laws, governed through local "jirgas" or councils of elders.

Traditional isolation and complex socio-economic systems based on "tribalism" render the Tribal Areas radically

FIGURE 1 -12-



different from the rest of the country. A hostile social climate and very limited income-generating opportunities combined with inter-tribal rivalries that often result in bloodshed, make life in the Tribal Areas difficult and dangerous.

The Tribal Areas have long been noted for out-migration, especially over the past two decades, to other areas in Pakistan (notably Karachi) and more recently to the Middle East. These migrants probably represent the major source of income for the area. According to the GOP Population Census of 1980-81, the total population of the Federally Administered Tribal Areas declined by 12.7 percent between 1972 and 1981, from 2,491,000 to 2,175,000. All other areas in Pakistan showed population increases during this period ranging from 26 percent in the Punjab to 77 percent in Baluchistan.

The economic base is mainly dryland agriculture with some irrigation provided by scattered tubewells and a small system of canals drawn from the Warsak Dam built on the Kabul River in Mohmand Agency. A large portion of the population rears goats and sheep, which they move from place to place with the change of the seasons.

Besides farming, the other main tribal occupations are livestock, trade, transportation (trucking), and the timber industry, roughly in that order. But the area has not and perhaps never will be self-sufficient in food due to its meagre natural resources. It is estimated that per capita income for the area is one third that of the rest of the country. Basic health services are inadequate, largely due to the difficulties in staffing and supplying health facilities. The present road system through the Tribal Areas includes some 989 kms. of black-top road and 1234 kms. of gravel road. There are 1146 primary, middle, and high schools and 8 colleges. For these, there are 5175 trained and 2035 untrained teachers. There are 25 hospitals with 1000 beds and 129 dispensaries with 61 beds. For both health and education, there are major problems recruiting and retaining qualified staff who are willing to reside in the Tribal Areas. Table 1 summarizes basic data on the Tribal Areas by Agency for all seven Agencies.

The demographic balance in the Tribal Areas has been upset over the past three years with the influx of some 793,000 registered refugees from Afghanistan. In some Agencies, e.g. Kurram and Bajaur, the actual (as opposed to the registered) number of refugees is said to outnumber the local population. The refugees compete with the tribals for local resources to some degree, despite United Nations High Commission for Refugees (UNHCR) and World Food Program assistance. Below is a summary of the registered Afghan refugee population in

TABLE 1  
BASIC DATA<sup>a/</sup> ON THE AGENCIES OF THE TRIBAL AREAS

Agencies	Population <sup>b/</sup>	Roads in Kms.		Schools	Colleges	Hospitals	Dispensaries	Total Area (in Acres)	Cultivable Area (in Acres)	Cultivable Area as a Percent of Total Area
		Black Topped	Gravel							
Mohmand	161,000	113	67	139	1	2	5	567,680	24,968	4
Khyber	282,000	124	414	163	1	3	17	634,240	134,763	21
Kurram	289,000	114	254	171	2	4	11	662,400	45,915	7
Orakzai	356,000	79	155	129	-	1	15	448,000	42,600	10
Bajaur	287,000	64	35	136	1	1	15	377,600	292,540	77
North Waziristan	235,000	221	117	194	1	8	28	1,162,880	18,149	2
South Waziristan	308,000	274	192	214	2	6	38	1,635,840	240,180	15
TOTAL	1,918,000	989	1234	1146	8	25	129	5,085,440	799,115	16

a/ Socio-economic data on the Tribal Areas are hard to come by and are suspect. The data do provide an indication of orders of magnitude and gross differences among the Agencies.

b/ Source: Housing and Population Censuses of Pakistan, 1980-1981, Population Census Organization, GOP. These figures do not include an estimated additional 257,000 inhabitants living in what is classified as FATA territory adjoining Peshawar, Kohat, Bannu and D.I. Khan Districts which are not considered part of any of the seven Agencies. The total FATA population is therefore estimated at 2,175,000 in 1980-1981.

the Tribal Areas by Agency as of June 30, 1982:

<u>Agency</u>	<u>Afghan Refugees<sup>a/</sup></u>	<u>Local Inhabitants<sup>b/</sup></u>
Bajaur	197,590	287,000
Kurram	278,814	289,000
Khyber	25,761	282,000
N. Waziristan	187,256	235,000
S. Waziristan	47,474	308,000
Orakzai	15,827	356,000
Mohmand	40,454	161,000
Total	793,176	1,918,000

a/ Source: World Food Program (probably on the low side)

b/ Source: Housing and Population Censuses of Pakistan, 1980-1981, Population Census Organization, GOP.

### C. Institutional Setting

The Government of the Northwest Frontier Province (NWFP) consists of three administrative units, the District, the Provincially Administered Tribal Areas (PATA) and the Federally Administered Tribal Areas (FATA). This project is concerned only with FATA.

The local administrative unit of both FATA and PATA is the Agency, which is headed by a "Political Agent". He is either a career Federal Government employee or is seconded from the NWFP Government Civil Service. The staff working for the Political Agent are mostly from the NWFP. Each Political Agent reports administratively to a Commissioner who administers either a Division, one or more districts, or one or more Districts plus Agencies. There are seven FATA Political Agents in the NWFP. The Political Agents of the 5 northern Tribal Agencies (Bajaur, Mohmand, Khyber, Orakzai and Kurram) report to the Commissioner, Peshawar Division. Political Agents from the two Southern Tribal Agencies (North Waziristan and South Waziristan) report to the Commissioner of the D.I. Khan Division.

Each Political Agent also has direct access to the Governor of the NWFP who is the direct representative of the President of Pakistan for the administration of the Tribal Areas. The Commissioners and the Home Secretary, NWFP, report to the Chief Secretary/Governor, NWFP. The Home Secretary, NWFP, who is responsible for the maintenance of law-and-order in the NWFP, is also concerned with law-and-order in all seven Tribal Agencies.

Development activities in the Tribal Areas are undertaken by the Federally Administered Tribal Areas Development

orporation (FATA-DC) and by the various provincial level nation-building departments (those directly concerned with carrying out development projects) including : Education, Health, Agriculture, Communications and Works (C&W), Rural Development, and Forests.

FATA-DC is an autonomous government agency created under a Federal Government Charter with a full-time Chairman and a Board of Governors consisting of senior officials of the NWFP Government and the Federal Government. FATA-DC carries out development activities in industries, minerals and irrigation, and has its own staff for these projects. Two units of FATA-DC which carry out development activities, and with which this project will be concerned are the Tubewell Division and the Irrigation Division.

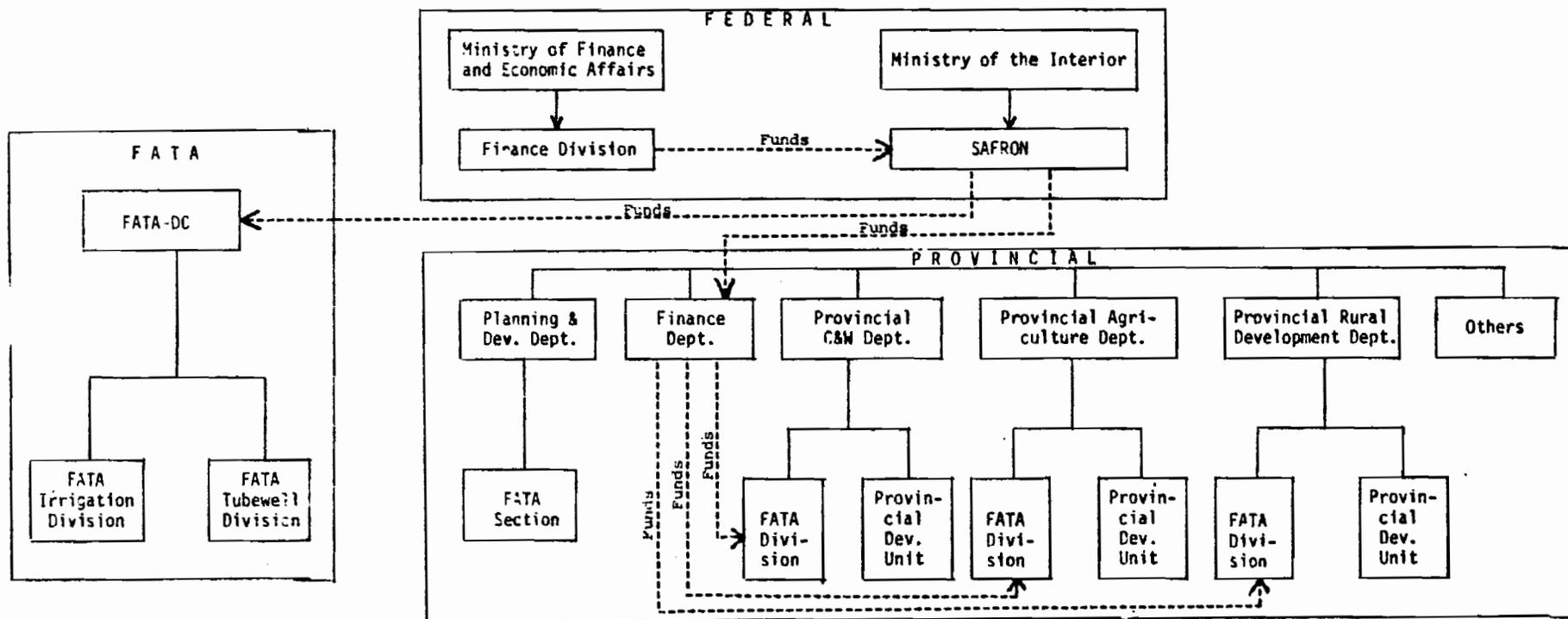
Funding for FATA-DC activities is provided by the Finance Division of the Federal Ministry of Finance and Economic Affairs (Min F&EA) through the States & Frontier Regions Division (SAFRON) of the Federal Ministry of the Interior. SAFRON is responsible for all development and non-development activities in the Tribal Areas. The Government of the NWFP is not involved in planning nor managing any of the FATA-DC projects.

The provincial nation-building departments have FATA Divisions which also carry out development projects in the Tribal Areas, and funding for these projects is from the federal rather than the provincial budget. The FATA Divisions of various provincial departments working in the Tribal Areas report to their respective provincial headquarters in Peshawar. The provincial development budget (Annual Development Program) for the Tribal Areas is presented by the FATA Section (no relation to FATA-DC) of the NWFP Planning and Development Department. Funding for the development budget for the Tribal Areas is provided by the federal Finance Division (MF&EA) to the provincial Finance Department through the federal SAFRON Division.

There is a difference in the funding mechanism for FATA-DC and for the provincial nation-building departments undertaking projects in the Tribal Areas. The source of funding in both cases is SAFRON. However, the provincial nation-building departments working in the Tribal Areas receive SAFRON funding through the provincial Finance Department, whereas FATA-DC receives its funding directly from SAFRON, which gives FATA-DC greater flexibility (See Figure 2).

There is an important difference between the development administration for the Tribal Areas and that for a district in the NWFP. A provincial nation-building department selects a project in a district of the NWFP based on technical and economic considerations. At best, the administrative head

**FIGURE 2**  
**ORGANIZATION CHART OF RELEVANT AGENCIES OF THE FEDERAL AND**  
**PROVINCIAL GOVERNMENTS AND FEDERALLY ADMINISTERED TRIBAL AREAS (FATA)**



of a district (Commissioner) is informed about the project. The administrative head of a Tribal Agency (Political Agent), on the other hand, provides the basic proposals for the development projects and must approve a project prior to implementation. His approval is based on such additional factors as area accessibility, loyalty of benefiting tribes, and the political impact of the project.

Specific divisions within FATA-DC as well as the FATA divisions of several provincial nation-building departments will be responsible for the implementation of activities under this project.

#### D. Socio-Political Setting

##### 1. A Perspective on Authority

The Pashtun (also known variously as Pathan, Pakhtun, and Afghan) claim descent from their putative ancestor, Qais bin Rashid, who went to Arabia from Kohistan, Ghor in Afghanistan and was converted to Islam by the Prophet himself in the seventh century. He is said to have married the daughter of the renowned Islamic General, Khalid bin Walid, from whom he had three sons, Sarbarn, Bitan, and Ghurghust. All Pashtun tribes trace their origin to the offspring of Qais.

Despite the ethnic variations that have developed among the Pashtun over the centuries, they all share the belief in an adherence to the Pukhtunwali, the rigid tribal code of behavior. Further, they have retained their highly fragmented tribal political structure wherein there is no recognized central authority. Authority traditionally has rested with the localized council of elders (jirga). These features are key elements in the administrative, political, and social contexts of the Tribal Areas, and it is the interrelationships among them that give the Tribal Areas special and distinct characteristics not found in other parts of Pakistan.

The characteristics of Pashtun society sustained its independence from outside forces and historically have had a profound effect upon attempts to control or administer the Tribal Areas. For example, the Pashtun remained in general conflict with the British from the time of initial contact in the 1840's until the British departure in 1947. This dissidence and the complexity of the Pashtun social organization required a different administrative system from that of the more passive districts of India. The colonial government, somewhat resigned to compromise, demarcated this region and dubbed it the "Tribal Areas". Through special laws, treaties, and procedures, the government administered the area by giving recognition to the traditional code (as interpreted by the jirgas), and the system of tribal authority. Each "Agency" was administered by a Political Officer (now the

Political Agent) whose relationship with the inhabitants reflected the need for a cautious and flexible political accommodation. This system of indirect administration has generally remained intact.

## 2. Institutions Affecting the Exercise of Power

### a. The Maliks

Within the Tribal Areas, indirect rule by the British posed problems not encountered in the more settled areas where a hierarchy of large landowners/influential leadership already existed. The political fragmentation of Pashtun tribal society prompted the British to create the "Maliki system", based upon the traditional roles of patriarchs called Maliks (implying "petty chief" or "headman") as a formal category of local leadership, and upon an informal category of leaders known as mashars (the distinction between the two is very fine). Loyal and suppliant Maliks and mashars were officially given the title "Malik", and their names were placed by the Political Agent on lists which entitled them to various favors but which also imposed on them certain duties. Unlike the traditional leadership roles, these roles were inheritable, and in time a profusion of Malik categories resulted.

The Maliki system has continued until the present time, and while their official allowances are commonly tiny (as little as a rupee per year), the role has political importance as well as high social status. It presents the Malik with a great many economic opportunities : special financial allowances in addition to those meant for his "subsection"; quotas for food rations (for sugar, tea, and flour) at special prices; and all building contracts in his immediate area (most let sub-contracts). In addition, the Malik is given the choice of appointing tribal levies (khassadars) from his kinsmen (usually his sons); he, along with other Maliks, attests as to whether a person is a "genuine Pashtun" and therefore eligible for a domicile certificate which is essential for scholarships and service quotas; only Maliks are allowed to vote for National Assembly candidates. Groups of Maliks also form lobbies to decide who may be granted visas for employment abroad (i.e. in the Middle East). One result of these prerogatives is that some official Maliks have become wealthy.

Duties are as vague as is the term "loyalty" for which the favors ostensibly are given. These duties include: helping to keep the main roads open; negotiating the return of kidnapped people or escaped outlaws, and proclaimed offenders; and being available in "times of trouble". However, as some Maliks have become affluent, they have found it prudent to shift their sphere of activity outside the Agency.

Since they were created by fiat, Maliks have produced more problems than they solve for the administration. Even today, the Maliks share little of their benefits with kinsmen, who often criticize them as selfish and devious, concerned only with personal gain. Internally, tribal society is faced with its first real structural crisis as an opposition group called the kashars has emerged. Although the word literally means, "younger" or "junior", the Kashars can be **described** as "political have-nots", including old and rich people. Their opposition is expressed in political rather than violent terms. The Kashar may be militant, but he is not a revolutionary. He wishes to abolish what he considers an invidious British-created system in order to return to a traditional (and perhaps idealized) tribal structure. In many respects, he is an expression of emerging contradictions within the existing structure.

The average tribesman, like the kashar, regards the Maliki system as an institution imposed upon him by the British for the latter's political and administrative ends. A Malik rarely represents more than a three-generation tribal joint family (a subsection), which usually consists of between eighty and a hundred people. He is for them the living link to the founding father of the tribe, giving rise to strong in-group sentiments. As a result, the Malik's main objective is to maximize individual or small kin-group gains rather than gains for the whole tribe. He may, for example, ignore sectional or tribal interests to improve his own bargaining position vis-a-vis the political authorities. Consequently, he may oppose (directly or indirectly) the construction of a road or a school in his village. Such a position may have as its immediate goal monetary or other rewards if he changes his position, but another goal may be more subtle -- to beat back the threat to his status created by economic development, manifested by a road. Although he may talk about the need and desire for change, he may fear its long-term consequences.

The variety of Maliks is confusing and ranges from actual tribal leaders with real patriarchal authority to those who do not even live in the Tribal Areas and have no influence within their tribes. They also are proliferating. Agency Malik lists that at one time numbered a few hundred, currently include several thousand names.

b. Councils of Elders (Jirgas) and Local Tribal Councils

Tribesmen conduct their affairs through a council of elders (jirgas) which meets to discuss matters of importance, such as those related to law and order. It is

their responsibility to implement the principles of the Pukhtunwali code. The size and makeup of any given jirga will depend on the issues to be decided, the area involved, and the tribal sections affected.

Another institution frequently found in the Tribal Areas is the Local Council, often referred to as Agency Council. Unlike the jirgas, however, these councils exist for a fixed period of time, and the members are named by the government (the Political Agent). Size depends on the Agency population with members being senior heads of kin groups (local lineages). The result is that most of the membership is drawn from the established Malik families, so that there is an overlap of traditional tribal leadership, the Malik system, the jirgas, and the Agency Council, although the importance of this varies from Agency to Agency.

Many people, particularly the educated, see the Maliks in the council as being primarily concerned with reinforcing their traditional power roles in the society. They have vested interests and attempt to monopolize privileges for themselves and their kinsmen.

It is amidst this socio-political setting that development must take place. The Pakistan Government took heed of the British experience. The same historical inter-relationships within the society have influenced the course of recent development efforts in the Tribal Areas. They will have an equally significant impact on any further development program formulated for the Tribal Areas.

#### E. GOP Special Development Plan for the Tribal Areas

Only within the last ten years has the GOP accorded priority to the development of the Tribal Areas. In the 1960's, only Rs 100 million for the entire decade was allocated for the Federally Administered Tribal Areas (FATA). In the late 1970's, allocations gradually increased, reaching an annual average of almost Rs 200 million. The Annual Development Program for FATA for 1981-82 provided about Rs 300 million.

In January 1982, the GOP signaled an increased priority for the Tribal Areas with the publication of the Special Development Plan for the Tribal Areas. The Plan was distributed by the GOP to potential donors, and at the June 1982 Paris meeting of the Consortium of AID Donors to Pakistan, the GOP stressed the priority it assigns to the development of the area, and the need for additional resources from the donor community.

The objective of the plan is "the removal of the sense of economic deprivation resulting from past neglect and the laying down of an infrastructure base for future growth and development". The plan, which encompasses both FATA and the Provincially Administered Tribal Areas (PATA), covers programs and projects totalling Rs 4.3 billion to be phased over a period of five to six years. The plan would double the annual public sector development expenditures for both FATA and PATA over the past few years.

Development projects identified in the plan for FATA total about Rs 2.6 billion or an average over the six-year plan period of Rs 461 million per year, which is more than double the level allocated in the late 1960's. Over 50% of the funds are allocated for the transport and communications sector. Construction and improvement of roads are given the highest priority in order to improve the infrastructure base that has been a major bottleneck to the rapid development of the Tribal Areas. The plan calls for the construction of 1070 kms. of roads to link the major settlements and to open up new areas for development.

Energy sector allocations of Rs 400 million are proposed, chiefly for electrification. The next largest allocations after energy are for the agricultural sector and the water resources sector, for which projects totalling Rs 295 million and Rs 231 million, respectively, are included in the Plan. Agricultural projects to be undertaken include intensification of horticultural and agricultural activities, land development, soil and water conservation, and livestock and poultry. Water resources projects include installation of some 250 tubewells and the improvement of small irrigation schemes. Annex L includes relevant excerpts from the Special Development Plan.

#### F. Factors Affecting Development

Attitudes of the Pashtun toward the outside world and toward their own world are changing and while the changes have to some degree created a climate more favorable to development, there continue to be features of Pashtun life that constitute formidable barriers to development.

##### 1. Changes Favoring Development

The events in neighboring Afghanistan have served to remind the Pashtuns that the isolation they enjoyed historically has been swept away, and their mountain fastness could easily become an international no-man's land. Some of the Agencies (such as Kurram and Bajaur) are said to have more Afghan refugees than indigenous population, and the stories of their flight have not been lost on the Pashtun

(who are their ethnic and linguistic cousins). They also are increasingly aware that their barren desolate mountains have limited economic potential and that they are essentially dependent on the government to provide or arrange for their economic security and development.

The pattern of outmigration since British times reflects the limited economic opportunities in the Tribal Areas. Pashtuns have for a long time been migrating to other parts of Pakistan (Karachi is described as the largest Pashtun urban center in existence) and more recently to the Middle East. It has been estimated that one member from every major extended family is working in the Middle East (5 to 10 percent of the total population or at least 100,000 persons). The flow of remittances has brought cars, trucks, tractors, television sets, and other consumer goods. Remittances also have provided the wherewithal for Pashtuns to invest in land and in business outside the Tribal Areas.

For some ten years, the GOP has sought to bring development to the Tribal Areas with roads, electric power, tubewells, and other irrigation systems. Social services available in other parts of Pakistan have been partially extended to the region. The number of schools has increased. One of the best high schools in the NWFP, for example, is located in the old British military camp at Ramzak (it is a boarding school operated as a military academy). The areas visited during project paper design reflect some of the changes taking place. There is a striking example of development in the Bara area of Khyber Agency, where the Afridi tribe is undergoing a sweeping transition as a result of its move, during the past ten years, from the mountainous Tirah region down to the Khajuri Plain where its farming has been undergoing modernization and its involvement in entrepreneurial activities has increased tremendously. On a smaller scale, the Turi tribal village of Luqman Khel in Kurram Agency is anxious to improve its existing irrigation system and add 3,000 acres of new farmland. The Ali Sherzai tribal villagers in Shamkhi (Kurram Agency) want a new road to give them access to the market and to social services in Sadda.

## 2. Constraints to Development

### a. The Administrative System

The administrative system in the Tribal Areas centralizes authority in the Political Agent so that much depends on his personal qualities and orientation. Project design should reflect this reality which, depending upon the situation, could be advantageous or create risks for

successful project implementation.

b. Local Politics

Local politics will most certainly affect project implementation. Within the context of the Tribal Areas, the Pashtun is a skilled politician who historically has used, manipulated or eliminated outsiders who have come into this forbidding region to further their own ends. The Pashtuns will condone activities they see as useful, but at the same time they are apt to attempt to manipulate projects and personnel to their own advantage.

c. Accessibility

The tribals have a long history of separatism, and their relations with the government continue to be defined in treaties. Their primary allegiances are to the immediate kin group and not to any higher political authority. Trust is still restricted to this kin group which continues to give the individual his identity. While there is some rethinking of their role in the nation and in the world, there still is a basic distrust of outsiders and their intentions when they enter the Tribal Areas. There are Pashtuns who do not want incursions from the outside, and they are prepared to resist with force if necessary.

d. Rivalry

Although social, economic, and political relations among the Pashtuns are very much kin-oriented, male sibling and male cousin (notably brother's sons) rivalries and conflicts are a central feature of Pashtun society since both are related to problems of leadership and inheritance of land. Tarboorwali or the "code of the cousin" is a formal and structured expression of rivalry between the individual and his father's brothers' sons regarding land. The land tenure system is such that these cousins are very likely to have fields in close proximity. It would therefore affect any project that calls for cooperation. Since additional land will be brought under cultivation as a result of both the Bara activity and other irrigation schemes (such as Sheen Tangi), the question arises whether this rivalry may extend to another precious resource -- water -- thereby affecting the cooperation so essential for a well-working system.

e. Contracting Procedures

Contracting for project work will be directly affected by local and tribal policies. Contracts for large construction projects (such as roads and irrigation systems)

are awarded by the Political Agent. Awarding of contracts is a political gesture which defines the personal relationship between the Political Agent and the Maliks. Typically, despite their lack of experience in construction or in business, Maliks are given the contracts, and they in turn usually subcontract to someone more qualified. There are clear political advantages to this, but complications arise when the work either is substandard or not completed. In such situations, it becomes awkward for the Political Agent or engineers of government departments to exert pressure, which might end in the Malik's being jailed. When thus pressured, Maliks have been known to express their resentment by acts of kidnapping or sniping at government posts. Should the government judge that a given project is far too big to be handled by an individual Malik, the contract can be awarded to an outside firm. In such cases, the tribe living in the area where the project is being implemented is entitled to a certain percentage (known as the Tribal Commission).

#### G. Other Donor Assistance

There has been only limited involvement of other donors in the Tribal Areas to date. Thus far, the assistance which has been provided has been directly supportive of GOP programs targeted to the Afghan refugees located throughout the Tribal Areas. The United Nations High Commission for Refugees (UNHCR), the United Nations Children's Emergency Fund (UNICEF), and the World Food Program have active programs for refugees in the Tribal Areas. UNICEF is also working with the NWFP Health Department to develop rural drinking water systems throughout the Tribal Areas but as isolated activities related to the refugee program rather than as part of an area development program for the tribals.

There are three major reasons for the absence of more donor participation in the Tribal Areas: (1) Only recently has the GOP allowed outsiders to work in the Tribal Areas. In fact, only since January 1982 with the publication of its Special Development Plan for this region has the GOP actively sought assistance from the donor community for the Tribal Areas; (2) The unusual if not unique characteristics of the region made it very difficult to undertake development activities in the Tribal Areas; and, (3) Many opportunities exist and have existed for donors to provide assistance to Pakistan outside the Tribal Areas.

To date, the response of the donor community to the publication of the GOP's Special Development Plan has been limited. Only the IBRD has expressed interest in the area, but at this point, the Bank has neither pledged a specific amount of funds nor has it indicated what sectoral or geographical areas it might support. In many respects, the A.I.D. project represents a pilot demonstration effort which,

if successful, could establish a precedent and pave the way for other donor involvement in the Tribal Areas.

#### H. Relationship to A.I.D. Strategy and Other A.I.D. Projects

##### 1. A.I.D. Strategy

This project is fully consistent with A.I.D.'s strategy in Pakistan and will help to achieve the overall objectives of the renewed economic assistance program. The project will focus entirely on one of Pakistan's least developed areas where some of the country's poorest inhabitants reside. As a result of the project, rural productivity, agricultural production, and employment opportunities should increase, rural-income disparities should be reduced, and the overall quality of life in the Tribal Areas should improve. In addition, the project will carry out two of the Agency's development priorities, namely institution-building and technology transfer.

A major portion of the funds under this project will be used for local cost financing, which will help to alleviate Pakistan's balance of payments difficulties. Given the geographical focus of the Tribal Areas Development Project, the project will assist Pakistan deal with the burdens imposed by the massive influx of Afghan refugees, of which almost half reside in the Tribal Areas. Finally, this project is one of the major activities in the proposed economic assistance program to Pakistan which will support the USG's continued efforts, in conjunction with the GOP, to curtail opium poppy cultivation and the processing of opium into heroin in Pakistan.

##### 2. Other A.I.D. Projects

The Tribal Areas Development Project is the only project in the entire portfolio which will impact directly on the inhabitants of the Tribal Areas. With the exception of the Baluchistan Area Development project, all the remaining projects will be national in scope. However, this project and the people in the Tribal Areas will derive benefits from these other projects to the extent that provincial nation-building departments and other organizations in the NWFP are strengthened through training, technical assistance, and the provision of commodities and new technologies and approaches are tested and adopted for use in Pakistan.

For example, this project will directly benefit from the technology and training programs developed under the

On-Farm Water Management Project. The same applies to the Agricultural Research Project in relation to improved agricultural land practices. The institutional strengthening, increased generating capacity, and expanded distribution which will result from the Rural Electrification Project will have both direct and indirect benefits for the population in the Tribal Areas. The same applies to the Farm to Market Roads Project under which the provincial C&W Department, a major implementing agency under this project, will be strengthened. Activities under the Agricultural Production, Distribution and Storage Project (such as the fruit and vegetable marketing component), the Agricultural Education, Research, and Extension Project (such as the development of the Agricultural University at Peshawar), the Energy Planning and Development Project (such as the hydro-power component), and the Development Support Training Project (under which a full-time Pakistani management training advisor will work with appropriate NWFP departments in planning and management) should also have significant spin-off benefits for the inhabitants of the Tribal Areas. This also applies to the Irrigation System Management and the health and population projects in the USAID/Pakistan portfolio, all of which will involve activities in the NWFP.

Clearly, the Tribal Areas will benefit, both directly and indirectly, from all the proposed projects under A.I.D.'s renewed economic assistance program to Pakistan. An important dimension of this project and of the rest of the portfolio is its positive contribution to national stability and cohesion.

### I. Project Rationale

The Tribal Areas has been traditionally closed to foreign donors. Since the early 1970's, the GOP has financed with its own resources an active development program in this region in an attempt to accelerate the pace of socio-economic development in the less developed areas of the country. The GOP's increased priority with respect to the development of the Tribal Areas was underscored with the publication of the Special Development Plan for the region in January 1982 and the GOP's solicitation of donor support to implement the Plan. This project represents the first commitment made by an external donor in response to the Plan and is consistent with the agreed upon strategy and objectives of A.I.D.'s renewed economic assistance program to Pakistan, with present GOP development policy, goals, and objectives, and with the perceived needs and desires of the inhabitants of the Tribal Areas.

The Tribal Areas is one of the least developed regions of the country because of the inhabitants' long tradition of social and political isolation and insulation and their limited resources. Only recently have the tribals begun making strong requests/demands of the GOP for extensive development activities. The needs are great, local demand exists, and GOP commitment to development in the region is highly evident. These factors combined justify the high priority for this project.

The water resources development component of the project is aimed at one of the most critical development constraints in this region of sparse and uncertain rainfall where agriculture is the main occupation. The road construction component is justified in terms of the establishment of basic communications with previously isolated areas. These two components have been designed as a series of area-specific development efforts to maximize the overall impact of the project. Activities which will be funded under the Supplementary Development Fund will further increase the impact of the project in these selected areas.

An economic analysis of the project suggests that the returns will be high. The significant positive social and economic benefits of the project are also likely to contribute to the USG and GOP's objective of curtailing of opium poppy cultivation by making opium poppy production a less attractive economic option.

All activities will be implemented within the existing cultural-political-administrative structure of the Tribal Areas. Existing government institutions will be the conduits of assistance activities. They will be strengthened under the project to do better at and more of what they are already undertaking in the region. The implementation and success of this project do not depend on any social or institutional changes.

Finally, as mentioned previously, a successful first effort by a foreign donor in assisting development in the Tribal Areas will encourage other donors to participate and will provide guidelines regarding methods and approaches which can be used in the design of future projects in the region.

### III. DETAILED PROJECT DESCRIPTION

#### A. Project Goal and Purpose

The goal of this project is to accelerate the integration of the Tribal Areas into the socio-economic mainstream of Pakistan and improve the quality of life for tribal inhabitants. The purpose of the project is to (1) strengthen the capability of government institutions to implement development programs in the Tribal Areas; and (2) construct basic infrastructure (roads and irrigation works) to support the continued development of the region.

#### B. Project Outputs

The project is expected to produce the following outputs which together should achieve the project purpose:

1. 9 FATA-DC personnel trained in On-Farm Water Management;
2. 4 FATA-DC professionals trained in the U.S. in selected water resource development activities;
3. Increased capability of FATA-DC to design, construct, rehabilitate, repair, and maintain watercourses and other water development schemes;
4. Increased capability of FATA-DC to undertake groundwater investigation and to construct, repair, and maintain tubewells;
5. A water production and resource monitoring system developed and functioning at FATA-DC including a water budget for the area in which the tubewells are installed;
6. Increased capability of FATA-DC and the provincial Agriculture Department to provide technical assistance to farmers in land development and cropping patterns;
7. Increased capability of the provincial C & W Department to design and build roads;
8. 160 watercourses designed and rehabilitated or constructed in Bara;
9. 20,000 acres of new land brought under irrigation and 20,000 additional acres developed using appropriate land development practices in Bara;
10. A land development and cropping patterns demonstration plot established and functioning in Bara;
11. 20 tubewells drilled and operational using improved equipment in various parts of the Tribal Areas;
12. 20,000 acres (approximately 100 acres per tubewell) of new land brought under irrigation in various parts of the Tribal Areas;

13. Three to four minor irrigation schemes constructed or rehabilitated and 6,000 to 8,000 acres of new farmland brought under irrigation within these schemes in various parts of the Tribal Areas;
14. 25.6 kms. of gravel road built between Sadda and Marghan in Kurram Agency;
15. 40,000 people in Kurram Agency with more reliable access to regional markets, health facilities, and educational centers;
16. 100 kms. of additional roads constructed into isolated, underdeveloped areas or in support of the further development of already developing areas;
17. At least twenty small-scale self-help rural development activities in various parts of the Tribal Areas in support of area development schemes; and,
18. Reliable and timely socio-economic and other basic data on the Tribal Areas collected and available to government agencies and A.I.D.

#### C. Project Components

Some specific project activities have already been identified. Other activities will be identified during project implementation. The criteria which were and will be used to select activities are that the activity: (1) is in the GOP's Special Development Plan; (2) has already been accepted in the locality; (3) develops, expands or improves an existing activity or capability; (4) is self-sustaining without requiring major changes in local technical skills, attitudes, or tribal-tribal or tribal-governmental relationships and practices; (5) contributes to the betterment of the human condition in developmental terms; (6) creates a potential for future developmental efforts; (7) enhances the government's ability to provide services to the area; (8) is not in an area where poppies are grown at the time an activity starts; (9) is accessible to project staff and is likely to remain accessible.

On the basis of these criteria, activities which will be financed under this project fall into three major categories: (1) water resources development, including both surface and ground water development activities; (2) roads; and, (3) a supplementary development fund. The major occupation of most of the households in the Tribal Areas is subsistence agriculture which generally requires irrigation since the region is characterized by sparse and erratic rainfall, high evaporation rates, and limited surface water. With increasing population pressures, many of the traditionally built irrigation systems require upgrading, new surface water systems need to be developed where feasible, and ground water needs to be developed where land and water resources are available. The impact of these and other activities would be significantly enhanced by the existence of at least a minimal

support system of roads. The supplementary development fund will be used to finance development targets of opportunities in areas where project-financed water or roads activities are being implemented in order to enhance the overall development impact of A.I.D. assistance in specific locales.

In addition to having a fairly limited sectoral focus, this project will also have a limited geographical focus. The reasons for this relate to the following: (1) this is the first intervention of its kind by a foreign donor; (2) accessibility and local cooperation vary among the Agencies; (3) the Agencies are at various stages of development; and, (4) it was decided that a limited number of fairly large sub-projects would not only be easier to manage and implement but would also more likely achieve a long-term and visible development impact which would serve as an example to both the tribals and the government as to the benefits of a donor-financed activity.

Accordingly, activities in three major areas will be financed as follows:

1. Water Resources Development

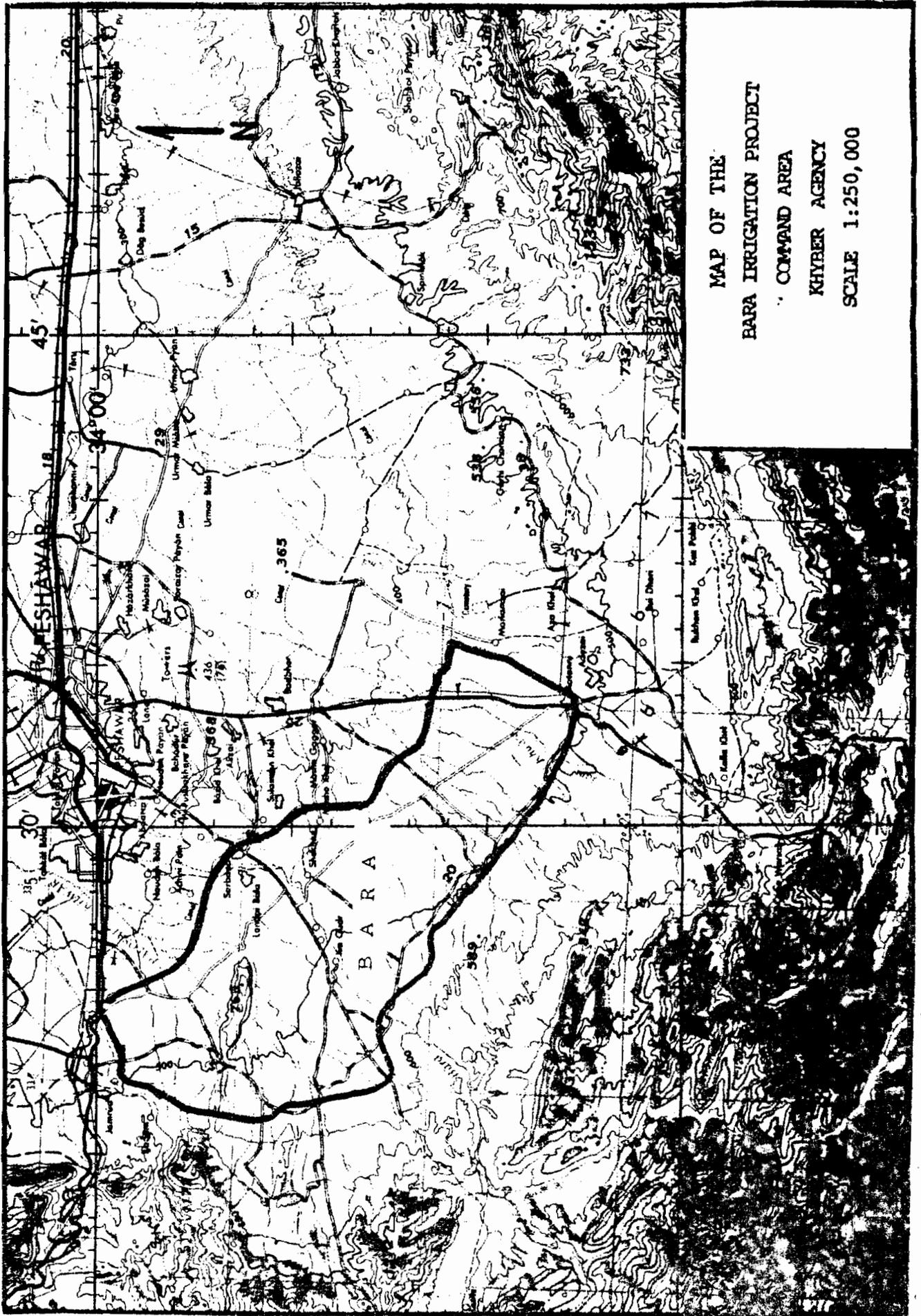
This component of the project will consist of the following activities: (a) rehabilitation and extension of an irrigation scheme and related land area development at Bara in Khyber Agency; (b) upgrading groundwater investigations and tubewell efficiency through applied technology; and, (c) construction of selected water development schemes. Technical assistance, training, and commodities will be provided under the project to support these activities.

- a. Bara Irrigation and Water Development Scheme

The Bara Irrigation Scheme was designed and constructed by FATA-DC. Figure 3 provides a map of the Bara Irrigation Project Command Area. This Scheme is on the Bara River below its confluence with the Mastura River in Khyber Agency about 10-15 miles outside Peshawar. The Scheme, which was fully completed in 1980, consists of a diversion structure on the Bara river, a diversion tunnel, main canal, right bank canal, left bank canal with a 1500 foot long tunnel through Besai Hill and the minor canals. The diversion capacity is 279 cubic feet per second (cfs), the right bank canal capacity is 211 cfs and commands about 25,000 acres, and the left bank canal capacity is 68 cfs and commands nearly 20,000 acres. The total command acres is nearly 45,000.

The Bara Irrigation Scheme is a well-engineered and constructed irrigation distribution system down to the level of the farm watercourses. The development of these watercourses and the lands was left to the farmers to accomplish without technical

32  
FIGURE 3



assistance. As a result, major watercourse losses occur because of over-topping of low banks, leaking turnouts, poor hydraulic cross-sections or, in many cases, the failure to construct watercourses. As a result, only an estimated 20,000 acres are being farmed due primarily to water losses in the system after the water leaves the main and secondary canal systems.

Wheat, barley, and maize are grown during the two major growing seasons and represent 85% of all crops grown. However, there are periods of time between these cropping seasons when few crops are grown, and as a consequence, most of the irrigation water passes through the system unused. This clearly represents a considerable loss due to inefficient use of available irrigation water. The combination of losses due to poor watercourse construction and inefficient cropping patterns and land use results in only about 20% of the diverted water being used for cultivation.

Under this project, approximately 160 watercourses will be improved according to proper engineering practices. Earthen sections need to be constructed with compact fill with proper hydraulic cross section, free board and bank width. Sections passing through or along high traffic areas and erosive gradients should be lined. Needed structures include turnouts, drainage, and road crossings and new canal outlets that will regulate and proportion the discharge and prevent tampering by the farmers. If all the watercourses are improved, the water saved should supply an additional 20,000 acres of crop. Furthermore, at least 1/3 more water will be delivered to the farmers. If the farmer can grow 3 acres of crops without watercourse improvement, he can grow at least 4 acres with watercourse improvement, all other conditions remaining the same.

Because of poor irrigation water management (IWM), at least 1/3 of the water delivered to the farm is not being utilized for crop production due to poor timing of irrigations and not having a crop available to utilize the water. Accordingly, another activity under this component will involve altering the cropping patterns to include crops that will utilize the present off-season water. This, along with precision land levelling and better cultural and water management practices should affect an additional 20,000 crop acres. A demonstration plot will be established in the area for training purposes.

With both watercourse improvement and IWM, farmers will be able to make proper and timely use of irrigation water and make adjustments in the cropping patterns so that crop water requirements more closely match available supply. In this way, the original 3 acres of crops can be increased to at least

5-1/3 acres. In many cases, the result could be even greater. The ultimate crop acreage with improved watercourses and irrigation water management should approach the originally planned cropping intensity of 65,000 acres, as opposed to the present 25,000.

Both FATA-DC and the farmers recognize that this irrigation system is less than efficient and know where the problems lie. Prior to the design of this project, together they planned and will implement a pilot watercourse improvement program beginning in the fall of 1982. In addition, five FATA-DC executive level engineers are currently in training at the On-Farm Water Management (OFWM) Training Center in Lahore, which was established under A.I.D.'s OFWM Project, in preparation for the above-mentioned pilot program as well as the activities planned under this project.

The construction work that FATA-DC has undertaken, using its own staff, is very good. Further, FATA-DC has been able to train and retain skilled craftsmen. In addition, FATA-DC has expressed interest in expanding its activities to include improved water management, cropping pattern and use practices which is a natural outgrowth of its work on irrigation scheme construction. Technical advisors (described below) will be provided under the project to assist FATA-DC in both watercourse improvement and improved water and agricultural farming practices.

The planning and design work for the watercourses will be undertaken by FATA-DC staff with technical assistance provided under the project. FATA-DC will hire local labor to perform the construction work. FATA-DC will also be responsible for maintenance and repair of the watercourses. With the assistance of the technical advisors, FATA-DC staff will also establish the pilot demonstration training plot for improved agricultural practices and will work closely with farmers who will be benefitting from the watercourse improvement activity. FATA-DC, in working with tribal farmers, will make an effort to convey to the farmers the importance of watercourse maintenance and repair and that the farmer is in the best position to carry out this work. Since this would represent a significant change in the structure of doing business in the Tribal Areas, it is not anticipated that any profound changes in this practice are likely to occur during the life of the project.

Local works will be undertaken in accordance with the Fixed Amount Reimbursement (FAR) system. The technical assistance advisors will be involved in every phase of the work, including assisting FATA-DC develop specifications and firm cost estimates prior to construction, approving designs at various stages of construction, and monitoring actual construction. A.I.D.'s Office of Energy and Engineering will

make periodic spot checks on all local works and will be responsible for certification for payment.

b. Upgrading Groundwater Investigations and Tubewell Efficiency

As previously noted, the Tribal Areas receive little rain and snowfall. Surface water is limited, and most of what is available is already committed for specific purposes. For irrigation, therefore, FATA-DC has turned to the development of groundwater. Currently, groundwater investigation is limited to surface geological observations for locating test well sites. These wells are regular full-size bore holes which are reclassified as developed tubewells if an adequate water source is located. Although the test wells are strategically located, and geological strata are recorded during drilling, sub-surface mapping is not being done and little water-table monitoring is carried out.

FATA-DC has had a groundwater resource development activity for several years. It has test wells in all seven Agencies. Small well-fields (6 to 10 wells) have already been established in Peshawar, Orakzai and North Waziristan, and one is under construction in South Waziristan. A major well-field (about 100 wells) has essentially been completed in Bajaur. There are also plans for four other major well-fields (30 to 80 wells each) in Orakzai, North Waziristan and South Waziristan. However, the necessary equipment and skills to conduct a more scientific, systematic and efficient exploration activity are absent.

Accordingly, funds will be provided under this project to improve and accelerate the development of groundwater resources for irrigation purposes in the Tribal Areas. The activity is designed as a pilot demonstration effort. Both technical assistance and seismological investigation equipment will be provided to assist FATA-DC undertake groundwater investigations at various locations in the Tribal Areas. Likely sites are Wana or Spin Plains in South Waziristan or specific sites in Orakzai Agency where FATA-DC has already begun investigations including test wells.

On the basis of the findings from these investigations, twenty tubewells will be drilled and installed with appropriate geological samples being obtained. All wells will be installed using U.S. designed well screens which should increase productivity over the long-term by up to twenty percent. FATA-DC will be responsible for ensuring that tubewell connections are carried out in a timely manner by the Water and Power Development Authority (WAPDA). WAPDA's policy is to subsidize these

connections by providing up to one-half the cost, which is estimated at the equivalent of \$ 3,000 per hook up, assuming a quarter mile line. A comprehensive data collection and monitoring program will then be undertaken in the basin where the tubewells have been installed. As a result of this activity, FATA-DC personnel will acquire the necessary skills to establish water resource investigation and evaluation programs in other water basins throughout the Tribal Areas.

The testing and analysis will be carried out by FATA-DC staff with the assistance of an engineering geologist. The well drilling will be done by FATA-DC staff using their own drilling equipment. Some of the wells may be drilled by local contractors who have their own equipment. The maintenance, repair, and operation of all wells drilled under this project will be the responsibility of FATA-DC. As in the case of the watercourse improvement activity, the FAR system will be used with the technical advisors, supplemented by periodic spot checks by the Mission's Office of E&E, playing a major role in monitoring and inspection.

FATA-DC is not currently involved in land or water use development associated with tubewells. FATA-DC has, however, expressed interest in expanding its activities to be able to provide assistance to the tribals in this important and closely related area. Accordingly, the technical advisors will assist FATA-DC staff as well as the provincial Agriculture Department staff working in the Tribal Areas so that both organizations will be capable of advising the tribals how to make the most efficient use of the water provided by the tubewells.

### c. Selected Water Development Schemes

FATA-DC has been active in the construction of irrigation schemes in the Tribal Areas for about seven years and has submitted proposed schemes to the GOP Planning Commission for inclusion in the Special Development Plan for the Tribal Areas. During project preparation, several constructed and proposed schemes in Kurram and South Waziristan were visited. Because of the critical importance of this type of development activity in the Tribal Areas in terms of its impact on agriculture and hence the economy of the region, and because of the high priority accorded water development schemes by FATA-DC, funds have been earmarked for the design and construction of up to 4 small irrigation schemes and for related geological investigations at specific sites. This activity will not begin until the latter part of 1983, after the Bara Irrigation Scheme activity is well underway.

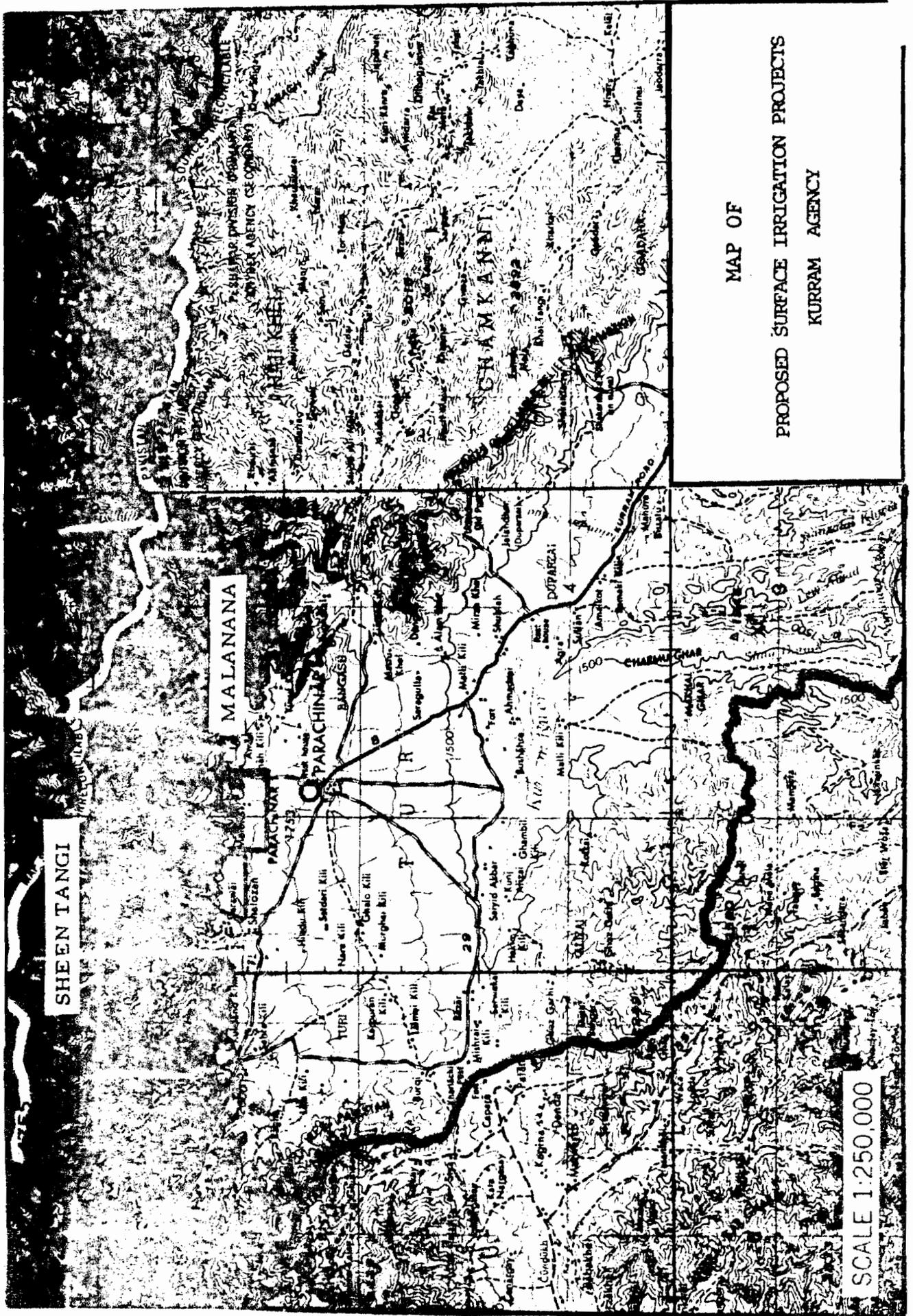
Typical of the schemes to be financed under this component is the one proposed for Sheen Tangi in Kurram Agency (See Figure 4). The Sheen Tangi scheme will establish an effective "cut-off" structure at bed rock in the bottom of the stream-bed in order to capture all water flowing in the ravine after the stream has run dry on the surface. Infiltration chambers will then pass the water to canals for delivery to the farmers' watercourses. The Sheen Tangi scheme will serve directly about 4,000 inhabitants of Lugman Khel village, adding about 3,000 acres of irrigated farmland.

As is the case with the Bara Irrigation Scheme, FATA-DC staff, with technical assistance from the resident advisors, will also offer assistance to farmers involved in the irrigation scheme in proper land and water use procedures including watercourse improvements, precision land levelling, and improved cropping patterns. The investigation and design work will be done by FATA-DC staff while construction will be done by local laborers hired by FATA-DC. The FAR system will also be used for this activity.

#### d. Technical Assistance Program

Although FATA-DC is currently very active in many aspects of water resources development, many of the techniques and procedures and much of the equipment used are either outdated or otherwise inadequate to do the job. FATA-DC's focus in water resources development has been exclusively on the engineering aspects, e.g., construction of a diversion structure or a series of main irrigation canals or the drilling of wells. Inadequate attention to the other aspects results in the inefficient use of what thus becomes expensive water, with less than hoped-for results. Accordingly, funds will be provided for three long-term advisors (two for three years and one for two years) and six person-months of short term consultants to provide assistance to FATA-DC staff to implement all the activities planned under the Water Resources component of this project.

The advisors will work primarily with the Irrigation Division and the Tubewell Division of FATA-DC in such areas as ground-water investigation and monitoring techniques, surface water capture and deployment, on-farm water management, watercourse improvement and construction, and improved agricultural practices. While each advisor will have specific tasks to perform, including the development and conduct of in-service training sessions for FATA-DC personnel in his particular area of specialization, all three advisors will be expected to work as a team. As a result of this technical assistance program, FATA-DC personnel will be able to carry out integrated water resources development programs in the Tribal



SHEEN TANGI

MALANANA

PARACHINAR

BANGS

TUR

GHAKANNI

SCALE 1:250,000

MAP OF  
PROPOSED SURFACE IRRIGATION PROJECTS  
KURRAM AGENCY

Areas which effectively address not only the engineering aspects of the programs but also the farmers' irrigation land use and cropping problems.

Assistance will be provided by the following experts:

i. An irrigation water management engineer for three years who will provide advisory assistance in irrigation distribution systems, watercourses, surface water hydrology, irrigation water allocation, land development and precision land levelling. He will assist FATA-DC staff with all design and construction activities involving both surface and ground water development schemes, monitor construction progress, and make final inspections of completed construction;

ii. An irrigation water management agronomist for three years who will provide technical assistance on crop water requirements, cropping patterns that will best utilize irrigation water in a given area, improved irrigation scheduling procedures, and development of a Bara demonstration plot. He will work with FATA-DC staff and the Provincial Agricultural Department staff working in the Tribal Areas, to strengthen their skills in agricultural aspects of both surface and groundwater development schemes; and,

iii. An engineering geologist for two years who will provide assistance in hydrologic investigation and analysis, geophysical utilization, aquifer analysis, and techniques in surface and sub-surface mapping and remote sensing. He will be involved in activities in basin monitoring and evaluation to establish aquifer hydraulics, recharge requirements, and yield potential, and well drilling and logging procedures, including sampling and classification screen design procedures.

The long-term advisors will be supplemented by up to six person-months of short-term advisors in various aspects of water resources development over the life of the project.

e. Training

Technical professionals and field staff of FATA-DC will be trained both in the U.S. and Pakistan in a broad range of water resources subjects as follows:

i. Training in the U.S.

Four technical professionals in FATA-DC will receive 90 days of training each in the U.S. in a variety of fields related to water resources development to upgrade

their technical skills and expose them to modern practices and procedures. Short courses in this field are periodically offered by organizations such as the U.S. Department of Agriculture, the U.S. Soil Conservation Service, the Bureau of Reclamation, and Colorado State University. The training is scheduled for 1984 and 1985 in order to allow sufficient time to identify precisely the disciplines in which strengthening is required, which personnel are most likely to benefit, and which courses will be available and are most appropriate. Training will also be scheduled to avoid excessive diversion of FATA-DC's talent at any one time.

ii. In-Country Training

Nine staff-level employees from FATA-DC will receive irrigation water management training at the On-Farm Water Management Training Institute, Lahore in formal 90-day training courses. Three trainees each will attend the course beginning in October 1983, January 1984, and January 1985. The training course is expected to use the On-Farm Water Management Field Manuals developed under the A.I.D.-financed On-Farm Water Management Project. Some pre-project training (10-day short courses) is scheduled for 7 executive engineers from FATA-DC at the same Institute.

f. Commodities

i. Vehicles

A 4-wheel drive Wagoneer will be provided for each of the three technical advisors. One pickup truck and two trucks ranging from  $\frac{1}{2}$  ton to  $1\frac{1}{2}$  ton capacity, will be provided for FATA-DC staff to support the groundwater development activities.

ii. Supplies and Equipment

About \$ 460,000 will be provided for a variety of supplies and equipment for the Water Resources Development component, most of which will be installation and monitoring equipment for tubewell investigation. An equipment list is provided in Annex P.

2. Roads

Road construction is the GOP's highest development priority for the Tribal Areas and for many of the inhabitants of the Areas as well. As mentioned previously, the Special Development Plan for the Tribal Areas includes road projects involving about 1,000 kms. of new construction.

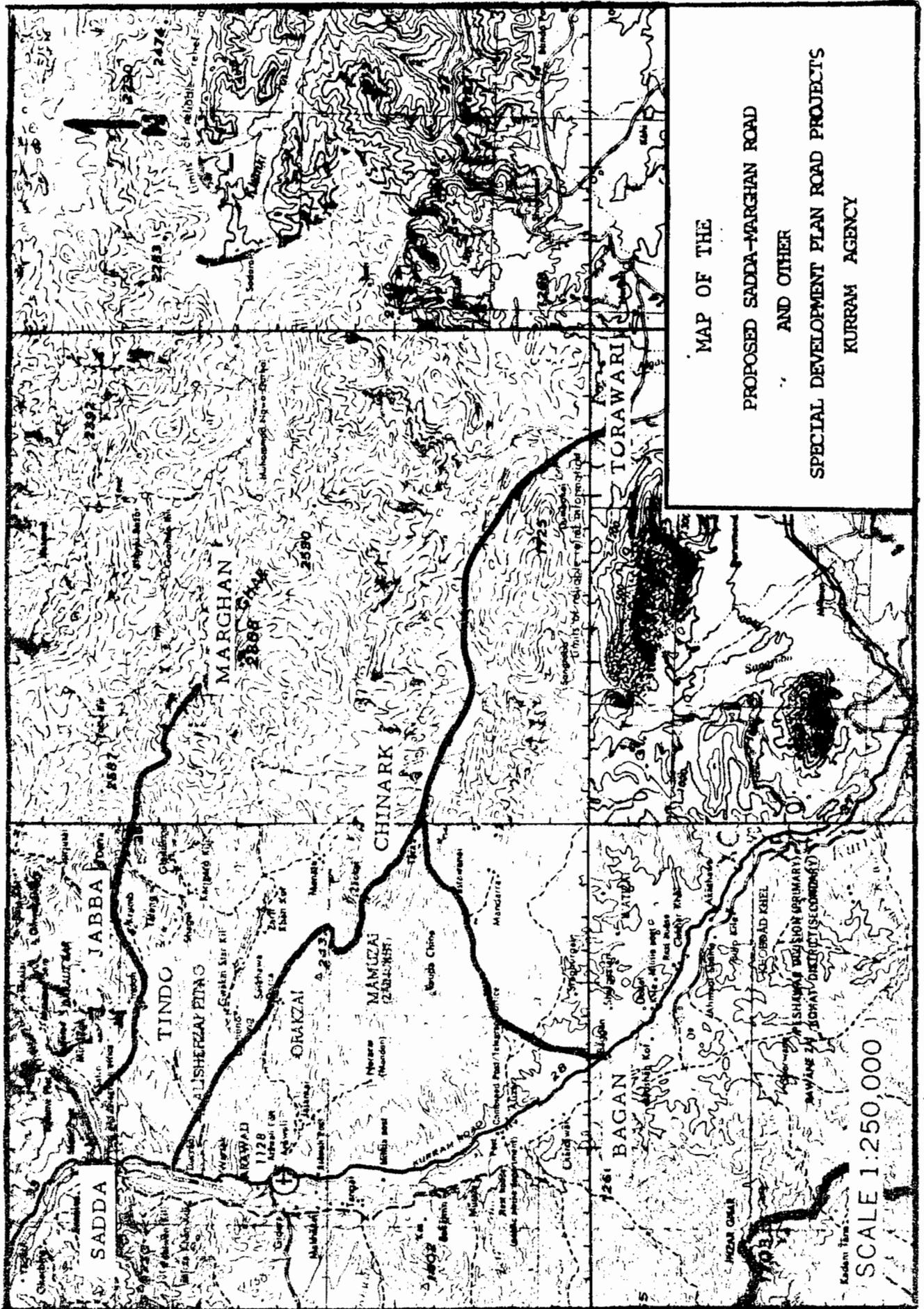
Based on a review of the Plan, discussions with government officials and inhabitants of the Tribal Areas, site visits, and consideration of the criteria for project selection, funds have been allocated for the construction of 125.6 kms. of new gravel roads in the Tribal Areas under this project. One road, the Sadda-Marghan road (25.6 kms.) in Kurram Agency has already been identified; the remaining 100 kms. of roads to be financed under this project will be identified by the end of the first year of project implementation.

a. The Sadda-Marghan Road

This road satisfies the criteria for project selection. It is in the Special Development Plan and was identified as one of the major development priorities by the Political Agent in Kurram Agency. The local inhabitants have been demanding this road for some time. At present, access into the area is limited to a track, in some places bulldozed on the sides of the hills; sections of it are passable only in the spring and summer. The area which the road will serve is isolated and relatively underdeveloped and is inhabited by approximately 20,000 people. The tribals have requested a primary school for the area, and FATA-DC is currently undertaking a survey to improve and expand an existing water irrigation scheme located at the end of this proposed road. The Political Agent also discussed plans to extend power lines into the area and to establish a health facility. The proposed road will clearly "lead into" an integrated area development program. This road, therefore, was considered a logical choice for the first road sub-project to be financed under this project.

The design of the 25.6 kms. 12-foot wide gravel road (See Figure 5) has already been completed, and the plans were reviewed by the project design team consulting engineer. The design was considered generally acceptable, but some of the details regarding the specifications and road alignment require re-analysis. Annex J provides an engineering and cost analysis for this road.

Construction will be undertaken by local contractors under the direction of the FATA Division of the provincial Communications and Works (C&W) Department. This Department will also be responsible for maintenance and repair of all roads constructed under the project. Local contractors do not generally have the equipment required to undertake some aspects of the work. Therefore, equipment will be made available to the contractors by the C&W Department through the regional C&W equipment yard. Road equipment will also be provided under the project (see below).



MAP OF THE  
PROPOSED SADDA-MARGHAN ROAD  
AND OTHER  
SPECIAL DEVELOPMENT PLAN ROAD PROJECTS  
KURRAM AGENCY

SCALE 1:250,000

The FAR system will be the method of payment for this component of the project. Inspection work and certification for payment will be the responsibility of the Mission's Office of E&E.

b. Other Road Activities

As mentioned previously, an additional 100 kms. of road will be identified by the end of the first year of project implementation. Sixty-three different road projects are listed in the Special Development Plan (See Annex L.). Those which most fully satisfy the criteria for project funding will be pursued. Possible candidates include the following: (i) additional segments of road in Kurram Agency (See Figure 5) such as from Bagan to Chinark (24 kms.) and from Torawari to Sadda via Chinark (56 kms.), which would provide access into areas with fairly sizeable populations where little or no development has occurred or can occur under present conditions of isolation; (ii) in South Waziristan, an 11.2 kms. road into the village of Tatti or a 24 kms. road from Wana into Kirikot to Shin Warsak, which would provide access into and through a major apple-producing region; apples are one of the predominant sources of income in this Agency.

The same implementation procedure employed for the Sadda-Marghan road will be followed for all project-financed roads.

c. Technical Assistance

Approximately twelve months of short-term technical assistance by road engineers is planned for this activity. Advisors will assist the provincial C&W Department with road alignment and design, engineering and cost analyses, and materials selection; they will insure that C&W staff understand the specifications to be met under the FAR system, and will approve final designs and cost estimates.

d. Commodities

One 4-wheel drive Wagoneer will be provided to support the work of the advisors and that of project monitoring personnel. In addition, two sets of heavy equipment consisting of one bulldozer, three farm tractors and one towed vibratory compactor per set will be purchased for the provincial C&W Department.

3. Supplementary Development Fund

In recognition of the need for flexibility in project design to take advantage of targets of opportunity,

and in keeping with the area development strategy of this project, Rs 2,500,000 has been earmarked for a special fund to finance discrete, small-scale, self-help development projects within the geographic areas where other project-financed activities will be implemented. This will be a pilot effort designed to increase the development impact of other project activities and to encourage local participation in the development process.

Each Agency currently has a Rural Development Fund for small-scale village improvement projects which are selected by the Agency Council, approved by the Political Agent, and implemented with the assistance of the provincial Rural Development Department. The annual budget for this Fund in each Agency is about Rs 1,000,000. In a number of Agencies, the Political Agent supplements this Fund from his Political Fund. There are more requests for projects than there are funds. Local participation in these projects is the norm with the provincial department supplying primarily technical assistance (engineering and design) and materials (such as cement).

The system of project selection and construction, however, is highly politicized. The Political Agent approves projects on the basis of equitable distribution across the tribal segments and support to communities recognized as friendly to the government. A major problem with the present system is that some of the funded projects are not completed through default. The challenge in implementing this activity will be to find ways of tapping into elements of the system, e.g., local selection of projects and local participation in construction and to avoid the problems of unfinished projects and loss of funds.

The type of activities likely to be supported includes construction of: schools, health facilities; housing for teachers or health personnel from outside the area (apparently one of the major barriers to recruitment); cooling houses for slaughtered meat; link roads; flood control structures; and, irrigation diversion structures on small community water systems. These activities will be subject to the same selection criteria as the other project components. A major criterion, however, will be that the activity is supportive, in area development terms, of the other project components. Difficulty in administration and monitoring will also be a consideration in the selection process.

The Fund will be administered by the A.I.D. Project Manager with the assistance of a local-hire employee of Pashtun origin with a background in rural development and engineering, who will be funded out of the Supplementary Development Fund. It is likely that requests for projects will come from a number of sources, but all projects must either originate from or be

approved by the Political Agent in the Agency in which the proposed activity will occur. Most of the activities will be implemented with the assistance of the provincial Rural Development Department, but some may involve other provincial nation-building departments such as Education for schools, Health for clinics, and Communications and Works for link roads.

It is anticipated that all activities will be funded through a FAR arrangement. Each activity will be defined and agreed upon between A.I.D. and the implementing organization in a project implementation letter. Once agreement is reached on costs and specifications, construction will be undertaken by the local inhabitants under the guidance and with the assistance of the appropriate provincial nation-building department. Some standard designs, e.g. for schools, already exist. Funds will be made available either out of the Agency's Rural Development Fund or the FATA development budget of the appropriate provincial department. After inspection and certification by the Mission's Office of E&E, reimbursement will be made. Depending on the type of activity, either the villagers or the appropriate GOP agency will be responsible for maintenance.

Plans are to fund between 5 and 10 such activities each year, beginning in the second year of the project. This would mean a total of between 20 to 40 sub-projects valued at between Rs 62,500 to Rs 125,000 during the life of the project (less the salary of the local project officer for this component of the project). Estimates for construction of schools in the Tribal Areas, for example, range from Rs 60,000 to Rs 150,000.

This activity will be carried out on an experimental basis beginning in the second year of project implementation. The use of this Fund may suggest new directions for future project activities. It may also serve as a catalyst for local participation and may set an example to the local participants as to what a foreign donor, in particular, A.I.D., is able to provide to the region. However, if it is found that administration of the Fund and implementation of the activities are excessively time-consuming and create major problems, this effort will be discontinued and the funds reprogrammed to support other project components.

#### IV. IMPLEMENTATION PLAN

##### A. Implementation Schedule

Project activities are planned to take place over a period of five years. A proposed implementation schedule is provided in Table 2.

Immediately upon signing the Agreement, A.I.D. will initiate the recruitment process for the three long-term advisors and will place orders for all the project vehicles, the commodities required for the Water Resources and the Roads components, and the household and office equipment and supplies required for the long-term advisors. The only exceptions to this are (1) the screens for the tubewells, which will be procured after the advisors arrive in-country; and (2) the second set of road equipment for the Roads component which will be procured in 1983.

As mentioned previously, FATA-DC has already developed a pilot watercourse improvement program for the Bara Irrigation Scheme and plans to begin implementation in the fall of 1982. In the event the long-term Irrigation Water Management Engineer is not on-board by February 1983, a short-term consultant (preferably the individual identified to serve as the long-term advisor) will spend one month in-country to assist FATA-DC staff with watercourse design. An additional five person-months of short-term technical assistance will be provided throughout the life of the project for the Water Resources component. Watercourse construction at Bara and groundwater investigations are scheduled to begin in April/May 1983.

Construction of the Sadda-Marghan road will begin in March/April 1983. A road engineer will spend about one month in-country in January 1983 to assist the provincial C&W Department finalize specifications and road alignments and develop firm cost estimates. An additional eleven person-months of technical assistance by road engineers is planned over the life of the project to assist the provincial C&W Department implement the other road projects. Additional road projects and irrigation schemes will be identified by September 1983 and design work will commence by October 1983. Construction is planned to begin as soon as possible thereafter in order to minimize cost escalations due to inflation. Commencement of the road construction is not dependent on the timely arrival of the road equipment since the C&W Department can use other equipment, which authorities have assured the Mission will be available. Implementation of activities under the Supplementary Development Fund is not planned to begin until October 1983.



In-country short-term training for three FATA-DC irrigation technicians is scheduled for October 1983 at the Lahore On-Farm Water Management Training Institute for 90 days each. Six additional FATA-DC employees, three in early 1984 and three in early 1985, are scheduled to participate in the same course. Short-term training in the U.S. for four FATA-DC officials for three months each in water resource-related subjects is currently scheduled for 1984 and 1985.

A project office will be established in Peshawar. Office space has already been secured in a building which is under a long-term A.I.D. lease. Office support staff including secretaries and drivers will be hired on a phased basis after the Agreement is signed such that the office will be fully staffed by the time the long-term advisors and project vehicles arrive in-country. In addition to the office support staff, a research and evaluation officer and two field assistants will be hired within three months after the Agreement is signed to undertake the data collection activity which is planned for this project (See Evaluation Plan). The Pakistani rural development engineer who will handle the Supplementary Development Fund will be hired by August 1983.

## B. Administrative and Monitoring Arrangements

### 1. A.I.D. Responsibilities

The USAID/Pakistan Office of Agriculture and Rural Development (ARD) will assume overall responsibility for the management of this project. A USDH Rural Development Officer/Anthropologist in the Office will be the full-time Project Manager. During the first critical year of the project, he will spend a majority of his time in Peshawar; the Mission is also considering the possibility of having him stationed in Peshawar full-time. He will be assisted as necessary by the other four USDH staff in the Office (one of whom is an irrigation specialist), the local-hire agronomist and a program assistant in the Office, and the USAID/Pakistan Liaison Officer for the NWFP who is stationed in Peshawar.

The Mission's Office of Energy and Engineering (E&E) will play a major role in this project since this Office is responsible for all A.I.D.-financed construction activities, including monitoring and inspection of all activities financed under a FAR system. This Office is also responsible for all Mission environmental activities. Accordingly, E&E staff will conduct the necessary Environmental Assessment scheduled at the end of the first year of the project (See Annex I, Initial Environmental Examination), will approve in advance the design of all local works, will undertake inspections on all civil works, and will certify all such works for payment.

E&E, which currently has a staff of one USDH and nine FSN professionals will shortly be expanded by the addition of two USDH and three FSN professionals.

The Office of Project Development and Monitoring (PDM) will assist ARD in all contracting and procurement transactions under this project. This Office, which currently has three USDH and two FSN professionals, will be expanded by the addition of two USDH and one FSN professional in FY 1982.

In addition, A.I.D. regional officers including the Area Contracts Officer in New Delhi and the Regional Commodity Management Advisor in Bangkok as well as AID/Washington staff in SER/CM, ASIA/PD, and ASIA/TR, and the Mission Office of Program (PRO) will be called upon as necessary to assist the Mission in contracting, procurement, training, and evaluation functions.

Mission and other available staff resources are considered adequate to handle this project.

## 2. Federal and Provincial Responsibilities

Both federal and provincial agencies will be involved in the implementation of this project. At the federal level, the States and Frontier Regions Division (SAFRON) of the Ministry of the Interior will be the counterpart organization for overall program planning, coordination, and approvals. SAFRON must approve all activities undertaken by FATA-DC. SAFRON has project and budgetary approval authority for all activities in the Tribal Areas, and, as mentioned previously, channels funds from the Finance Division of the Ministry of Finance and Economic Affairs directly to FATA-DC and also to the NWFP Financial Department. The latter in turn channels funds to individual provincial nation-building departments for projects in the Tribal Areas. The provincial Planning and Development Department (FATA Section) will be responsible for coordinating and approving planning documents and funding for all activities carried out under this project by the FATA Divisions of provincial nation-building departments.

Project activities will be implemented by four major government entities : (a) the Irrigation and Tubewell Divisions of FATA-DC for the Water Resources component; (b) the provincial C&W Department for the Roads component; (c) the provincial Agriculture Department which, along with FATA-DC, will be responsible for the agricultural land practices activities; and (d) the provincial Rural Development Department for the Supplementary Development Fund activities. Depending on the nature of the activities financed under the

Fund, other nation-building departments of the provincial government may be involved in implementing discrete, small, self-help projects.

FATA-DC and the C&W Department will play by far the major roles in project implementation. Their responsibilities include : (a) ensuring that counterparts are in place for the technical advisors; (b) for FATA-DC, selecting qualified participants for training; (c) arranging for all travel clearances for USAID staff and advisors; (d) ensuring that construction activities are undertaken in a timely manner and within the agreed-upon cost estimates; (e) for FATA-DC, coordinating with the Water and Power Development Authority (WAPDA) to ensure that electrical connections for the newly installed tubewells are undertaken in a timely; (f) ensuring that all local works constructed under this project are properly maintained; and, (g) ensuring that PC-Is (GOP Planning Documents) are approved and other necessary GOP clearances are obtained in a timely manner.

Both FATA-DC and the C&W Department have the necessary human and financial resources to assume their administrative and monitoring responsibilities under this project. (See Administrative Analysis).

### C. Procurement Plan

#### 1. Technical Assistance

This project will finance a total of 114 person-months of expatriate technical assistance consisting of : two long-term advisors (an irrigation water management(civil) engineer and an irrigation water management agronomist)for 36 months each; one long-term engineer geologist for 24 months; 6 person-months of short-term assistance in water resources development; and, 12 person-months of short-term assistance by road design engineers.

All technical assistance will be contracted directly by A.I.D. Since the host country implementing organizations, namely FATA-DC and the provincial C&W Department, have had limited experience in contracting with expatriate consultants, the Mission has determined that it is in the best interests of the project for A.I.D. to undertake this function.

All three long-term advisors will most likely be contracted under PASAs with either the Bureau of Land Reclamation or the U.S. Soil Conservation Service. It is also likely that a PASA with one of these institutions will be employed for the six person-months of short-term assistance in water resources management. These two U.S. government agencies

are uniquely qualified to provide consultants with the range of skills and extensive hands-on experience in water resources development in developing countries at the farm level which are essential for this project. Road design engineers will be contracted either under IQCs or PSCs.

Funds will also be provided to hire local staff for the project office in Peshawar as follows : three administrative/ clerical staff; six drivers; one rural development engineer; one research and evaluation officer; and two field assistants. All local staff will be contracted by the Mission on one-year contracts with the option to renew.

## 2. Commodities

Four categories of commodities, all of which will be procured directly by the Mission will be financed under the project : (a) nine right-hand drive vehicles, including six 4-wheel drive AMC Wagoneers, one pick-up truck, one 1-ton truck, and one 1½-ton truck. With the possible exception of the 1½-ton truck, all vehicles will be of U.S. source/origin and will be procured through the AMC dealer in Karachi. An appropriate waiver will be issued if necessary for the larger-sized truck; (b) two sets of road equipment for the provincial C&W Department, each set consisting of : one bulldozer, three farm tractors, and one towed vibratory compactor. These items will be procured either through A.I.D.'s Excess Property Division or by competitive solicitation; (c) equipment and supplies for the Water Resources component, including groundwater investigation equipment, all of which are listed in Annex P; these items will also be procured either through A.I.D.'s Excess Property Division or by competitive solicitation; and, (d) household furnishings for the long-term advisors and supplies and equipment for the project office, all of which will be procured either locally or in the U.S. by competitive solicitation. Since all goods (with the possible exception of one truck) will have their source and origin in countries within the geographic code for this project (i.e., U.S. or Pakistan), no waivers are required.

## 3. Local Works

The FAR procedure will be employed for all local works financed under this project. This includes : the construction or rehabilitation of 160 watercourses at Bara; the construction of 20 tubewells; the 25.6 kms. of road between Sadda and Marghan and the 100 kms. of additional roads; 4 small irrigation schemes; and, all activities financed under the Supplementary Development Fund. The watercourses, tubewells, and irrigation schemes will be handled by FATA-DC which will hire local labor to do the

construction. The roads will be contracted out to local contractors by the provincial C&W Department. The local works financed under the Supplementary Development Fund will be undertaken by provincial nation-building departments working with the local inhabitants.

In all cases, specifications and detailed cost estimates will be developed with the assistance of consultants and approved in advance by A.I.D. and the relevant government agency. All materials required for construction will be procured locally by the responsible implementing entity. Payment will be made only upon certification by Mission inspectors that the work has been performed according to agreed-upon standards and practices.

#### D. Training Plan

##### 1. U.S. Training

Four professional staff members of FATA-DC will attend three-month formal courses in the U.S. in groundwater development and irrigation water management at such institutions as Colorado State University, the Bureau of Land Reclamation, the U.S. Department of Agriculture, or the U.S. Soil Conservation Service. The training is scheduled for 1984 and 1985.

##### 2. In-Country Training

Nine FATA-DC engineers will attend the three-month water management course offered by the On-Farm Water Management Training Institute at Lahore. Three participants each will be financed beginning in October 1983, January 1984, and January 1985.

#### E. Evaluation Plan

In view of the experimental nature of this project and the uncertainties relating to local cooperation and accessibility, project activities will be more closely monitored by Mission and government staff than is the case under most projects. In addition, a Data Collection Unit will be established in the project headquarters at Peshawar, and three formal evaluations will be carried out during the life of the project.

##### 1. Data Collection Unit

As mentioned previously, there is a dearth of basic socio-economic and demographic data available on the Tribal Areas, and what is available is for the most part unreliable and outdated. This is partly due to problems associated with local cooperation and accessibility as well

as to the fact that no government agency working in the region has made a systematic, consistent attempt to collect such data.

The collection of basic social, economic, demographic and administrative data at the beginning, during, and at the end of the project is critical to be able to accurately measure program progress and project impact. Accordingly, funds will be provided under the project for a Data Collection Unit to be established at the project headquarters at Peshawar. This Unit will consist of three locally hired staff of Pashtun origin : a research and evaluation officer and two field assistants. All three will be supervised by the Mission Project Manager. A project-financed vehicle will be available to this Unit. The staff of the Unit will be carefully selected to ensure that they are flexible and cautious in undertaking what will be a very sensitive assignment, the success of which will depend on the relationships these officers establish with the local inhabitants and government counterparts. All data collected will be shared with appropriate government offices.

During the first year of the project, the primary activity of this Unit will be to collect, tabulate, and analyze basic farm and economic data for the Bara Project. This is essential in order to establish a baseline against which future changes can be measured. In each area served by an individual watercourse, demographic data, size of land holdings, crop production statistics, and methods of production and marketing will be documented. During this period, the staff will also attempt to collect and compile all existing secondary source data available on the Tribal Areas from government offices and other sources.

This Unit will gather similar data on other project activities and will collect the socio-economic data necessary but generally lacking in PC-Is (GOP Planning Documents) that will be developed for these other project activities. The staff of the Unit will also monitor local reactions to the development activities underway and will maintain a record of project events, accomplishments, and implementation problems.

This Unit will not only serve a critical monitoring function but will also provide important data and other information as well as expertise which will be invaluable for the planned project evaluations described below.

## 2. Evaluations

The first of the three formal evaluations will take place in March 1984, 18 months after the Agreement is

signed. The primary objective of this initial evaluation will be to evaluate the institutional mechanisms and the impact of socio-cultural factors on implementation progress. Specific areas which will be examined include : (a) project site accessibility and degree of local cooperation; (b) the effectiveness of the staff of the Data Collection Unit in carrying out their assignment; (c) progress with the Supplementary Development Fund; (d) the effectiveness of the long-term advisors in carrying out their assignments; (e) implementation of the FAR system; and, (f) progress achieved specifically on the Bara Irrigation Scheme Project, the Sadda-Marghan Road Project, and groundwater investigations, all three of which should have been initiated almost one year before the evaluation.

The second evaluation will take place in September 1985, about 18 months after the initial evaluation. In addition to all of the above areas, special attention will be paid to the implementation of the additional roads projects, the four additional irrigation schemes, and the drilling and connection of tubewells. Based on an on-site examination of several activities completed under the Supplementary Development Fund and a review of the overall management and administration of the Fund, the Mission will make a decision as to whether to continue with the Fund or possibly even expand it. The findings of this evaluation will also be used to determine whether any modifications are required in the overall design or in the budget for the remainder of the project.

The final evaluation, scheduled to occur in June 1987, three months before the PACD, will measure the overall impact of the project including an assessment of the economic and social impact and a quantification of project benefits. An assessment will also be made of the extent to which the project was able to overcome previously identified constraints to development. Lessons learned will be documented, and an attempt will be made to assess the capabilities of implementing agencies to determine the degree to which institutional strengthening has occurred.

All evaluations will involve representatives of participating government agencies as well as the long-term advisors, the staff of the Data Collection Unit, and USAID/Pakistan and one or two AID/Washington representatives. Evaluations will be conducted using data gathered by the Data Collection Unit and on the basis of field trips to project sites and interviews with federal and provincial authorities, local leaders, and community members.

## V. PROJECT ANALYSES

### A. Technical Analysis

#### 1. Water Resources Development

There are three activities in this component : (a) construction and rehabilitation of watercourses in the Bara Irrigation Scheme; (b) improved placement and operating efficiency of tubewells; and, (c) improvement of surface irrigation schemes in selected locations in the Tribal Areas.

##### a. Watercourses

Watercourse construction and rehabilitation has been a major A.I.D.-supported program in Pakistan for over nine years. Suitable technology was developed by a consultant team from Colorado State University in the early 1970's, and an A.I.D.-financed On-Farm Water Management (OFWM) Project (391-0413) was initiated in 1976. All provinces, including the NWFP, participated in this project.

The topographical conditions in the Bara Scheme are similar to those found in the Peshawar Vale, the site of watercourse improvements in the NWFP under the OFWM Project. The watercourses generally run below ground level, obviating the need for heavily compacted banks. The concrete control structures are readily available. With minimal training, FATA-DC staff could conduct the necessary surveys, prepare designs, and undertake construction. The technology is well-developed and is suitable for the conditions found in the project area.

##### b. Tubewells

Electrically powered tubewells have a long history in Pakistan. Pumps, screens, and drilling equipment are readily available. By making minor modifications in operating equipment, including experimentation with improved screens, efficiency can be significantly improved. Optimum siting of tubewells will be achieved by the use of modern seismographic equipment. Groundwater surveys now lack precision. FATA-DC staff are currently carrying out surveys and drilling wells. With minimal training, the staff is fully capable of effectively using improved technological techniques.

##### c. Selected Irrigation Schemes

In the second and third years of the project, selected surface water irrigation schemes will be improved.

By installing stronger and better placed weirs (small dams), improving the layout of delivery channels, and installing water control structures, the efficiency of these traditional systems can be significantly improved. FATA-DC engineering staff have sufficient experience to carry out these activities with existing technologies. With minimal design assistance from expatriate advisors, these existing technologies can be readily modified and applied in the Tribal Areas.

Another important activity which is programmed for the water resources component is the training of both FATA-DC staff and provincial Agriculture Department staff working in the Tribal Areas in agricultural and water management practices so that they will be better equipped to assist farmers to make more efficient use of irrigation water. This represents a new area of activity for FATA-DC but one in which they have expressed an interest since they recognize the importance of an integrated approach to water resources management. The technologies involved are relatively simple and have been applied in many countries around the world. With the assistance of the long-term expatriate advisors working with these staff on the proposed demonstration plot, these existing technologies should be readily transferable and adaptable to the Tribal Areas.

## 2. Roads

Over the past ten years, the provincial C&W Department has constructed the major arteries through the Tribal Areas. Negotiations with individual tribal groupings have resulted in link roads to small populations from the main arteries. The C&W Department has experienced and qualified staff to design and construct these mountain roads. The gravel roads which will be financed under this project will be constructed by the C&W Department which will execute individual contracts with local contractors for earthmoving in small sections. This is the standard procedure in the area. While cost overruns are common and construction often lags behind schedule, it is expected that the FAR mechanism will serve as an incentive to the C&W Department to ensure that the job is completed in a timely manner and within the agreed upon budget since no reimbursement will be made for cost-overruns. Standards should be maintained as a result of the monitoring and inspection work which will be undertaken by the Mission's Office of E&E.

The first road to be constructed under the project will be between Sadda and Marghan in Kurram Agency. The design speed is thirty miles per hour, with twelve foot wide gravel

surface, six inches thick, with cross drainage culverts, and masonry/concrete causeway stream crossings. A preliminary design and cost estimates have already been prepared using standard road construction cost estimates. An expatriate short-term consultant experienced in road construction in mountainous terrain is programmed to work with the design engineers of the C&W Department to produce the final design and firm cost estimates.

The technology employed for road construction in the Tribal Areas is labor intensive and is complemented by heavy equipment for long distance hauling, compaction, and final dressing. Management and engineering skills are available. Construction of roads in the Tribal Areas of the type proposed involves technology, skills, and experience which already exist within the C&W Department.

### 3. Supplementary Development Fund

Small village improvement projects have a long history in the Tribal Areas. As mentioned previously, the Political Agent in each Agency has a Rural Development Fund to respond to self-help proposals from tribal groups. These small scale construction activities usually include schools, drainage culverts or small bridges for streams, and the development of potable water sources. The project will build on this experience by financing similar self-help projects to complement other activities being financed under the project as part of an overall area development effort. The technologies employed will be those already in use and well known by the inhabitants.

### 4. Summary

The technologies to be employed under this project are either already in use in the Tribal Areas or are those which have been proven to be effective in other countries, are readily transferable and adaptable to the conditions in the Tribal Areas, and, with the technical assistance which will be provided, can be readily adopted by government agency personnel and the local inhabitants. This project is therefore judged to be technically feasible and sound.

### B. Administrative Analysis

There are three tiers of administration involved in the implementation of this project : (1) At the federal level, the States and Frontier Regions Division (SAFRON) of the Ministry of the Interior is responsible for policy formulation and overall program planning for the Tribal Areas.

The Finance Division of the Ministry of Finance and Economic Affairs provides funds to SAFRON for both federally-administered and provincially-administered development projects in the Tribal Areas, the former through the Federally Administered Tribal Areas Development Corporation (FATA-DC) and the latter through the government of the NWFP; (2) At the provincial level, the FATA Section of the Planning and Development Department reviews and approves proposed projects. The Ministry of Finance receives federal funds through SAFRON and, in conjunction with the Planning and Development Department, allocates the funds to specific provincial nation-building departments. Special FATA Divisions have been created in these nation-building departments to carry out development projects in the Tribal Areas. Three such departments will be directly involved in the implementation of project activities : (a) the Communications and Works (C&W) Department; (b) the Agriculture Department; and (c) the Rural Development Department; (3) At the local level is FATA-DC, an autonomous federal agency created under a federal government charter, which receives its funding and program approval and guidance directly from SAFRON and works exclusively on development projects in the Federally Administered Tribal Areas. In addition, the Political Agent in each Agency, who reports to a Commissioner, must approve all projects, whether undertaken by FATA-DC or the provincial nation-building departments, in his Agency. Finally the tribals themselves will play an important role in the implementation of this project.

FATA-DC will be responsible for implementing all activities under the Water Resources component of this project through its Irrigation and Tubewells Divisions. FATA-DC is managed by a Board of Directors, consisting of a Chairman (of tribal origin as are most of his staff); the Additional Chief Secretary, Planning and Development Department, NWFP; the Joint Secretary, States and Frontier Regions (SAFRON); the Home Secretary, NWFP; and the Financial Advisor, SAFRON. The full-time Chairman of FATA-DC is the Chief Executive of a staff of about 200 employees. The organization is further divided into Directorates.

At the Agency level, there is an Executive Engineer for FATA-DC located in each Agency who reports to the Executive Director of the Technical Directorate. These men generally are of tribal origin, are well trained and are highly motivated. They will have responsibility for, among other things, the development and maintenance of the tubewells and irrigation schemes financed under this project.

Staff of the FATA Division of the provincial Agriculture Department will work with FATA-DC staff and the technical

advisors to implement the land development activity under the Water Resources component. This activity will build on and enhance the capability of Agriculture Department staff who are already providing extension services, although on a limited scale, to farmers, and will increase the cadre of trained personnel with agricultural extension skills by introducing these new skills to FATA-DC staff. Since both FATA-DC and the provincial Agriculture Department have worked together before, this activity will not require the establishment of any new or different administrative or organizational relationships.

The FATA Division of the provincial C&W Department will be responsible for the implementation of the road component of this project. It is a branch of the provincial C&W Department but is funded by the federal rather than the provincial government. It shares technical personnel as well as equipment with the provincial organization. There is an Executive Engineer in charge of C&W activities in each of the Tribal Agencies with responsibility for the construction and maintenance of all roads. There are also sub-division officers responsible for smaller areas within Agencies, depending on the size of the Agency and the nature and level of C&W activity. The Bara area, for example, has a C&W sub-division officer. The FATA Division of the C&W Department has the necessary skills, manpower and equipment to accomplish the road construction planned for this project as well as to meet its expanded obligations for construction funded under the regular FATA Development Plan.

Implementation of activities under the Supplementary Development Fund will involve the provincial Rural Development Department and most likely the provincial Health and Education Departments, inasmuch as schools and health facilities are possible self-help projects which will be financed. Since all of these departments are already working in the Tribal Areas undertaking similar activities, no major administrative problems in carrying out this project with these agencies is anticipated.

The cooperation and support of the Political Agents and the tribals in the Agencies where project activities will occur, are critical to the success of this project. Because of the high turnover of Political Agents and the individual differences among them with respect to their interest in development, it is all the more important that local support and demand for development activities be created. Several Political Agents are developmentally oriented. Others, to whom development has not been a major concern, can be expected to be "encouraged" by higher provincial and

federal authorities, as part of the government's clear intention to accelerate the development of the Tribal Areas.

In summary, the project will be implemented by existing government agencies following established procedures. A sufficient number of qualified staff is available in each implementing agency and they will be strengthened by the technical assistance and training provided under the project. In addition, the design of this project takes into account the socio-political-administrative relationships and arrangements existing in the Tribal Areas between government agencies and between the government and the tribals. This project is therefore judged to be administratively feasible and sound.

### C. Economic Analysis

Economic analyses for three project activities (the Bara Irrigation Scheme, tubewells, and the Sadda-Marghan Road) were carried out. An internal rate of return (IRR) was calculated and a sensitivity analysis was undertaken for each. The results justify the investment for all three activities. Additional background information on the economic analysis is contained in Annex N.

Although not subjected to rigorous analysis, long-range economic benefits and other non-quantifiable factors are also present. These include : opening areas to mineral exploration, establishment of a more stable base for industry, access to increased job opportunities and to new or improved services, the multiplier effects of increased production and employment, encouragement to other donors, and political stability.

#### 1. Bara Irrigation Scheme and Water Management

The analysis of the estimated costs and benefits of this component attests to its economic feasibility. The base internal rate of return is 36 percent. Cost estimates were derived from technical reports prepared by the U.S. Soil Conservation Service irrigation engineer who served as a project advisor for the On-Farm Water Management Project in Pakistan. Specific design estimates were developed in consultation with FATA-DC engineers.

The economic life of the watercourses has been conservatively estimated at 20 years. Cost estimates include all costs to government agencies and farmers, e.g. land levelling. The estimated increase in net revenues from agricultural production attributable to this sub-project was the only benefit included in the analysis. The benefit is estimated to be the direct result of water savings from the two

activities of the sub-project, namely, watercourse construction and watercourse management training. The basic assumption is that 40,000 additional crop acres will be brought under irrigation : 20,000 as a result of watercourse construction over a period of 4 years and another 20,000 as a result of irrigation water management training over a period of 10 years.

TABLE 3  
ESTIMATED BENEFITS AND COSTS OF THE  
BARA IRRIGATION SCHEME

(In Rs 000)

Year	Annual Benefits	Annual Costs	Annual Net Benefits
1	-	17,377	(17,377)
2	6,160	17,034	(10,874)
3	12,320	17,682	( 5,362)
4	18,480	14,924	3,556
5	24,640	4,545	20,095
6	26,400	4,439	21,961
7	28,160	4,439	23,721
8	29,920	4,439	25,481
9	31,680	4,439	27,241
10	33,440	4,439	29,001
11	35,200	2,700	32,500
12	35,200	2,700	32,500
13	35,200	2,700	32,500
14	35,200	2,700	32,500
15	35,200	2,700	32,500
16	35,200	2,700	32,500
17	35,200	2,700	32,500
18	35,200	2,700	32,500
19	35,200	2,700	32,500
20	35,200	2,700	32,500
Cumulative Totals	563,200	120,757	442,443

The internal rate of return for the sub-project is 36.0 percent. Although all benefits and costs have been carefully estimated, unforeseen circumstances may either reduce benefits or increase costs. To account for such possible exigencies, a sensitivity analysis was carried out. It was considered improbable that

the decrease in benefits and increase in costs would be more than 30 percent and 15 percent, respectively. Table 4 gives the results.

TABLE 4  
BARA IRRIGATION SCHEME  
Sensitivity Analysis

Case	Internal Rate of Return(%)
Estimated Costs and Benefits	36.0
Estimated Benefits Decreased by 30 percent	24.5
Estimated Costs Increased by 15 percent	31.1
Benefits Decreased by 30 percent and Costs Increased by 15 percent	22.3

The component remains economically feasible even if all costs are increased by 15 percent each year; the IRR decreases from 36.0 percent to 31.1 percent. If benefits are decreased by 30 percent each year, the IRR falls from 36.0 percent to 24.5 percent. Similarly, in the extreme case if project costs are increased by 15 percent and benefits decreased by 30 percent, the IRR falls to 22.3 percent.

In addition to the direct benefits, there are other socio-economic benefits associated with the Bara Irrigation Scheme. Before the development of irrigation networks, the entire command area was barren with no human settlements. The area belonged to the Afridi Tribe which at that time lived in the mountains of Tirah. In Tirah, schools, roads, health facilities and electric power were not available. In their present location in Bara, the Afridis now have electricity and roads as well as access to education and health facilities. Additionally, the major agricultural activity of the Afridis in Tirah was poppy-growing. This tradition has not been carried down to the Bara Irrigation Scheme.

## 2. Tubewell Improvement

The feasibility of tubewell installations varies from location to location, depending upon agronomic differences, cropping mix, and physical factors. Although the locations for the 20 tubewells to be financed under this project have not yet been identified, the Wana Plain of South Waziristan Agency was considered one of the most likely sites. The economic analysis for this component was done with the premise that all tubewells will be located there. The internal rate of return is 24 percent.

With the use of improved screens and completion methods (continuous wire screen, pressure jetting, and the like), the output of a tubewell will increase by at least 20 percent, which is equivalent to 20 percent more area being irrigated. Normally, one cusec discharge can irrigate 150 acres of land. In this case, it will be 180. An average discharge of 0.625 cusec was assumed for each tubewell which is the current average in the Tribal Areas.

With the installation of 20 improved tubewells, 2,250 acres of new land will be irrigated. The net revenues from agricultural production attributable to newly irrigated land were taken as benefits. Net revenue is defined as gross revenue minus the costs of all inputs except the costs of water and the land. Based on existing cropping patterns, the weighted average net revenue worked out to Rs 3,088 per acre. This figure is higher than in other parts of the Tribal Areas since 60 percent of the land in Wana Plain is under orchards, mostly apples.

The estimates include all costs which can be attributed to initiating crop production in the command areas of the tubewells, whether borne by government agencies or by farmers. These were categorized as land levelling, water-course construction, and operation and maintenance costs. The operation and maintenance costs consist of the cost of power, operators' salaries, and maintenance of machinery and civil works at the rates used by FATA-DC, except for power where a subsidy was added to the cost.

It was assumed that fifty percent of the tubewells will be installed in the first year and the rest in the second year of the project. The estimated life of a tubewell is 10 years. Additional details on this analysis are provided

in Annex N. The streams of benefits, costs and net benefits follow in Table 5.

TABLE 5

ESTIMATED BENEFITS AND COSTS  
OF TUBEWELL IMPROVEMENT

(In Rs 000)

Year	Annual Benefits	Annual Costs	Annual Net Benefits
1	-	14,220	(14,220)
2	3,474	8,508	(5,034)
3	6,948	917	6,031
4	6,948	560	6,388
5	6,948	560	6,388
6	6,948	560	6,388
7	6,948	560	6,388
8	6,948	560	6,388
9	6,948	560	6,388
10	6,948	560	6,388
11	6,948	560	6,388
12	3,479	280	3,199
<b>Cumulative Totals</b>	<b>69,485</b>	<b>28,405</b>	<b>41,080</b>

The internal rate of return is 24.2 percent which makes the investment economically viable. To test the sensitivity, first the benefits were reduced by 30 percent and then to see the effect of cost increases, all costs were increased by 15 percent. In another test, all benefits were reduced by 30 percent and all costs were increased by 15 percent. Results are given in Table 4. The IRR under these cases ranges between 10 percent and 19 percent, keeping the investment still feasible.

TABLE 6  
TUBEWELL IMPROVEMENT  
Sensitivity Analysis

Case	Internal Rate of Return (%)
Estimated Costs and Benefits	24.2
Benefits Decreased by 30 Percent	12.6
Costs Increased by 15 Percent	19.1
Benefits Decreased by 30 Percent and Costs Increased by 15 Percent	9.5

The results of the analysis are somewhat understated in that the effects of employment generation, improved income distribution, increased food availability, better nutrition, and the like are not reflected. In addition to the employment generated by the project activity itself, it is expected that, at a rate of 28 man-days per acre per year, another 173 man-years of employment will be generated every year. <sup>3/</sup>

### 3. Sadda-Marghan Road

Data required for a fully satisfactory standard economic analysis of this road were not available. The analysis had to be carried out using secondary data on agricultural production potential and assumptions regarding expected levels of change.<sup>4/</sup>

The benefits of this component consist of savings in transportation costs, increased agricultural production, and employment generation. The key assumption in the analysis is that the net revenue to the farmers will increase due to both a savings in transportation costs and a shift to a crop mix weighted in favor of high-priced cash crops. Other assumptions were as follows : a 10 percent annual increase in farmers' net revenue for years 2 thru 7 of the

<sup>3/</sup> Manpower and Employment Statistics in Pakistan, May 1977.

<sup>4/</sup> The approach used in this analysis is similar to the roads' economic analysis methodology proposed in IBRD's 1976 report, The Economic Analysis of Rural Road Projects.

project, 5 percent for years 8 thru 13, and zero percent thereafter; annual vehicular traffic growth rate of 10 percent; and, availability of employment benefits for the first two years of the project life.

Operating costs were estimated by modifying the cost data prepared by a consultant road engineer for the A.I.D.-financed Farm-to-Market Road Project (See Annex J). Annual maintenance costs were calculated at Rs 120 thousand except for 1991 and 1998 when major repairs would be required; maintenance costs were estimated at Rs 480 thousand for these years. Table 7 gives the estimated benefits, costs and net benefits for this road component.

TABLE 7

ESTIMATED BENEFITS AND COSTS  
OF THE SADDA-MARGHAN ROAD

(In Rs 000)

Year	Annual Benefits	Annual Costs	Annual Net Benefits
1	520	7,278	(6,758)
2	1,207	7,338	(6,131)
3	1,732	120	1,612
4	1,906	120	1,786
5	2,096	120	1,976
6	2,306	120	2,186
7	2,537	120	2,417
8	2,699	120	2,579
9	2,874	480	2,394
10	3,061	120	2,941
11	3,262	120	3,142
12	3,478	120	3,358
13	3,711	120	3,591
14	3,839	120	3,719
15	3,980	120	3,860
16	4,135	480	3,655
17	4,306	120	4,186
18	4,494	120	4,374
19	4,700	120	4,580
20	4,927	120	4,807
Cumulative Totals	61,770	17,496	44,274

The IRR is 16.7 percent. A sensitivity analysis for this component is shown in Table 8.

TABLE 8  
SADDA - MARCHAN ROAD  
Sensitivity Analysis

Case	Internal Rate of Return(%)
Estimated benefits and costs	16.7
Benefits decreased by 30 percent	11.0
Costs increased by 15 percent	14.3
Benefits decreased by 30 percent and costs increased by 15 percent	9.0

A 30 percent decrease in benefits gives an IRR of 11 percent and a 15 percent increase in costs results in an IRR of 14.3 percent. If simultaneously the benefits are decreased by 30 percent and costs increased by 15 percent, the IRR is 9 percent.

The Ali Sherzai area to which this road will lead, has an estimated population of 40,000. Approximately 3,000-4,000 other inhabitants live in the immediate vicinity of the proposed road as it leaves the major market town of Sadda. Three villages, Tindo, Jabba and Shamki-Marghan, are also along the route. In addition, there are numerous small clusters of tribals along the road. The total number of all these additional persons who will benefit from the road was estimated at 25,000. Construction of the road will require 75 man-years of semi-skilled and skilled labor and 175 man-years of unskilled labor. Most of this labor is likely to come from the same area. In the long run, one can also expect increased earnings in non-agricultural activities, e.g., promotion of trade and private businesses especially in transport.

Tribals along the Sadda-Marghan road and the area beyond have consistently been requesting education, health and electric power services. However, GOP policy has been to limit the

expansion of public services until adequate communication links are established. The prospects of extending the road through the rest of the Ali Sherzai and eventually linking up with Hangu, the settled area of Kohat, adds another dimension to the project that will have beneficial economic impact on the population of the entire area.

D. Social Soundness Analysis

1. Summary

Some of the outstanding socio-political characteristics of the Tribal Areas are:

a. Limited influence of the central and provincial governments in the Tribal Areas, with the Tribal Area-government relationship shaped by traditions and political structures which have essentially remained unchanged for generations;

b. A society in transition, as population pressures compete for meagre resources and are mitigated by job opportunities elsewhere in Pakistan and outside the country, particularly the Middle East;

c. This economic pressure (which is an indication of the deterioration of the economic base of the Tribal Areas) combined with a growing awareness of what is happening elsewhere and what is possible within the Tribal Areas, has helped to create a demand for government assistance to improve the quality of life in these areas; and,

d. An impressive combination of the adaptive capacity to make a major change in economic life style (e.g., mass migration of the Afridis within the Tribal Areas to an area based upon a different agricultural production model, with new non-agricultural income sources) while maintaining age-old traditions, tribal relationships, customs, and primary control over their own affairs.

Project design respects these and other socio-political characteristics. It does not challenge political institutions or administrative practices but works with and uses them; it will finance activities sought by the inhabitants; it will strengthen elements of the area's infrastructure which are considered priority requirements by all parties -- inhabitants, central and provincial authorities; and, it will build on the dynamic elements of tribal society, particularly the capacity for adjusting to new agricultural technology and to new economic patterns. The project also provides for design adjustments during the life of the project. A significant addition to the foregoing is the GOP's determination to accelerate Tribal Area development, translated into sharply increased federal resource allocations to the area and to requests for external assistance of the type proposed in this project.

For the above reasons, the project is structurally responsive

to this unique area. It is judged to be sound and feasible. It is likely to work and achieve its objectives.

## 2. Selected Project Activities

### a. The Bara Irrigation Scheme

Until the construction of the Bara Irrigation Scheme in the Khajuri plain, the area was barren and devoid of water except for the Bara River which cut through a deep canyon. The area was mostly used for winter grazing by the Afridis. The availability of water for irrigation and drinking enticed the Afridis from the upland Tirah to the plain, which was accessible to the advantages of a city, Peshawar, but still within the bounds of tribal territory with all its advantages and freedoms. This move resulted in some profound changes in the socio-economic activities of the Afridis.

Farming is undergoing a process of modernization with the use of tractors, threshers and chemical fertilizer. For most of the Afridis, irrigation is an innovation (only some of those located on the banks of the Bara River in the Tirah had simple irrigation systems), and for all of them, cooperation in the sharing of water is a new experience. Now there is cash-cropping. In addition, trucking activities among the Afridis have increased greatly and now provide an important source of income. Large landowners have shops in the Bara market, and their sizeable Qilas (farmstead/fort) provide secure garages for their trucks. Hujras (male guest quarters) also serve as safe storage places for valuable inventories. Accessibility to the Bara and Peshawar markets has expanded the opportunities for off-farm employment. Finally, the rise in demand for foreign labor in the Middle East has provided Afridis the opportunity to earn money abroad, and their remittances are an important source of income among Bara families.

The improvement and expansion of the Bara irrigation system will set into motion a new phase in the developmental trends already taking place. It will involve an acceleration of the modernization process already evident in farming. A.I.D.'s input will advance the realization of Bara's potential. As such, all of the estimated 150,000 inhabitants will benefit either directly or indirectly.

Direct beneficiaries will include those for whom farming is a source of income. For the farmers themselves, the new irrigation system will guarantee a supply of water when needed, thereby tending to stabilize their income. This in turn will provide greater incentive for farmers to invest

further in their operations (e.g. mechanizing, adopting new crops or new strains) and increase production, which will raise incomes still further. Village craftsmen such as carpenters and smiths will experience a rise in demand for their services. Indirect beneficiaries include those in and around Bara who provide goods and services to the farm sector. Transport, processing, storage, and general marketing activities will expand.

The land available for livestock raising will diminish as grazing land on the plain will be converted into irrigated crop land. Although some individuals may regard this as undesirable, the evidence suggests that the inhabitants in general would prefer at least the options which this project will generate, if not the actual shift to a higher-income form of agricultural production. It is also possible, based on experience in other countries, that livestock yields will increase substantially (better fed animals) and even more than offset the decrease in the number of animals.

#### b. The Sheen Tangi Project

The direct beneficiaries include all of the 4,000 inhabitants of Luqman Khel village. The project will add 3,000 acres of irrigated farmland. Effects will be similar to those expected in the Bara Irrigation Scheme : production will rise and new crops will be introduced, leading to a shift away from subsistence agriculture and expanding production for the market; adequate water, more reliably supplied, will be available to most if not all the farmers; incomes will rise, stimulating the use of new farming techniques, crops and strains. Tribal traditions, combined with the availability of additional farmland, will result in large holdings for some farmers and new holdings for at least some of the previously landless. The effects on livestock-raising would be similar to what is expected in Bara. It is worth noting that, in discussions of this possible problem, villagers indicate they would still have the option of grazing at higher elevations above the village. They appear to regard the project as bringing new and desirable economic opportunities.

#### c. Tubewell Development

The specific sites for the proposed 20 wells have not yet been chosen. In two of the possible candidate areas, Orakzai and South Waziristan, beneficiaries would include small farmers who either are dependent upon unreliable rains or on intermittent irrigation based upon limited supplies of surface water. Each tubewell will establish about 100 acres of farmland with a reliable source

for irrigation. The water will allow farmers to increase production in the cool seasons (grain crops), add an additional second crop (in the currently rain-fed areas), and change to a wider range of crops. An additional substantial benefit will accrue to women who spend a major portion of the day seeking and carrying water from distant sites.

d. The Sadda-Marghan Road Project

This road will benefit an estimated 20,000 people, about half of the total population of the Ali Sherzai tribe. It will diminish the isolation that has characterized this region of eastern Kurram Agency. It was disclosed during the study of the area that although the earthen trail has only connected Shankhi village to Sadda since late 1980, farmers already have accepted such innovations as tractors and chemical fertilizers. With an improved road, villagers will have access to the Sadda market ; commerce will grow; new technologies will be introduced ; access to social services will expand, particularly health facilities in Sadda. The road in effect will open a whole new world for the Ali Sherzai.

e. The Supplementary Development Fund

The activities to be financed under this project component will be identified as the project progresses but will include the construction of community-benefiting structures such as schools, health facilities, flood control structures and electric power spurs. These activities will increase the development impact of other project components. In each case, the beneficiaries from these activities will coincide with those of the other activities, but benefits will be substantially increased. For example, the people of Marghan will benefit from the road construction in terms of access to services and markets, but they currently have no school or health facility. The opening of such facilities in the area would bring many more direct benefits, particularly to the children and women of the area.

3. Other Benefits

Technical assistance and training will obviously benefit government staff and organizations. This in turn will be translated into more effective development activities and improved services for the inhabitants of the Tribal Areas.

The project will support narcotics suppression goals. It will reinforce the shift from opium poppy production among the Afridis to other agricultural and non-agricultural pursuits, and present other tribals with alternatives and disincentives relating to the array of activities associated with narcotics. It would strengthen the hand of the authorities concerned with narcotics suppression.

If successful, the project would serve as a demonstration of the positive possibilities which external assistance, in cooperation with government, holds for development and the quality of life in the Tribal Areas. Over all, the project as a whole offers the prospect of diminishing the strains of modernization and increasing the likelihood that the Tribal Areas will become a more productive, stable, and integrated component of the nation.

#### 4. Conclusion

The foregoing material is illustrative of the impact of the project and of the opportunities which the project will explore. Annex K contains additional social soundness background material on the Tribal Areas. Wherever possible, self-help and local participation will be encouraged. The move to reduce the landless and enlarge uneconomic land holdings will be stimulated. Technology transfer and institution building will be emphasized. Over all, the economic and social impact is expected to be positive and facilitative, responding to the needs and wishes of the inhabitants and building on trends already in evidence in this heretofore largely neglected area.

#### E. Financial Analysis

##### 1. General

This project provides assistance to support specific activities in the GOP's Special Development Plan for the Tribal Areas. As shown in Table 9, the entire program over the next five years is estimated to cost \$ 24,046,000. This amount does not include the GOP's contribution to development programs in the Tribal Areas which has increased substantially in recent years. As mentioned previously, no other foreign donor is engaged in development activities in the Tribal Areas. Therefore, the A.I.D. project, which will provide 100 percent of the costs of the proposed activities, supports GOP efforts which, to date, have been unsupported by other donors.

Four summary tables are provided on the following pages : Table 9 summarizes project costs by fiscal year and source of funding : Table 10 describes project costs by expense category and source of funding : Table 11 depicts project costs by project component, expense category, and source of funding : and Table 12 provides A.I.D. funding by foreign exchange and local costs. Additional data are provided in the Detailed Budget Tables in Annex M.

Project costs are defined as anticipated sub-obligations or commitments of funding through, e.g., PIOs, contracts, or purchase orders. Inflation was calculated on the basis of 10 percent for U.S. consultant salaries, 15 percent for all other foreign exchange costs, and 20 percent for local costs, all compounded annually. A contingency factor of 10 percent was applied to all costs. Rupees, where shown, are expressed as dollar equivalents at the exchange rate of U.S. \$ 1.00 = Rs 12.16 as of July 18, 1982.

## 2. Summary Cost Estimates and Financial Plan

### a. A.I.D. Contribution

The total cost of the project is \$ 24,046,000, which includes \$ 15 million in ESF grant funds and Rs 110 million or the equivalent of \$ 9,046,000. The proposed obligation schedule for the dollar grant is as follows : FY 1982 = \$ 3.0 million; FY 1983 = \$ 5.0 million; FY 1984 = \$ 5.0 million; and FY 1985 = \$ 2.0 million. The rupees required for this project are programmed for FY 1984 - FY 1986. Depending on the availability of funds, either Mondale rupees, U.S. appropriated rupees, counterpart funds or some combination of these three or other sources, will be used to finance those local costs not covered by dollars. It may be that, in the out-years, additional dollars from the Project Reserve will be used to finance these local costs now programmed to be funded from rupee sources.

A major portion (77 percent) of the A.I.D. dollar grant will be used to finance local costs under this project. Most of these costs are for civil works, but they also include the costs for local-hire project staff, vehicle maintenance and repair, in-country training, and the local costs associated with technical assistance. These funds will be disbursed in U.S. dollars in order to maximize the balance of payments impact of this program in accordance with the overall objectives of the renewed US-GOP economic and development assistance program. A FAA Section 612 (b) certification has been signed by the USAID/Pakistan Mission Director and is included in Annex C.

TABLE 9

SUMMARY OF PROJECT COSTS <sup>a/</sup>  
BY FISCAL YEAR AND SOURCE OF FUNDING

(in \$ 000)

Source of Funding	FISCAL YEAR						
	FY 82	FY 83	FY 84	FY 85	FY 86	FY 87	Total
A.I.D. Grant	2,761	3,616	3,528	2,318	2,557	220	15,000
U.S. Owned Rupees <sup>b/</sup>	-	-	2,895	3,419	2,732	-	9,046
TOTAL	2,761	3,616	6,423	5,737	5,289	220	24,046

<sup>a/</sup> Project costs are defined as anticipated sub-obligations or commitments of funding through, e.g., PIOs, contracts, or purchase orders.

<sup>b/</sup> Expressed as dollar equivalents at the exchange rate of U.S. \$1.00 = Rs 12.16 as of 7/18/82.

**TABLE 10**  
**SUMMARY OF PROJECT COSTS <sup>a/</sup>**  
**BY EXPENSE CATEGORY AND SOURCE OF FUNDING**  
**(\$ 000)**

Expense Category <sup>b/</sup>	LIFE OF PROJECT FUNDING	
	A.I.D. Grant	U.S. Owned Rupees <sup>c/</sup>
1. Technical Assistance		
a. Short-Term	346	-
b. Long-Term	2,002	-
Sub-Total	2,348	-
2. Training		
a. U.S. Short-Term	82	-
b. In-Country	22	-
Sub-Total	104	-
3. Commodities		
a. Vehicles	618	-
b. Other	1,357	-
Sub-Total	1,975	-
4. Other Costs		
a. Construction	8,950	8,205
b. Evaluation	256	-
Sub-Total	9,206	8,205
TOTAL	13,633	8,205
Contingency (10%)	1,367	841
GRAND TOTAL	15,000	9,046

<sup>a/</sup> Project costs are defined as anticipated sub-obligations or commitments of funding through, e.g., PIOs, contracts or purchase orders.

<sup>b/</sup> Inflation factor of 10% for U.S. personnel costs, 15% for off-shore equipment costs and 20% for all rupee costs, compounded annually, is included

<sup>c/</sup> Expressed as dollar equivalent at exchange rate of US \$1.00 = Rs 12.16 as of 7/18/82.

TABLE 11  
SUMMARY OF PROJECT COSTS<sup>a/</sup> BY PROJECT COMPONENT,  
EXPENSE CATEGORY, AND SOURCE OF FUNDING  
 (\$ 000)

Project Component <sup>b/</sup>	Life of Project Funding	
	A.I.D. Grant	U.S. Owned Rupees <sup>c/</sup>
1. Water Resources		
a. Technical Assistance	2,118	-
b. Training	104	-
c. Commodities	773	-
d. Other Costs	6,912	-
Sub-Total	9,907	-
2. Roads		
a. Technical Assistance	230	-
b. Commodities	897	-
c. Other Costs	1,833	8,205
Sub-Total	2,960	8,205
3. Supporting Activities <sup>d/</sup>		
a. Commodities	305	-
b. Other Costs	461	-
Sub-Total	766	-
TOTAL	13,633	8,205
Contingency (10%)	1,367	841
GRAND TOTAL	15,000	9,046

a/ Project costs are defined as anticipated sub-obligations or commitments of funding through, e.g., PIOs, contracts, or purchase orders.

b/ Inflation factor of 10% for U.S. personnel costs, 15% for off-shore equipment costs and 20% for all rupee costs, compounded annually, is included.

c/ Expressed as dollar equivalents at exchange rate of US \$1.00 = Rs 12.16 as of 7/18/82.

d/ Supplementary Development Fund and Research and Evaluation Activities.

TABLE 12  
SUMMARY OF A.I.D. FUNDING  
BY FOREIGN EXCHANGE (FX) AND LOCAL COSTS (LC)  
(\$ 000)

Expense Category <sup>a/</sup>	LIFE OF PROJECT FUNDING			
	A.I.D. Grant		U.S. Owned Rupees <sup>b/</sup>	TOTAL
	FX	LC		
1. Technical Assistance				
a. Short-Term	277	69	-	346
b. Long-Term	1,241	761	-	2,002
Sub-Total	1,518	830	-	2,348
2. Training				
a. U.S. Short-Term	69	13	-	82
b. In-Country	-	22	-	22
Sub-Total	69	35	-	104
3. Commodities				
a. Vehicles	209	409	-	618
b. Other	1,353	4	-	1,357
Sub-Total	1,562	413	-	1,975
4. Other Costs				
a. Construction	-	8,950	8,205	17,155
b. Evaluation	-	256	-	256
Sub-Total	-	9,206	8,205	17,411
TOTAL	3,149	10,484	8,205	21,838
Contingency (10%)	292	1,075	841	2,208
GRAND TOTAL	3,441	11,559	9,046	24,046

<sup>a/</sup> Inflation factor of 10% for U.S. personnel costs, 15% for off-shore equipment costs and 20% for all rupee costs, compounded annually, is included.

<sup>b/</sup> Expressed as dollar equivalents at exchange rate of US \$1.00 = Rs 12.16 as of 7/18/82.

The remaining 23 percent of the grant will be used for the foreign exchange costs associated with technical assistance, vehicles, commodities procured off-shore and short-term U.S. training. A.I.D. will finance the international travel costs of all participants under this project. A participant training travel waiver, which exempts the GOP from having to cover these costs, has been signed by the USAID/Pakistan Mission Director and is included as Annex O.

Of the \$15 million grant, allocations by expense category are as follows: 60.0 percent for civil works; 15.5 percent for technical assistance; 13.0 percent for vehicles and commodities procured off-shore; 1.7 percent for data collection activities; 0.8 percent for training; and the remaining 10 percent for contingency. All of the rupees are programmed for road construction other than the Sadda-Marghan Road which will be financed with dollars. The financing mechanism which will be employed for all civil works will be the Fixed Amount Reimbursement (FAR) system, under which the government will be reimbursed for up to 100 percent of the costs of construction provided the work meets previously agreed upon specifications and standards.

Allocations of the dollar grant alone by project component are as follows: 66 percent for the Water Resources Component including the Bara Irrigation Scheme, the groundwater investigation activity and tubewells, and four other irrigation schemes; 20 percent for the Roads component including technical assistance, road equipment and the Sadda-Marghan road only; 5 percent for the Supplementary Development Fund and research and evaluation activities; and the remaining 10 percent for contingency. For the total project, including both dollar and rupee funds, the allocation is as follows: 41 percent for the Water Resources component; 46 percent for the Roads component; 3 percent for the Supplementary Development Fund and research and evaluation activities; and the remaining 10 percent for contingency.

b. GOP Contribution

GOP development expenditures in the Federally Administered Tribal Areas are disbursed by both federal and provincial agencies. FATA-DC, an autonomous federal government agency which works exclusively in FATA, obtains its annual development program budget from the Finance Division of the federal Ministry of Finance and Economic Affairs through the States and Frontiers Regions Division (SAFRON) in the federal Ministry of the Interior. SAFRON also channels funds from the federal government to the FATA divisions of NWFP nation-building departments through the provincial Finance Department which, in collaboration

with the FATA section of the provincial Planning and Development Department, establishes the annual development program for the Federally Administered Tribal Areas which will be undertaken by the provincial government.

Table 13 provides a summary of government expenditures in the Tribal Areas from 1970 to 1982, for both the provincial government and FATA-DC. Several facts are worth noting. FATA-DC's PFY 1981/1982 budget was between one-fourth to one-third of the provincial government's budget for this region in that year. The total allocation for the region has increased almost five-fold from about Rs 78,600,000 in PFY 1973/74 to about Rs 375,900,000 in PFY 1981/82. The total budget increased about 32 percent between PFY 1980/81 and PFY 1981/82. This reflects the increasing priority given to development of the Tribal Areas by the GOP.

Although the GOP contribution to the development of the Tribal Areas is significant (compare the PFY 1981/82 government allocation of the equivalent of about \$ 31 million to the total five-year A.I.D. project budget of about \$ 24 million), the GOP contribution to this project will be relatively small. It will be limited to staff salaries, materials, land royalty, and machinery maintenance. The GOP will not contribute any funds for the civil works since the A.I.D. project will reimburse the GOP for 100 percent of the costs of construction. However, the GOP will be expected to provide adequate funds in its annual development budget for both FATA-DC and the provincial government to cover the maintenance costs for all civil works financed under this project, both during the project and after A.I.D. input terminates. Assurances have been obtained from government officials that this normal procedure will continue to be implemented and sufficient funds will be made available.

Thus the A.I.D. project will support the GOP's efforts in the Tribal Areas by making a significant contribution of additional funds to the GOP's available resources for this region.

#### F. Environmental Analysis

An Initial Environmental Examination (IEE) is provided as Annex I. It has been determined that this project will not have a significant impact on the air or water quality, climate, or geography of the Tribal Areas but that it is possible that the project will have a measureable socio-economic and cultural impact on the traditional tribal structure. In view of this, the Mission recommends that an Environmental Assessment (EA) be undertaken at the end of the first year of the project, by which time project activities will have been fully identified, and a more

TABLE 13

GOVERNMENT EXPENDITURES IN THE  
FEDERALLY ADMINISTERED TRIBAL AREAS, 1970-1982

(Million Rupees)

PAKISTAN FISCAL YEAR	FATA (P) <sup>a/</sup>		FATA-DC <sup>b/</sup>		TOTAL	
	Allocation	Expenditure	Allocation	Expenditure	Allocation	Expenditure
1970 - 71	-	-	0.2	N.A.	0.2	N.A.
1971 - 72	6.6	N.A.	4.0	2.2	10.6	N.A.
1972 - 73	15.0	N.A.	14.7	9.3	29.7	N.A.
1973 - 74	51.7	N.A.	26.8	26.6	78.6	N.A.
1974 - 75	155.0	N.A.	56.0	55.8	211.0	N.A.
1975 - 76	180.5	N.A.	43.4	43.4	223.9	N.A.
1976 - 77	187.5	N.A.	42.3	42.3	229.8	N.A.
1977 - 78	168.0	168.9	40.9	40.9	208.9	209.8
1978 - 79	220.0	219.0	46.0	46.0	266.0	265.0
1979 - 80	196.7	208.6	55.1	62.7	251.8	271.3
1980 - 81	225.0	223.6	60.0	63.9	285.0	287.5
1981 - 82	292.5	N.A.	83.4	N.A.	375.9	N.A.

<sup>a/</sup> FATA Section, Planning & Development Department, Govt. of NWFP, Peshawar.

<sup>b/</sup> FATA Development Corporation.

reliable basis would exist for an analysis of the socio-economic and cultural effects of the project.

#### G. Women in Development

Given the tribal social structure, this project will have limited direct impact on the women in the Tribal Areas. They will, however, benefit from this project in the same manner as most other members of the target households as a result of increased household incomes and an improvement in the overall quality of life.

In the tribal division of labor, women concentrate their efforts on running the household, which involves maintaining the house, cooking, gathering firewood, fetching water, and caring for the children. It is a full-time job for women in the large extended family households which characterize the Tribal Areas. Their activities outside the household depend on the economic status of the family. In general, the seclusion of women is a paramount feature of tribal social behavior and is deeply rooted in the principles of Islam.

It is common practice for women in these grain-producing regions to be involved in the final stages of threshing and cleaning of crops. They also may engage in the heavier tasks of farming and harvesting if the household situation (such as a shortage of available male labor) demands that they do so. Such a situation invariably adversely affects the household's quality of life and reduces the household's status in the community. This is more likely to be the case in lower income families with small male labor forces. Families with several male members in the Middle East may have small labor forces, but they will generally also have sufficient cash income (from remittances) to hire local labor. If the economic status of a household improves, women can be expected to conform to the traditional role of remaining in the seclusion of the house, and the general quality of life of that household as a consequence will improve.

In areas where significant development is taking place, certain benefits are accruing to women although their traditional role cannot be said to be changing. Increased educational opportunities, particularly at the primary level, are being made available for females. Increased agricultural production means higher family incomes, and women, along with the rest of the family, benefit from improved household amenities such as electricity, radios, and television sets. Higher income also means better clothes and more personal possessions such as jewelry.

The latter is generally associated with the accumulation of family wealth. Lack of locally available firewood is a widespread problem in the Tribal Areas, necessitating time-consuming and arduous searches, often miles from the household. Increased income makes it possible to purchase more firewood in the local markets or to use other sources of energy such as electricity or kerosene. Finally, improved irrigation systems and tubewells make water for domestic use more readily available.

As a contribution to development and economic change and progress, this project will, over time, have other effects on women. These effects could be described as part of the modernization process. However, it is very difficult to assess what the consequences of this process will be on the role and status of women in the Tribal Areas. The impact of the project in these terms is likely to be much less significant than the outcome of the mix of social, cultural, political, and religious forces as well as of external events which would exert influence on the region.

#### H. Narcotics Impact Statement

Most of the poppies grown in the Tribal Areas are found in the northern regions in the Bajaur and Mohmand Agencies near the centers of opium production in non-FATA territories such as Dir, Malakand, and Buner. For this reason, no project activities are planned for these two Agencies of the FATA.

Another center of production in the Tribal Areas is the Afridi Tirah in Khyber Agency which borders an Afghan Province, Nangahar, which is known for its opium production in the past. The Afridi Tirah is an inaccessible area. The tribals of the area will not even allow a road to pass through their district. At the same time, they are migrating out of the area into the Bara area, one of the major sites for development activities under this project. In general, the Afridis have not brought this cash crop with them into Bara. An estimated 10 acres (or less than one percent of the total cultivable area) was in poppy this year. It suggests changing attitudes associated with development activities. As was noted in several other Agencies where production activities are targeted, the few farmers producing poppies tended to have small plots clustered in a few scattered districts.

This is in contrast to the poppy growing districts to the north outside the Tribal Areas where as much as 30 to 50 percent of the fields were in poppy. Orakzai Agency is also known as an opium-producing area. The only possible project

activity in this area will be associated with the tubewell activity. Some poppy fields were also observed in Kurram Agency, but the general pattern appears to be that there are fewer poppies as one moves from the north to the south through the Agencies.

In general, the laws of Pakistan do not apply and are unenforceable in the Tribal Agencies although there are exceptions. Several officials indicated that a law banning poppies would not be appropriate in the Tribal Areas but that pressure could, in many areas, be brought to eliminate production. The existing socio-political setting in the Tribal Areas would make it enormously difficult and possibly even dangerous to attempt to implement a poppy ban on a consistent basis in the Tribal Areas.

In discussions on the subject of poppy production with five key Maliks in the Bara area, it was stated that poppies were not of major interest to farmers in the irrigation scheme and that the few fields in the area could be eliminated. They understood the restrictions under which the project must function. This is an area where the main cash crop is not poppy and where local demand for development activities is strong.

The objective is to eliminate poppy production in areas targeted for project assistance. If successful, the project would also provide incentives to farmers to resist the temptation to grow or return to growing poppies which other farmers, not benefiting from the project, might be unable to resist.

The Mission will include a Poppy Clause in the Project Agreement. Mission staff have clearly and consistently stated to all key government officials contacted during project design the content, intent, and meaning of the clause. Project personnel will monitor the project areas to insure that poppy production is not occurring.

The proposed language for the poppy clause for this project is as follows:

"The Government of Pakistan (GOP) agrees to undertake appropriate measures to prohibit cultivation of opium poppy and/or processing of opium into heroin within any village or area benefiting from the project. In the event that a determination is made that the cultivation of opium poppy and/or processing of opium into heroin is occurring in a

village or area programmed to benefit or benefiting from the project, no assistance under the project directly benefiting that village or area shall commence and, if commenced, such assistance shall be suspended until the prohibited activity is eliminated. If the prohibited activity found to exist is not fully eliminated within a specified period of time to be agreed upon by the United States Government and the GOP, all assistance directly benefiting that village or area will be terminated. If, during the life of the project, it is detected that the prohibited activity is occurring in a village or area which has benefited from the project and the prohibited activity is not eliminated within a period of time to be agreed upon by the United States Government and the GOP, the GOP shall reimburse A.I.D. for all assistance that the GOP has received from A.I.D. which has resulted in direct benefits to that village or area in which the prohibited activity is occurring".

VI. CONDITIONS, COVENANTS, AND NEGOTIATING STATUS

A. Conditions Precedent to Disbursements

1. First Disbursement

Prior to the first disbursement under this project or to the issuance by A.I.D. of documentation pursuant to which disbursement will be made, the Grantee shall, except as the parties may otherwise agree in writing, furnish or have furnished to A.I.D. in form and substance satisfactory to A.I.D. within sixty (60) days after the signing of the Project Agreement :

a. An opinion of Counsel acceptable to A.I.D. that the Project Agreement has been duly authorized and/or ratified by, and executed on behalf of, the Grantee and it constitutes a valid and legally binding obligation of the Grantee in accordance with all of its terms.

b. A written statement setting forth the names and titles of persons holding or acting in the Office of the Grantee and representing that the named person or persons have the authority to act as the representative or representatives of the Grantee, together with a specimen signature of each such person certified as to its authenticity.

c. A written statement by authorized representatives of the Federally Administered Tribal Areas Development Corporation (FATA-DC) and the NWFP Communications and Works (C&W) Department, indicating concurrence with the Project and with the role and responsibilities of their respective organizations under the Project as outlined in the A.I.D. Project Paper dated August 1982.

2. Condition Precedent to Release of Road Construction Equipment

Prior to the release to the NWFP Communications and Works (C&W) Department of road construction equipment procured under this project, the C&W Department shall, unless A.I.D. otherwise agrees in writing, provide to A.I.D. a written statement indicating concurrence with the following priority uses of the road construction equipment: first priority shall be given to A.I.D.-financed development projects in the Tribal Areas; second priority shall be given to other development projects in the Tribal Areas; and third priority shall be given to development projects in the NWFP.

3. Condition Precedent to the Drilling of Tubewells

Prior to the disbursement under this Project or to the issuance by A.I.D. of documentation pursuant to which disbursement shall be made for the drilling of tubewells, the Grantee shall, through its Federally Administered Tribal Areas Development Corporation (FATA-DC), unless A.I.D. otherwise agrees in writing, provide evidence, in form and substance satisfactory to A.I.D. that electrical connections for each tubewell shall be completed by the Water and Power Development Authority (WAPDA) within no more than three months after the tubewell has been constructed.

4. Condition Precedent to Reimbursement for Civil Works

Prior to the reimbursement under this Project or to the issuance by A.I.D. of documentation pursuant to which reimbursement shall be made in accordance with the Fixed Amount Reimbursement (FAR) System for all civil works financed under this project, A.I.D. shall have approved the design and cost estimates prior to construction and shall certify that construction has been completed in accordance with agreed upon standards and procedures.

B. Covenants

1. The Grantee shall ensure that sufficient funds have been provided in its budget for the maintenance of all civil works constructed under this project.

2. The Grantee, through its Federally Administered Tribal Areas Development Corporation (FATA-DC), shall ensure that all persons trained under this project shall continue to work on water resources development activities in FATA-DC for at least three years after the period of their training.

C. Negotiating Status

The above conditions and covenants have been discussed with and agreed to by the Government of Pakistan. During Project Agreement negotiations, USAID/Pakistan will incorporate into the Agreement appropriate language to cover these terms and conditions.

VII. ANNEXES

P 198613Z DEC 81  
FM SECSTATE WASHDC  
TO AMEMBASSY ISLAMABAD PRIORITY 4738  
PT  
UNCLAS STATE 335269

AIDAC

E.O. 12958: N/A

TAGA:  
SUBJECT: APAC REVIEW - TRIBAL AREA DEVELOPMENT PID  
(391-2471)

REFS: (A) ISLAMABAD 16654, (B) VAN RAALTE/LJON MEMO  
OCTOBER 16, 1981

REGRET DELAY IN COMMUNICATING CONCLUSIONS OF APAC.

1. APAC APPROVED SUBJECT PID OCTOBER 15, 1981, AND PROVIDES GUIDANCE FOR PF DEVELOPMENT AS FOLLOWS, TAKING INTO ACCOUNT MISSION'S PLANS PER REF A. YOUR INITIATIVE IN THAT REGARD IS APPRECIATED.

2. THE APAC FELT THAT THE AID PROJECT COULD ONLY BE SUCCESSFUL IF CARRIED OUT IN THE CONTEXT OF A GOP-TRIBAL RELATIONSHIP BASED ON A PRINCIPLE OF ACCOMMODATION ON THE PART OF THE GOP TOWARD THE LATTER. THIS WOULD MEAN THAT THE GOP WOULD ALLOW THE TRIBAL GROUPS TO MAINTAIN THEIR OWN ETHNIC IDENTITIES AND ENJOY A MEASURE OF AUTONOMY WHILE AT THE SAME TIME SATISFYING THEIR DESIRES FOR DEVELOPMENT PROGRAMS TO IMPROVE THEIR LIVING STANDARDS. IN LIGHT OF THIS, THE PF SHOULD INCLUDE A CLEAR ASSESSMENT OF GOP TRIBAL POLICY, ADDRESSING THE FOLLOWING QUESTIONS:

(A) IS THE POLITICAL AGENT AN EFFECTIVE LIAISON BETWEEN THE GOP AND THE TRIBAL LEADERS?

(B) DOES THE FEDERALLY ADMINISTERED TRIBAL AREAS CORPORATION FUNCTION AS A CHANNEL FOR TRIBAL LEADERS TO EXPRESS TO THE GOP THE KIND OF DEVELOPMENT PROJECTS THEY DESIRE?

(C) ARE THE ON-GOING PROJECTS IN THE TRIBAL AREAS ONES THAT THE LEADERS AND THE PEOPLE REALLY WANT? YOUR PROPOSED SCOPE OF WORK DESCRIBED PARA 4, REF A, INCLUDING THESE QUESTIONS, SEEMS TO BE APPROPRIATE.

3. APPROPRIATE INSTITUTIONAL MECHANISMS FOR IMPLEMENTING THE PROJECT WILL NEED TO BE DESCRIBED IN THE PF. THE POTENTIAL ROLES OF FATA AND OF VILLAGE-LEVEL IMPLEMENTING INSTITUTIONS WILL NEED TO BE ANALYZED. THESE MECHANISMS AND ROLES WILL HAVE TO BE UNDERSTOOD AND IN PLACE PRIOR TO PROJECT DISBURSEMENTS FOR RELATED ACTIVITIES.

IN THIS REGARD WE REQUEST CLARIFICATION OF THE INTENDED RELATIONSHIP BETWEEN THE CONSTRUCTION ALTERNATIVES STUDY ON THE ONE HAND AND THE SOCIAL SOUNDNESS STUDY AND PRESENCE OF APPROPRIATE INSTITUTIONAL MECHANISMS ON THE OTHER HAND. THE PROJECT SHOULD TAKE CARE TO NOT MAKE COMMITMENTS FOR SUBPROJECTS WHICH ARE NOT SUPPORTED BY THE PEOPLE NOR GENERATED BY THE DESIRED INSTITUTIONAL MECHANISMS. IF THE STUDY OF GOP CONSTRUCTION ALTERNATIVES WOULD RESULT IN DETAILED COST AND ENGINEERING ANALYSES OF SPECIFIC SUBPROJECTS TO BE FUNDED BY THE PROJECT, ITS PROPOSED TIMING MIGHT BE PREMATURE SINCE THEIR SELECTION COULD NOT HAVE TAKEN INTO ACCOUNT FINDINGS OF THE SOCIAL SOUNDNESS ANALYSIS WHICH IS PLANNED TO BE INITIATED AND COMPLETED AFTER THE CONSTRUCTION ALTERNATIVES STUDY. ON THE OTHER HAND, IF THE STUDY OF GOP CONSTRUCTION ALTERNATIVES IS INTENDED TO PRODUCE A GENERAL REVIEW OF ONGOING AND PROPOSED PROJECTS SOME OF WHICH COULD BECOME CANDIDATES FOR PROJECT FUNDING IF THEY MET SOCIAL SOUNDNESS CRITERIA, THEN BUREAU HAS NO OBJECTION. SELECTION AND DETAILED FEASIBILITY AND ENGINEERING ANALYSIS OF SPECIFIC SUBPROJECTS CAN BE DONE AS PART OF PROJECT IMPLEMENTATION FOLLOWING AUTHORIZATION ONCE SOCIAL SOUNDNESS AND INSTITUTIONAL MECHANISMS QUESTIONS ARE SATISFACTORILY ANSWERED IN PP. PLEASE RESPOND TO THIS ISSUE, INCLUDING THE PROPOSED TIMING OF THESE TWO STUDIES, BEFORE PROCEEDING WITH THEM.

4. APAC CONCURRED WITH MISSION DIRECTOR'S PERCEPTION THAT AID PROJECT IN NARCOTICS PRODUCING AREA WOULD NOT BE EXPECTED TO REDUCE DIRECTLY NARCOTICS PRODUCTION BUT

RATHER WOULD BE EXPECTED TO PRODUCE ECONOMIC AND SOCIAL BENEFITS WHICH IN TURN WOULD MAKE NARCOTICS PRODUCTION A LESS ATTRACTIVE ECONOMIC PURSUIT. CONSEQUENTLY, THE PP WILL BE EXPECTED TO DEMONSTRATE POSITIVE ECONOMIC IMPACT ON COMMUNITIES IN NARCOTICS PRODUCING AREAS AND ELSEWHERE AND DESCRIBE A SYSTEM FOR MONITORING THE LEVEL OF POPPY PRODUCTION DURING THE PROJECT PERIOD.

5. PROJECT PREPARATION: WITH EXCEPTION OF ABOVE QUESTIONS ABOUT TIMING OF PROPOSED STUDY OF GOP CONSTRUCTION ALTERNATIVES, BUREAU CONCURS WITH MISSION PROJECT PREPARATION PLAN PER PARA 2 AND 3 REF A. WE WILL CONTACT DR. AHMED RE AVAILABILITY, REQUEST S AND T/RAD ASSISTANCE AND ADVISE AVAILABILITY OF HICKEY OR SCOTT AND ASIA/PD TEAM LEADER AS REQUESTED. HAIG

BT

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STAB 335269

F 070229Z APR 82  
FM SECSTATE WASHDC  
TO AMEMBASSY ISLAMABAD PRIORITY 7252  
BT  
UNCLAS STATE 029520

AIDAC

F.O. 12065: N/A  
TAGS:  
SUBJECT: REDELEGATION OF AUTHORITY

REF: STATE 066932

1. FORMAL REDELEGATIONS DISCUSSED IN REF A BEING PREPARED. EFFECT ON RESPONSIBILITY FOR PROJECT AUTHORIZATIONS IN FY 82 IS DISCUSSED BELOW.

2. OF THE 12 NEW STARTS OR AMENDMENTS PROPOSED FOR FY 1982, MISSION ALREADY HAS AUTHORITY TO APPROVE PROJECT DESIGN FUND, ON-FARM WATER MANAGEMENT AMENDMENT, AGRICULTURAL RESEARCH AMENDMENT, AND DEVELOPMENT SUPPORT TRAINING PROJECT.

3. WE UNDERSTAND THE FOLLOWING NEW PROJECTS WILL EXCEED DOLS 20 MILLION LIFE OF PROJECT FUNDING AND WILL THEREFORE BE AUTHORIZED IN AID/W: AGRICULTURAL COMMODITIES AND EQUIPMENT (AUTHORIZED 3/29/82); IRRIGATION SYSTEM REHABILITATION; RURAL ELECTRIFICATION; POPULATION WELFARE PLANNING; AND MALARIA CONTROL II.

4. WE UNDERSTAND THE FOLLOWING PROJECTS WILL NOT EXCEED DOLS 20 MILLION: PRIMARY HEALTH CARE (DOLS 20 MILLION);

TRIBAL AREA DEVELOPMENT (DOLS 15 MILLION); AND CONTRACEPTIVE RETAIL SALES (APPROXIMATELY DOLS 13 MILLION). ALTHOUGH THE PIDS FOR THESE PROJECTS WERE REVIEWED PRIOR TO THE REDELEGATIONS, ALL BUT ONE OF THESE MAY BE AUTHORIZED BY THE MISSION UNDER THE ANTICIPATED REDELEGATIONS.

5. THE EXCEPTION RELATES TO THE TRIBAL AREA DEVELOPMENT PROJECT WHICH SHOULD BE SUBMITTED TO AID/W FOR AUTHORIZATION EVEN THOUGH IT WILL FALL WITHIN THE NEW LEVELS OF MISSION AUTHORITY. WE ARE RESERVING APPROVAL AUTHORITY IN AID/W BECAUSE OF THE COMPLEXITY AND SENSITIVE ASPECTS OF THIS PROJECT, SUCH AS FEDERAL-PROVINCIAL-TRIBAL RELATIONSHIPS, ITS SOCIAL SOUNDNESS ASPECTS, AND FACT THAT PROJECT WILL BE LOCATED IN POPPY GROWING AREA. THE PROJECT IS ALSO UNIQUE IN SEVERAL RESPECTS (INCLUDING THE RELATIVE AUTONOMY OF THE TRIBAL AREAS) AND AS SUCH IS OF CONSIDERABLE SIGNIFICANCE AND POTENTIAL INTEREST TO THE BUREAU, THE AGENCY AND OTHER IDC'S. IN ADDITION, THE ABBREVIATED PID DID NOT CONTAIN DEFINITE INFORMATION ON

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COMPONENTS WHICH AID WOULD FUND SINCE PRELIMINARY STUDIES WERE CONSIDERED TO BE NECESSARY. SINCE AID/W HAS NOT HAD THE OPPORTUNITY TO EXAMINE THE PROJECT IN AS MUCH DEPTH AS WOULD NORMALLY BE THE CASE WITH A PID, WE REQUEST THAT PP BE SUBMITTED FOR AID/W AUTHORIZATION.

6. PLEASE ADVISE IF CHANGES IN AMOUNTS FOR OTHER PROJECTS HAVE OCCURRED WHICH WOULD CHANGE OUR UNDERSTANDINGS IN PARAS 3 AND 4. FAIG

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STATE 89520

5C(2) PROJECT CHECKLIST

Listed below are statutory criteria applicable to projects. This section is divided into two parts. Part A. includes criteria applicable to all projects. Part B. applies to projects funded from specific sources only: B.1. applies to all projects funded with Development Assistance Funds, B.2. applies to projects funded with Development Assistance loans, and B.3. applies to projects funded from ESF.

CROSS REFERENCES: IS COUNTRY CHECKLIST UP TO DATE? HAS STANDARD ITEM CHECKLIST BEEN REVIEWED FOR THIS PROJECT? Yes Yes

A. GENERAL CRITERIA FOR PROJECT

1. FY 1982 Appropriation Act Sec. 523; FAA Sec. 634A; Sec. 653(b).

(a) Describe how authorizing and appropriations committees of Senate and House have been or will be notified concerning the project;  
(b) is assistance within (Operational Year Budget) country or international organization allocation reported to Congress (or not more than \$1 million over that amount)?

(a) Congressional Notification and Congressional Presentation

(b) Yes, assistance is within the 1982 operational year budget

2. FAA Sec. 611(a)(1). Prior to obligation in excess of \$100,00, will there be

- (a) engineering, financial or other plans necessary to carry out the assistance and (b) a reasonably firm estimate of the cost to the U.S. of the assistance?
3. FAA Sec. 611(a)(2). If further legislative action is required within recipient country, what is basis for reasonable expectation that such action will be completed in time to permit orderly accomplishment of purpose of the assistance?
4. FAA Sec. 611(b); FY 1982 Appropriation Act Sec. 501. If for water or water-related land resource construction, has project met the standards and criteria as set forth in the Principles and Standards for Planning Water and Related Land Resources, dated October 25, 1973? (See AID Handbook 3 for new guidelines.)
5. FAA Sec. 611(e). If project is capital assistance (e.g., construction), and all U.S. assistance for it will exceed \$1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability effectively to maintain and utilize the project?
- Yes, a detailed financial plan is included in the Project Paper. Engineering plans will be developed by the implementing GOP agencies, including firm estimates of costs.
- No further legislative action is required.
- Yes
- Yes, Mission Director's 611(e) certification is included in the Project Paper.

6. FAA Sec. 209. Is project susceptible to execution as part of regional or multilateral project? If so, why is project not so executed? Information and conclusion whether assistance will encourage regional development programs.

The Project is not appropriate for a regional or multilateral Project due to its limited and pilot nature. It is likely to encourage other donors to participate in tribal areas development, possibly on a regional basis.

7. FAA Sec. 601(a). Information and conclusions whether project will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; and (c) encourage development and use of cooperatives, and credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture and commerce; and (f) strengthen free labor unions.

a. d. and f. No. Project will have some positive impact on b. and c. Project will improve technical efficiency in agriculture (e).

8. FAA Sec. 601(b). Information and conclusions on how project will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).

U.S. private enterprise will participate as suppliers of commodities and technical services for the Project.

9. FAA Sec. 612(b), 636(h); FY 1982 Appropriation Act Sec. 507. Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the U.S. are utilized in lieu of dollars.
- The GOP contribution to the Project will consist of salaries of staff, operating expenses and maintenance of facilities. The GOP is also continuing its own activities in tribal development at levels higher than in previous years. Rupee support for the Project is proposed from either Mondale, U.S. appropriated, or GOP counterpart rupees, and, if not available from these sources, rupees derived from U.S. dollar sources will be utilized.
10. FAA Sec. 612(d). Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release?
- The U.S. owns excess Pakistani rupees; however uses programmed for these funds currently exceed availability. Thus rupee support for the Project is proposed from either Mondale, U.S. appropriated, GOP counterpart, or by conversion from U.S. dollar sources.
11. FAA Sec. 601(e). Will the project utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise?
- Yes.
12. FY 1982 Appropriation Act Sec. 521. If assistance is for the production of any commodity for export, is the commodity likely to be in surplus on world markets at the time the resulting productive capacity becomes operative, and is such assistance likely to cause substantial injury to U.S. producers of the same, similar or competing commodity?
- N.A.
13. FAA 118(c) and (d). Does the project comply with the environmental procedures set forth in AID Regulation 16? Does
- Yes.

the project or program take into consideration the problem of the destruction of tropical forests?

N.A.

14. FAA 121(d). If a Sahel project, has a determination been made that the host government has an adequate system for accounting for and controlling receipt and expenditure of project funds (dollars or local currency generated therefrom)?

N.A.

FUNDING CRITERIA FOR PROJECT

1. Development Assistance Project Criteria

This is an ESF Project.

a. FAA Sec. 102(b), 111, 113, 281(a). Extent to which activity will (a) effectively involve the poor in development, by extending access to economy at local level, increasing labor-intensive production and the use of appropriate technology, spreading investment out from cities to small towns and rural areas, and insuring wide participation of the poor in the benefits of development on a sustained basis, using the appropriate U.S. institutions; (b) help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward better life, and

N.A.

otherwise encourage democratic private and local governmental institutions; (c) support the self-help efforts of developing countries; (d) promote the participation of women in the national economies of developing countries and the improvement of women's status; and (e) utilize and encourage regional cooperation by developing countries?

b. FAA Sec. 103, 103A, 104, 105, 106. Does the project fit the criteria for the type of funds (functional account) being used?

N.A.

c. FAA Sec. 107. Is emphasis on use of appropriate technology (relatively smaller, cost-saving, labor-using technologies that are generally most appropriate for the small farms, small businesses, and small incomes of the poor)?

N.A.

d. FAA Sec. 110(a). Will the recipient country provide at least 25% of the costs of the program, project, or activity with respect to which the assistance is to be furnished (or is the latter cost-sharing requirement being waived for a "relatively least developed" country)?

N.A.

e. FAA Sec. 110(b).  
Will grant capital assistance be disbursed for project over more than 3 years? If so, has justification satisfactory to Congress been made, and efforts for other financing, or is the recipient country "relatively least developed"? (M.O. 1232.1 defined a capital project as "the construction, expansion, equipping or alteration of a physical facility or facilities financed by AID dollar assistance of not less than \$100,000, including related advisory, managerial and training services, and not undertaken as part of a project of a predominantly technical assistance character.

N.A.

f. FAA Sec. 122(b). Does the activity give reasonable promise of contributing to the development of economic resources, or to the increase of productive capacities and self-sustaining economic growth?

N.A.

g. FAA Sec. 281(b). Describe extent to which program recognizes the particular needs, desires, and capacities of the people of the country; utilizes the country's intellectual resources to encourage

N.A.

institutional development; N.A.  
and supports civil  
education and training in  
skills required for  
effective participation in  
governmental processes  
essential to self-government.

2. Development Assistance Project  
Criteria (Loans Only)

a. FAA Sec. 122(b). N.A.  
Information and conclusion  
on capacity of the country  
to repay the loan, at a  
reasonable rate of interest.

b. FAA Sec. 620(d). If N.A.  
assistance is for any  
productive enterprise which  
will compete with U.S.  
enterprises, is there an  
agreement by the recipient  
country to prevent export  
to the U.S. of more than  
20% of the enterprise's  
annual production during  
the life of the loan?

c. ISDCA of 1981, Sec. 724 N.A.  
(c) and (d). If for  
Nicaragua, does the loan  
agreement require that the  
funds be used to the  
maximum extent possible for  
the private sector? Does  
the project provide for  
monitoring under FAA Sec.  
624(g)?

3. Economic Support Fund  
Project Criteria

a. FAA Sec. 531(a). Will Yes  
this assistance promote  
economic or political

- stability? To the extent possible, does it reflect the policy directions of FAA Section 102? Yes
- d. FAA Sec. 531(c). Will assistance under this chapter be used for military, or paramilitary activities? No
- c. FAA Sec. 534. Will ESF funds be used to finance the construction of the operation or maintenance of, or the supplying of fuel for, a nuclear facility? If so, has the President certified that such use of funds is indispensable to nonproliferation objectives? No
- d. FAA Sec. 609. If commodities are to be granted so that sale proceeds will accrue to the recipient country, have Special Account (counterpart) arrangements been made? N.A.



UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT  
MISSION TO PAKISTAN

Cable : USAIDPAK

HEADQUARTERS OFFICE  
ISLAMABAD

THE DIRECTOR

TRIBAL AREAS DEVELOPMENT PROJECT  
FAA SECTION 611(e) CERTIFICATION

I, Donor M. Lion, the principal officer of the Agency for International Development in the Islamic Republic of Pakistan, having taken into account, among other things, the maintenance and utilization of projects in the Islamic Republic of Pakistan previously financed or assisted by the United States, do hereby certify, pursuant to Section 611(e) of the Foreign Assistance Act of 1961, as amended, that, in my judgment, the Islamic Republic of Pakistan has both the financial capability and the human resources capability to effectively implement, utilize and maintain the proposed Tribal Areas Development Project.

This judgment is based upon the program analysis as detailed in the Tribal Areas Development Project Paper and is subject to the conditions imposed therein.

A handwritten signature in cursive script, reading "Donor M. Lion", is written above a horizontal line.

Donor M. Lion  
Director  
USAID/Pakistan

July 26, 1982  
Date



UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT  
MISSION TO PAKISTAN

Cable : USAIDPAK

HEADQUARTERS OFFICE  
ISLAMABAD

THE DIRECTOR

TRIBAL AREAS DEVELOPMENT PROJECT  
FAA SECTION 612(b) CERTIFICATION

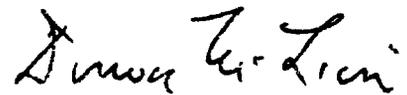
A major purpose of the \$1.625 billion economic assistance program negotiated between the governments of the U.S. and Pakistan, acknowledged by both governments and a primary reason for both governments having decided to develop an economic assistance package, is to provide balance of payments assistance to Pakistan.

I have carefully reviewed the advisability of disbursing U.S. dollars in lieu of U.S. - owned excess foreign currency to pay for local costs of projects being implemented in Pakistan. In light of the U.S. Government's objectives concerning the program, I have determined that it would be prejudicial to U.S. interests and goals to pay for any local currency costs with U.S. - owned rupees. Such a procedure would prevent the U.S. from providing the maximum amount of balance of payments support under the economic assistance package, and consequently would undercut one of the basic objectives of the program. The objective of providing balance of payments assistance to Pakistan can best be achieved by disbursing U.S. dollars to pay for local costs of the program.

Section 612(b) of the Foreign Assistance Act of 1961, as amended, authorizes the administrative official approving the voucher to determine that local costs will be funded with direct payment of dollars for the program. Pursuant to this provision, Handbook 19 requires that the Mission Director (or his designee) make a determination as to the reason in any instance where U.S. dollars are used (disbursed) when U.S. - owned foreign currency is available. Where dollars are used for local costs financing, therefore, USAID/Pakistan will make disbursements to the GOP in U.S. currency.

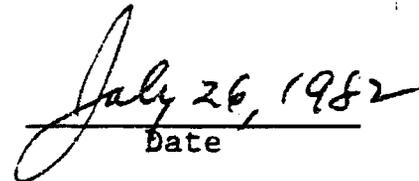
## FAA SECTION 612(b) CERTIFICATION (Continued)

In view of the above rationale, I, Donor M. Lion, principal Officer of the Agency for International Development in Pakistan, do hereby certify, pursuant to Section 612(b) of the Foreign Assistance Act of 1961, as amended, the need to disburse dollars to cover local currency costs in lieu of using U.S. - owned excess rupees under the Tribal Areas Development Project.



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Donor M. Lion  
Director  
USAID/Pakistan



---

Date



No. 1(1)CM-VI/81.  
Government of Pakistan  
MINISTRY OF FINANCE AND  
ECONOMIC AFFAIRS  
(ECONOMIC AFFAIRS DIVISION)

Islamabad etc, 28th July, 1982.

Telegram : ECONOMIC  
Telex : ECDIV No : 05-634  
SECRETARY  
Tele: 20629

Dear Dr. Lion,

As part of our two governments' agreement on a six year \$1.625 billion economic assistance program, the Government of Pakistan formally requests from USAID/Pakistan fifteen million dollars (\$15,000,000) in United States assistance and one hundred and ten million rupees (Rs.110,000,000) to fund a Tribal Areas Development Project. The GOP regards this assistance as needed, in part, to support its "Special Development Plan for Tribal Area of the North West Frontier Province".

The Tribal Areas Development Project is designed to support the Government of Pakistan's policy and plans to accelerate the pace of socio-economic development in the less developed areas of the country, in this case the Tribal Areas. This will be done through a combination of construction activities in water resource development, roads and selected rural works, technical assistance and training, and the purchase of some commodities.

Subject to the availability of funds, approximately \$15,000,000 of ESP grant funds and Rs 110,000,000 would be provided over a five-year period. These funds will be used to construct and improve selected irrigation schemes and, through training and demonstration, improve water management and land use and cropping pattern techniques. The funds will be used to improve groundwater exploration and monitoring techniques as well as establish a series of new tubewells. This project will support the process of area development through improved utilization of water resources and also the extension of the areas system of roads through construction. These activities will be

further supported by the construction of selected small rural works, e.g., schools, and health facilities, to maximize project impact in the selected areas of project activity.

The Government of Pakistan assures the United States Government of its full cooperation in carrying out the Tribal Areas Development Project. The necessary clearances, manpower, financial and other inputs required of us will be provided in an expeditious manner.

We look forward to a continued, combined effort by both our governments to yield a productive and beneficial program for the people of the Tribal Areas.

Yours sincerely,



( EJAZ AHMAD NAIK )

Dr. Donor M. Lion  
Director  
USAID Mission  
Islamabad.

**PROJECT DESIGN SUMMARY  
LOGICAL FRAMEWORK**

ANNEX E  
Page 1  
Life of Project:  
From FY 1982 to FY 1987  
Total U.S. Funding \$15,000,000 and  
Date Prepared: 7/25/84 Ra 110,000,000

Project Title & Number: Tribal Areas Development (391-0471)

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Program or Sector Goal: The broader objective to which this project contributes:</p> <ol style="list-style-type: none"> <li>1. Accelerate the GOP's efforts to integrate the Tribal Areas into the socio-economic mainstream of Pakistan.</li> <li>2. Improve the quality of life of the tribal inhabitants.</li> </ol>	<p>Measures of Goal Achievement:</p> <ol style="list-style-type: none"> <li>1. Increased numbers and improved quality of development projects in the Tribal Areas benefitting a substantial proportion of tribal inhabitants throughout the region.</li> <li>2. Increased agricultural production, yields, farmer incomes, and access to markets and educational and health facilities resulting in improvements in the physical quality of life indicators.</li> </ol>	<ul style="list-style-type: none"> <li>- Basic socio-economic data on the Tribal Areas</li> <li>- GOP planning and budget documents</li> <li>- A.I.D. project reports</li> <li>- Project evaluations</li> <li>- Field observations</li> </ul>	<p>Assumptions for achieving goal targets:</p> <ul style="list-style-type: none"> <li>- Continued GOP commitment to the development of the Tribal Areas as evidenced by adequate budgetary support</li> <li>- Local demand for development activities continues</li> </ul>
<p>Project Purpose:</p> <ul style="list-style-type: none"> <li>- To strengthen the capability of government institutions to implement development programs in the Tribal Areas and to construct basic infrastructure (roads and irrigation works) to support the continued development of the region.</li> </ul>	<p>Conditions that will indicate purpose has been achieved: End of project status.</p> <ul style="list-style-type: none"> <li>- Increased capability of FATA-DC to design, construct, rehabilitate, repair and maintain watercourses and other water development schemes</li> <li>- Increased capability of FATA-DC to undertake groundwater investigations and to construct, repair, and maintain tubewells</li> <li>- Increased capability of FATA-DC and the provincial Agriculture Development (continued on p.2)</li> </ul>	<ul style="list-style-type: none"> <li>- Project evaluations</li> <li>- Data available from Project's Data Collection Unit</li> <li>- A.I.D. and GOP project records</li> <li>- Field observations</li> </ul>	<p>Assumptions for achieving purpose and outputs:</p> <ul style="list-style-type: none"> <li>- Local cooperation of Tribal inhabitants and accessibility to project sites exist throughout the project period</li> <li>- Government agencies are adequately staffed and have sufficient budgetary resources</li> <li>- Political agents cooperate with project personnel and support project activities</li> <li>- The FAR system is a feasible implementation procedure for civil works</li> <li>- Project advisors are successful in transferring skills to government agency personnel</li> <li>- A feasible and manageable implementation procedure is identified for the Supplementary Development Fund</li> <li>- Opium poppies are not grown in the project areas during the life of the project</li> <li>- The GOP prepares and approves PC-1's as needed</li> </ul>
<p>Outputs:</p> <ul style="list-style-type: none"> <li>Watercourses rehabilitated or constructed</li> <li>New farmland brought under irrigation</li> <li>Farmland developed through improved agricultural practices</li> <li>Tubewells constructed</li> <li>Small irrigation schemes constructed</li> <li>New gravel roads constructed</li> <li>Small-scale development projects implemented</li> <li>Government agencies strengthened</li> <li>Improved water resource investigation and management</li> </ul> <p align="right">(continued on p.2)</p>	<p>Magnitude of Outputs:</p> <ul style="list-style-type: none"> <li>= 160</li> <li>= 48,000 acres</li> <li>= 20,000 acres</li> <li>= 20</li> <li>= 4</li> <li>= 125.6 kms</li> <li>= Minimum of 20</li> <li>= 2</li> <li>= 1 water production and resource monitoring system including a water budget for the area established</li> </ul>	<ul style="list-style-type: none"> <li>- Project evaluations</li> <li>- Data available from Project's Data Collection Unit</li> <li>- A.I.D. and GOP project records</li> <li>- Field observations</li> </ul>	<p>(continued on p.2)</p>
<p>Inputs:</p> <ol style="list-style-type: none"> <li>1. A.I.D. <ul style="list-style-type: none"> <li>- Short and long-term technical assistance</li> <li>- Fellowships for short-term training in the U.S. and Pakistan</li> <li>- Vehicles and equipment for water resources development and road construction</li> <li>- Civil works (FAR System)</li> <li>- Local project staff</li> </ul> </li> </ol> <p align="right">(continued on p.2)</p>	<p>Implementation Target (Type and Quantity)</p> <p>See financial analysis, implementation schedule, and commodity, technical assistance and training plans in the project paper.</p>	<ul style="list-style-type: none"> <li>- A.I.D. and GOP project records and financial documents</li> <li>- Project evaluations</li> </ul>	<p>Assumptions for providing inputs:</p> <ul style="list-style-type: none"> <li>- A.I.D. and GOP proposed funding levels are approved by their respective governments and disbursements are made on a timely basis</li> <li>- Appropriate overseas training programs can be identified</li> <li>- Construction is undertaken according to agreed upon standards and practices and is certified for 100 percent reimbursement</li> </ul>

**PROJECT DESIGN SUMMARY  
LOGICAL FRAMEWORK**

ANNEX E  
Page 2

Life of Project:  
From FY 1982 to FY 1987  
Total U. S. Funding \$15,000,000 and  
Date Prepared: 7/26/82 Rs 110,000,000

Project Title & Number: Tribal Areas Development (391-0471)

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Program or Sector Goal: The broader objective to which this project contributes:</p>	<p>Measures of Goal Achievement:</p>		<p>Assumptions for achieving goal targets:</p>
<p>Project Purpose:</p>	<p>Conditions that will indicate purpose has been achieved: End of project status. to assist farmers in land development practices and cropping patterns - Increased capability of the provincial C&amp;W Development to design and build roads - Approximately 160 watercourses, 20 tubewells, 4 small irrigation systems and 125 kms of new gravel roads constructed and a minimum of 20 small-scale development projects implemented</p>		<p>Assumptions for achieving purpose and outputs:</p> <ul style="list-style-type: none"> <li>- Qualified staff are selected for training</li> <li>- FATA-DC and Agriculture Department staff are able to work together in providing services to farmers</li> <li>- Necessary skills and materials are available locally for all civil works activities</li> </ul>
<p>Outputs:</p> <p>Trained personnel Improved land development practices</p>	<p>Magnitude of Outputs:</p> <ul style="list-style-type: none"> <li>- 13</li> <li>- 1 land development and cropping practices demonstration plot established</li> </ul>		
<p>Inputs:</p> <p>2. <u>GOP</u></p> <ul style="list-style-type: none"> <li>- Staff salaries and operating expenses</li> <li>- Maintenance and repair costs for all civil works and equipment</li> <li>- Land royalty</li> </ul> <p>(The GOP is devoting substantial resources to Tribal Areas Development outside this project.)</p>	<p>Implementation Target (Type and Quantity)</p>		<p>Assumptions for providing inputs:</p> <ul style="list-style-type: none"> <li>- The GOP meets the conditions precedent for tubewells and road construction equipment</li> <li>- Appropriate consultants can be recruited to provide the required technical assistance</li> </ul>

DRAFT PROJECT AUTHORIZATION

Name of Country: Pakistan      Name of Project: Tribal Areas  
Development

Number of Project: 391-0471

1. Pursuant to Section 531 of the Foreign Assistance Act of 1961, as amended, I hereby authorize the Tribal Areas Development Project for the Islamic Republic of Pakistan involving planned obligations of not to exceed U.S. Dollars Fifteen Million (U.S. \$15,000,000) and One Hundred Ten Million United States-owned Pakistani Rupees (Rs 110,000,000) in grant funds over a five (5) year period from the date of authorization, subject to the availability of funds in accordance with the A.I.D. OYB/allotment process, to help in financing foreign exchange and local currency costs for the Project.

2. This project is intended to accelerate the GOP's efforts to integrate the Tribal Areas into the socio-economic mainstream of Pakistan and to improve the quality of life for tribal inhabitants. The purpose of the project is to strengthen the capability of government institutions to implement development programs in the Tribal Areas and to construct basic infrastructure (roads and irrigation works) to support the continued development of the region. The project has three main components:

a.      Water Resources Development

This component of the project will consist of the (i) rehabilitation and construction of watercourses and related land area development at Bara in Khyber Agency; (ii) upgrading groundwater investigations and tubewell efficiency through applied technology including the drilling of tubewells; and, (iii) construction of selected water development schemes. Technical assistance, training, and commodities will be provided to strengthen and assist the Federally Administered Tribal Areas Development Corporation to implement these activities.

b. Roads

Road equipment and technical assistance will be provided to improve the capabilities of the Northwest Frontier Province Communications and Works Department, and approximately 125 kilometers of rural roads will be constructed.

c. Supplementary Development Fund

This fund will finance discrete small-scale, self-help development projects such as schools, health facilities, and flood control structures within the geographic areas where other project-financed activities will be implemented. This will be a pilot effort designed to increase the development impact of other project activities and to encourage local participation in the development process.

3. The Project Agreement(s) which may be negotiated and executed by the officers(s) to whom such authority is delegated in accordance with A.I.D. regulations and Delegations of Authority shall be subject to the following essential terms and covenants and major conditions, together with such other terms and conditions as A.I.D. may deem appropriate.

a. Source and Origin of Goods and Service

Goods and services financed by A.I.D. under this Project shall have their source and origin in the Cooperating Country or in the United States except as A.I.D. may otherwise agree in writing. Ocean shipping financed by A.I.D. under the Project shall, except as A.I.D. may otherwise agree in writing, be financed only on flag vessels of the United States and the Cooperating Country.

b. Condition Precedent to First Disbursement

Prior to the first disbursement under this project or to the issuance by A.I.D. of documentation pursuant to which disbursement will be made, the Grantee shall, except as the parties may otherwise agree in writing, furnish or have furnished to A.I.D. in form and substance satisfactory to A.I.D. within sixty (60) days after the signing of the Project Agreement, a written statement by authorized representatives of the Federally Administered

Tribal Areas Development Corporation (FATA-DC) and the NWFP Communications and Works (C&W) Department, indicating concurrence with the Project and with the role and responsibilities of their respective organizations under the Project as outlined in the A.I.D. Project Paper dated August 1982.

c. Condition Precedent to Release of Road Construction Equipment

Prior to the release to the NWFP Communications and Works (C&W) Department of road construction equipment procured under this project, the C&W Department shall, unless A.I.D. otherwise agrees in writing, provide to A.I.D. a written statement indicating concurrence with the following priority uses of the road construction equipment: first priority shall be given to A.I.D.-financed development projects in the Tribal Areas; second priority shall be given to other development projects in the Tribal Areas; and third priority shall be given to development projects in the NWFP.

d. Condition Precedent to the Drilling of Tubewells

Prior to the disbursement under this Project or to the issuance by A.I.D. of documentation pursuant to which disbursement shall be made for the drilling of tubewells, the Grantee shall, through its Federally Administered Tribal Areas Development Corporation (FATA-DC), unless A.I.D. otherwise agrees in writing, provide evidence, in form and substance satisfactory to A.I.D. that electrical connections for each tubewell shall be completed by the Water and Power Development Authority (WAPDA) within no more than three months after the tubewell has been constructed.

e. Condition Precedent to Reimbursement for Civil Works

Prior to the reimbursement under this Project or to the issuance by A.I.D. of documentation pursuant to which reimbursement shall be made in accordance with the Fixed Amount Reimbursement (FAR) System for all civil works financed under this project, A.I.D. shall have approved the design and cost estimates prior to construction and shall certify that construction has been completed in accordance with agreed upon standards and procedures.

f. Covenants

i. The Grantee shall ensure that sufficient funds have been provided in its budget for the maintenance of all civil works constructed under this project.

ii. The Grantee, through its Federally Administered Tribal Areas Development Corporation (FATA-DC), shall ensure that all persons trained under this project shall continue to work on water resources development activities in FATA-DC for at least three years after the period of their training.

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Eugene S. Staples  
Acting Assistant Administrator  
Bureau for Asia

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Date

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AID 7/27/82  
DIR:DMLION  
PDM:LNLION:SJ  
1.ARD:JWILSON, 2.PRO:LADLAN  
AMB DCM ECON, D DD PDM, PRO ARD CONT, (AID-12)

AMEMBASSY ISLAMABAD  
SECSTATE WASHDC, IMMEDIATE

AIDAC

FOR ASIA/PD - VAN RAALTE

E.O.12065 N/A  
SUBJECT: TRIBAL AREAS DEVELOPMENT PROJECT (391-0471):  
- DRAFT CONGRESSIONAL NOTIFICATION

1. THIS CABLE TRANSMITS DRAFT LANGUAGE FOR THE C.N. FOR THE SUBJECT PROJECT. MISSION WOULD APPRECIATE YOUR PROCESSING THIS C.N. ASAP AND ADVISING US WHEN FIFTEEN-DAY WAITING PERIOD EXPIRES. PAT MATHESON WILL HAND-CARRY TWENTY-FIVE COPIES OF PP WHEN SHE DEPARTS ISLAMABAD ON THURSDAY, JULY 29.

2. ACTIVITY DATA SHEET:

COUNTRY: PAKISTAN  
TITLE: TRIBAL AREAS DEVELOPMENT  
NUMBER: 391-0471  
NEW GRANT FUNDS: ESF  
PRIOR REFERENCE: NONE  
PROPOSED OBLIGATION: FY 82 - 3,000,000  
- LOP -15,000,000  
INITIAL OBLIGATION: FY 82  
ESTIMATED FINAL OBLIGATION: FY 85  
ESTIMATED COMPLETION DATE OF PROJECT: FY 87

3. NARRATIVE IS AS FOLLOWS:

PURPOSE: TO STRENGTHEN THE CAPABILITY OF GOVERNMENT INSTITUTIONS TO IMPLEMENT DEVELOPMENT PROGRAMS IN THE TRIBAL AREAS, AND TO CONSTRUCT BASIC INFRASTRUCTURE (ROADS AND IRRIGATION WORKS) TO SUPPORT THE CONTINUED DEVELOPMENT OF THE REGION.

BACKGROUND: THE TRIBAL AREAS, LOCATED ON PAKISTAN'S NORTHWESTERN BORDER WITH AFGHANISTAN, CONSISTS OF ABOUT 10,000 SQUARE MILES OF ARID AREAS, ISOLATED VALLEYS AND DIFFICULT MOUNTAINS AND HAS A POPULATION OF ABOUT 2 MILLION. THIS REGION HAS ALSO BECOME THE HOME FOR ALMOST 800,000 AFGHAN REFUGEES OVER THE PAST THREE YEARS. IT IS ONE OF THE LEAST DEVELOPED REGIONS OF THE COUNTRY BECAUSE OF THE INHABITANTS' LONG TRADITION OF SOCIAL AND POLITICAL ISOLATION AND INSULATION AND THEIR LIMITED RESOURCES. ONLY RECENTLY HAVE THE TRIBALS BEGUN MAKING STRONG REQUESTS AND DEMANDS OF THE GOVERNMENT OF PAKISTAN (GOP) FOR EXTENSIVE DEVELOPMENT ACTIVITIES. THE NEEDS ARE GREAT, LOCAL DEMAND EXISTS, AND GOP COMMITMENT TO DEVELOPMENT IN THE REGION IS HIGHLY EVIDENT. THIS PROJECT IS DESIGNED TO SUPPORT THE GOP POLICY TO ACCELERATE THE PACE OF SOCIO-ECONOMIC DEVELOPMENT IN THE LESS DEVELOPED AREAS OF THE COUNTRY. ALTHOUGH THIS POLICY HAS BEEN UNDERWAY IN THE TRIBAL AREAS SINCE THE EARLY 1970'S, RENEWED EMPHASIS WAS GIVEN TO THIS EFFORT IN JANUARY 1982 WITH THE PUBLICATION OF THE GOP'S SPECIAL DEVELOPMENT PLAN FOR THE TRIBAL AREAS. THE DEVELOPMENT ACTIVITIES IN THE PROPOSED PROJECT ARE DRAWN FROM THE SPECIAL DEVELOPMENT PLAN.

PROJECT DESCRIPTION: THE PROPOSED 5-YEAR PROJECT WILL PROVIDE DOLS 15 MILLION IN ESF GRANT FUNDS AND RS 110 MILLION IN U.S. OWNED RUPEES TO FINANCE ACTIVITIES IN THREE AREAS: (A) WATER RESOURCES DEVELOPMENT INCLUDING: (1) REHABILITATION AND EXTENSION OF AN IRRIGATION SCHEME AT BARA IN KHYBER AGENCY WHICH WILL INVOLVE THE IMPROVEMENT OR CONSTRUCTION OF WATERCOURSES COUPLED WITH TECHNICAL ASSISTANCE IN WATER MANAGEMENT PRACTICES AND IRRIGATED AGRICULTURAL DEVELOPMENT; (2) UP-GRADING GROUNDWATER INVESTIGATIONS AND TUBEWELL EFFICIENCY THROUGH APPLIED TECHNOLOGY, INCLUDING THE ADOPTION OF WATER MONITORING AND BUDGETING TECHNIQUES AND THE DRILLING OF TUBEWELLS; AND, (3) CONSTRUCTION OF SMALL-SCALE IRRIGATION SYSTEMS; (B) ROADS: ROAD CONSTRUCTION IS THE GOP'S HIGHEST DEVELOPMENT PRIORITY FOR THE TRIBAL AREAS AND FOR MANY OF THE INHABITANTS AS WELL. ACCORDINGLY, FUNDS HAVE BEEN EARMARKED FOR THE CONSTRUCTION OF UP TO 125 KMS. OF NEW GRAVEL ROADS INTO AREAS WITH FAIRLY SIZEABLE POPULATIONS AND GOOD PRODUCTION POTENTIAL

WHERE LITTLE OR NO DEVELOPMENT HAS OCCURRED OR CAN OCCUR BECAUSE OF ISOLATION; AND, (C) SUPPLEMENTARY DEVELOPMENT FUND: A SPECIAL FUND WILL BE ESTABLISHED TO FINANCE DISCRETE, SMALL-SCALE, SELF-HELP DEVELOPMENT PROJECTS WITHIN THE GEOGRAPHIC AREAS WHERE OTHER PROJECT-FINANCED ACTIVITIES WILL BE IMPLEMENTED. THIS WILL BE A PILOT EFFORT DESIGNED TO INCREASE THE DEVELOPMENT IMPACT OF OTHER PROJECT ACTIVITIES AND TO ENCOURAGE LOCAL PARTICIPATION IN THE DEVELOPMENT PROCESS. THE TYPE OF ACTIVITIES LIKELY TO BE SUPPORTED INCLUDES CONSTRUCTION OF: SCHOOLS; HEALTH FACILITIES; HOUSING FOR TEACHERS OR HEALTH PERSONNEL FROM OUTSIDE THE AREA (APPARENTLY ONE OF THE MAJOR BARRIERS TO RECRUITMENT); HOUSES FOR COOLING MEAT; LINK ROADS; FLOOD CONTROL STRUCTURES; AND, IRRIGATION DIVERSION STRUCTURES ON SMALL COMMUNITY WATER SYSTEMS. ABOUT 77 PERCENT OF THE DOLLAR FUNDS AND ALL OF THE RUPEES WILL BE USED TO COVER LOCAL COSTS, PRIMARILY CIVIL WORKS, WHICH WILL BE FINANCED UNDER THE FIXED AMOUNT REIMBURSEMENT (FAR) SYSTEM.

RELATIONSHIP OF PROJECT TO A.I.D. COUNTRY STRATEGY: THIS PROJECT IS FULLY CONSISTENT WITH A.I.D.'S STRATEGY IN PAKISTAN AND WILL HELP TO ACHIEVE THE OVERALL OBJECTIVES OF THE RENEWED ECONOMIC ASSISTANCE PROGRAM. THE PROJECT WILL FOCUS ENTIRELY ON ONE OF PAKISTAN'S LEAST DEVELOPED AREAS WHERE SOME OF THE COUNTRY'S POOREST INHABITANTS RESIDE. AS A RESULT OF THE PROJECT, RURAL PRODUCTIVITY, AGRICULTURAL PRODUCTION, AND EMPLOYMENT OPPORTUNITIES SHOULD INCREASE, RURAL-INCOME DISPARITIES SHOULD BE REDUCED, AND THE OVERALL QUALITY OF LIFE IN THE TRIBAL AREAS SHOULD IMPROVE. IN ADDITION, THE PROJECT WILL CARRY OUT TWO OF THE AGENCY'S DEVELOPMENT PRIORITIES, NAMELY INSTITUTION-BUILDING AND TECHNOLOGY TRANSFER. A MAJOR PORTION OF THE FUNDS UNDER THIS PROJECT WILL BE USED FOR LOCAL COST FINANCING, WHICH WILL HELP TO ALLEVIATE PAKISTAN'S BALANCE OF PAYMENTS DIFFICULTIES. GIVEN ITS GEOGRAPHICAL FOCUS, THE PROJECT WILL ALSO INDIRECTLY ASSIST PAKISTAN TO DEAL WITH THE BURDENS IMPOSED BY THE MASSIVE INFLUX OF AFGHAN REFUGEES, A LARGE PERCENTAGE OF WHOM RESIDE IN THE TRIBAL AREAS. FINALLY, THIS PROJECT IS ONE OF THE MAJOR ACTIVITIES IN THE PROPOSED ECONOMIC ASSISTANCE PROGRAM TO PAKISTAN WHICH WILL SUPPORT THE USG'S CONTINUED EFFORTS, IN CONJUNCTION WITH THE GOP, TO CURTAIL OPIUM POPPY

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CULTIVATION AND THE PROCESSING OF OPIUM INTO HEROIN IN PAKISTAN. IT IMPLEMENTS THE CONGRESSIONAL MANDATE TO PROMOTE DEVELOPMENT IN WAYS WHICH PROVIDE DISINCENTIVES TO OPIUM POPPY PRODUCTION.

**BENEFICIARIES:** IT IS ESTIMATED THAT A TOTAL OF ALMOST 400,000 INHABITANTS OF THE TRIBAL AREAS WILL BENEFIT DIRECTLY OR INDIRECTLY FROM THIS PROJECT. ALL OF THE ESTIMATED 150,000 INHABITANTS OF BARA WILL BENEFIT FROM THE INCREASED AGRICULTURAL PRODUCTION, INCOMES, AND ECONOMIC ACTIVITY AS A RESULT OF THE IMPROVED IRRIGATION SCHEME. AT LEAST 40,000 PEOPLE IN KURRAM AGENCY WILL HAVE MORE RELIABLE ACCESS TO REGIONAL MARKETS AND HEALTH AND EDUCATIONAL FACILITIES AS A RESULT OF THE SADDAM-MARGHAN ROAD. ALL OF THE ESTIMATED 4,000 INHABITANTS OF LUQMAN KHEL VILLAGE WILL BENEFIT FROM THE ADDITIONAL 3,000 ACRES OF IRRIGATED FARMLAND AS A RESULT OF THE SHEEN TANGI IRRIGATION PROJECT. IT IS CONSERVATIVELY ESTIMATED THAT AN ADDITIONAL 200,000 INHABITANTS WILL BENEFIT FROM THE TUBEWELLS AND OTHER ROADS AND IRRIGATION SCHEMES CONSTRUCTED UNDER THIS PROJECT THROUGHOUT THE REGION. IN ADDITION, THE BENEFICIARIES OF THE SMALL SELF-HELP DEVELOPMENT PROJECTS WILL COINCIDE WITH THOSE OF THE OTHER PROJECT ACTIVITIES, BUT BENEFITS WILL BE SUBSTANTIALLY INCREASED. AS A RESULT OF THIS PROJECT, THE OVERALL QUALITY OF LIFE FOR THESE TRIBAL INHABITANTS SHOULD IMPROVE SIGNIFICANTLY.

**HOST COUNTRY AND OTHER DONORS:** ONLY WITHIN THE LAST TEN YEARS HAS THE GOP ACCORDED PRIORITY TO THE DEVELOPMENT OF THE TRIBAL AREAS. WHILE ONLY RS 100 MILLION WAS ALLOCATED FOR THE ENTIRE DECADE OF THE 1960'S, THE ANNUAL DEVELOPMENT PROGRAM FOR THE FEDERALLY ADMINISTERED TRIBAL AREAS (FATA) FOR PAKISTAN FISCAL YEAR 1981-82 PROVIDED ABOUT RS 300 MILLION. THE GOP'S SPECIAL DEVELOPMENT PLAN FOR FATA, FOR WHICH EXTERNAL ASSISTANCE IS BEING SOUGHT, INCLUDES DEVELOPMENT PROJECTS TOTALLING ABOUT RS 2.6 BILLION OVER THE SIX-YEAR PLAN PERIOD OR AN AVERAGE OF RS 461 MILLION PER YEAR.

THERE HAS BEEN ONLY LIMITED INVOLVEMENT OF OTHER DONORS IN THE TRIBAL AREAS TO DATE. THUS FAR, THE ASSISTANCE WHICH HAS BEEN PROVIDED HAS BEEN DIRECTLY SUPPORTIVE

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OF GOP PROGRAMS TARGETED AT THE AFGHAN REFUGEES LOCATED THROUGHOUT THE TRIBAL AREAS. THE UNITED NATIONS HIGH COMMISSION FOR REFUGEES (UNHCR), THE UNITED NATIONS CHILDREN'S EMERGENCY FUND (UNICEF), AND THE WORLD FOOD PROGRAM HAVE ACTIVE PROGRAMS FOR REFUGEES IN THE TRIBAL AREAS. THIS PROJECT REPRESENTS THE FIRST COMMITMENT BY AN EXTERNAL DONOR IN RESPONSE TO THE GOP'S SPECIAL DEVELOPMENT PLAN. IN MANY RESPECTS, THE A.I.D. PROJECT REPRESENTS A PILOT DEMONSTRATION EFFORT WHICH, IF SUCCESSFUL, COULD ESTABLISH A PRECEDENT AND PAVE THE WAY FOR OTHER DONOR INVOLVEMENT IN THE TRIBAL AREAS.

- MAJOR OUTPUTS	ALL YEARS
WATERCOURSES IMPROVED OR CONSTRUCTED	160
TUBEWELLS INSTALLED	20
SMALL IRRIGATION SCHEMES CONSTRUCTED	4
NEW LAND BROUGHT UNDER IRRIGATION	48,000 ACRES
NEW LAND DEVELOPED USING APPROPRIATE - LAND DEVELOPMENT PRACTICES	20,000 ACRES
RURAL ROADS CONSTRUCTED	125 KMS.
SMALL SELF-HELP RURAL DEVELOPMENT - PROJECTS IMPLEMENTED	MINIMUM OF 20
TRAINED PERSONNEL	13
GOVERNMENT AGENCIES STRENGTHENED TO - UNDERTAKE DEVELOPMENT PROJECTS	2
IMPROVED WATER RESOURCE MANAGEMENT - -	A MONITORING SYSTEM DEVELOPED AND OPERATIONAL

- A.I.D. FUNDED INPUTS	LIFE OF PROJECT (DOLS 000)
TECHNICAL ASSISTANCE	2,348
TRAINING	104
COMMODITIES	1,975
OTHER COSTS (CONSTRUCTION, SUPPLEMENTARY DEVELOPMENT FUND, RESEARCH AND EVALUATION, CONTINGENCY)	10,573
- TOTAL	15,000

## U.S. FINANCING:

PROPOSED FY 82: OBLIGATIONS	3,000,000
FUTURE YEAR OBLIGATIONS	12,000,000
ESTIMATED TOTAL	15,000,000

PRINCIPAL CONTRACTORS OR  
AGENCY:-  
-  
-  
-U.S. SOIL CONSERVATION  
SERVICE OR BUREAU OF  
RECLAMATION, U.S. ENGINEER-  
ING FIRMS, AND PAKISTANI  
PRIVATE SECTOR CONSTRUCTION  
CONTRACTORS.

RATTRAY##

PROJECT DESCRIPTION FOR INCLUSION IN PROJECT AGREEMENT

A. Project Goal and Purpose

This project will assist the Government of Pakistan (GOP) to accelerate integration of the Federally Administered Tribal Areas (FATA) of the Northwest Frontier Province (NWFP) into the socio-economic mainstream of Pakistan and to improve the quality of life for tribal inhabitants. The purpose of the project is to strengthen the capability of government institutions to implement development programs in the Tribal Areas and to construct basic infrastructure (roads and irrigation works) to support the continued development of the region.

B. Project Components

A number of specific project activities have been identified. Additional activities will be identified during project implementation. The criteria used to select activities will include the following: (1) is in the GOP's Special Development Plan; (2) has already been accepted in the locality; (3) develops, expands or improves an existing activity or capability; (4) is self-sustaining without requiring major changes in local technical skills, attitudes, or tribal-tribal or tribal-governmental relationships and practices; (5) contributes to the betterment of the human condition in developmental terms; (6) creates a potential for future developmental efforts; (7) enhances the government's ability to provide services to the area; (8) is not in an area where poppies are grown at the time an activity starts; and, (9) is accessible to project staff and is likely to remain accessible.

The project consists of three main components: (1) Water Resources Development including both surface and ground water; (2) Roads; and, (3) a Supplementary Development Fund.

1. Water Resources Development

This component of the project will involve:

a. the construction and extension of the Bara Irrigation Scheme in Khyber Agency including the construction or rehabilitation of up to 160 watercourses and the establishment of a land development and cropping patterns demonstration plot;

b. upgrading groundwater investigations and the efficiency of tubewell operations through improved technology including the drilling of up to 20 tubewells and the establishment of a water production and monitoring system; and,

c. the construction of up to 4 additional small irrigation schemes.

Technical assistance in water resources development and agricultural land practices, commodities, and training will be provided to the Federally Administered Tribal Areas Development Corporation (FATA-DC) to implement these activities.

## 2. Roads

This component of the project will involve construction of up to 125.6 kms. of new gravel roads in the Tribal Areas. The first road project is to be the Sadda-Marghan Road (25.6 kms.). Technical assistance and commodities will be provided to the provincial Communications and Works (C&W) Department to implement these activities.

## 3. Supplementary Development Fund

A special fund will be established under the project to finance small discrete self-help development activities in areas where other project-financed activities will be occurring. Possible activities include but shall not be limited to the construction of : schools, health facilities, link roads, flood control structures, and electric power spurs. These activities will be subject to the same selection criteria as the other project components. Priority will be given to those activities that encourage local participation and are supportive of other project activities in area development terms.

## C. Project Outputs

The project is expected to produce the following outputs which, together, should achieve the project purpose:

1. 9 FATA-DC personnel trained in On-Farm Water Management;
2. 4 FATA-DC professionals trained in the U.S. in selected water resource development activities;
3. Increased capability of FATA-DC to design, construct, rehabilitate, repair, and maintain watercourses and other water development schemes;
4. Increased capability of FATA-DC to undertake groundwater investigation and to construct, repair, and maintain tubewells;
5. A water production and resource monitoring system developed and functioning at FATA-DC including a water budget for the area in which the tubewells are installed;

6. Increased capability of FATA-DC and the provincial Agriculture Department to provide technical assistance to farmers in land development and cropping patterns;
7. Increased capability of the provincial C&W Department to design and build roads;
8. 160 watercourses designed and rehabilitated or constructed in Bara;
9. 20,000 acres of new land brought under irrigation and 20,000 additional acres developed using appropriate land development practices in Bara;
10. A land development and cropping patterns demonstration plot established and functioning in Bara;
11. 20 tubewells drilled and operational using improved equipment in various parts of the Tribal Areas;
12. 20,000 acres (approximately 100 acres per tubewell) of new land brought under irrigation in various parts of the Tribal Areas;
13. Three to four minor irrigation schemes constructed or rehabilitated and 6,000 to 8,000 acres of new farmland brought under irrigation within these schemes in various parts of the Tribal Areas;
14. 25.6 kms. of gravel road built between Sadda and Marghan in Kurram Agency;
15. 40,000 people in Kurram Agency with more reliable access to regional markets, health facilities, and educational centers;
16. 100 kms. of additional roads constructed into isolated, underdeveloped areas or in support of the further development of already developing areas;
17. At least twenty small-scale self-help rural development activities in various parts of the Tribal Areas in support of area development schemes; and,
18. Reliable and timely socio-economic and other basic data on the Tribal Areas collected and available to government agencies and A.I.D.

## D. Implementation Plan

### 1. A.I.D. Responsibilities

A.I.D. will be responsible for : (a) contracting with all expatriate advisors; (b) purchase of all vehicles and commodities procured outside of Pakistan; (c) advance approval of design of civil works, inspections of civil works and certification for payment of all civil works financed under this project; (d) arranging for short-term training in the United States for selected participants; and, (e) providing sufficient staff to participate in the scheduled project evaluations and to liaise with appropriate government agencies in the implementation of this project.

### 2. Federal and Provincial Responsibilities

Project activities will be implemented by four major government entities : (a) the Irrigation and Tubewell Divisions of FATA-DC for the Water Resources component; (b) the provincial C&W Department for the Roads component; (c) the provincial Agriculture Department which, along with FATA-DC, will be responsible for the agricultural land practices activities; and, (d) the provincial Rural Development Department for the Supplementary Development Fund activities. Other nation-building departments of the provincial government may also be involved in implementing this project.

FATA-DC and the C&W Department will play major roles in project implementation. Their responsibilities include: (a) ensuring that counterparts are in place for the technical advisors; (b) for FATA-DC, selecting qualified participants for training; (c) arranging for all travel clearances for USAID staff and advisors; (d) ensuring that construction activities are undertaken in a timely manner and within the agreed-upon cost estimates; (e) for FATA-DC, coordinating with the Water and Power Development Authority (WAPDA) to ensure that electrical connections for the newly installed tubewells are undertaken in a timely manner; (f) ensuring that all local works constructed under this project are properly maintained; and, (g) ensuring that PC-1s are approved and other necessary GOP clearances are obtained in a timely manner.

### 3. Local Works

The FAR procedure may be employed for all local works financed under this project including water courses, roads,

small irrigation schemes and activities financed under the Supplementary Development Fund.

In all cases, specifications and cost estimates will be approved in advance by A.I.D. and the relevant government agency. Materials required for construction will be procured locally by the responsible implementing entity. Payment will be made only upon certification by A.I.D. inspectors that the work has been performed in accordance with established standards.

SUMMARY OF PROJECT COSTS BY EXPENSE CATEGORY  
AND SOURCE OF FUNDING  
(in 000s)

Expense Category	FY 1982			LIFE OF PROJECT <sup>1/</sup>		
	A.I.D.		GOP	A.I.D.		GOP
	Dollar Grant (in \$)	U.S.Owned Rupees (in Rs)		Dollar Grant (in \$)	U.S.Owned Rupees (in Rs)	
Technical Assistance	1,591	-	-	2,348	-	-
Training	-	-	-	104	-	-
Commodities	1,102	-	-	1,975	-	-
Other Costs	-	-	-	9,206	100,000	-
Total	2,693	-	-	13,633	100,000	-
Contingency	307	-	-	1,367	10,000	-
GRAND TOTAL	3,000	-	-	15,000	110,000	-

<sup>1/</sup> Subject to the availability of funds to A.I.D. for this purpose, and to the mutual agreement of the parties to proceed at the time of each subsequent increment.

INITIAL ENVIRONMENTAL EXAMINATION (IEE)

Project Location : Pakistan

Project Title and Number: Tribal Area Development, 391-0471

Funding : A.I.D. : FY 1982 = \$3.0 million and  
Rs 50 million in  
Mondale Rupees.

LOP = \$15.0 million and  
Rs 200 million in  
Mondale Rupees.

Life of Project : FY 1982-FY 1987

IEE Prepared by : S. Zahid Noor, Environmental  
Officer, Office of Energy and  
Engineering, and Shahabuddin Khan,  
Program Specialist, Office of  
Project Development and Monitoring,  
USAID/Pakistan, Islamabad.

Environmental Action  
Recommended : Environmental Assessment at the  
end of the first year of the  
project when all activities have  
been completely identified.

Mission Director's  
Concurrence : Signature *Donor M. Lion*  
Donor M. Lion

Date *June 29, 1982*

Decision of Asia Bureau  
Environmental Officer : Approved *Michael S. Pulley*  
Disapproved \_\_\_\_\_

Date *July 16, 1982*

I. Country Setting

Pakistan has an area of 307,375 square miles, is situated between 24 and 37 degrees north latitude and 61 and 78 degrees east longitude, and is surrounded on the North by the U.S.S.R. and China, on the East by India, on the South by the Arabian Sea, on the West by Iran, and on the Northwest by Afghanistan. The North is bounded by high altitude mountains. The Northwest is characterized by comparatively inaccessible mountainous terrain. Primarily because of the country's topography, the British, in spite of many wars, were unable to take command of the North and Northwest territories and were forced to compromise with the local Pathan tribes to let them rule the area according to local customs and traditions. These areas are called the Tribal Areas.

The entire tribal belt, comprising seven Agencies, is located on the border between Afghanistan and Pakistan. Annex 1 is a map of Pakistan showing the location of the Tribal Areas. In some cases, the border runs through tribes and even families. These Agencies are spread over an area of 10,509 square miles and have a population of 2,175,000. They have special legal status, emanating from the British colonial period, and, until recently, have remained largely excluded from development activities sponsored by both the federal and provincial governments in Pakistan. The special status of the Tribal Areas was acknowledged and accepted by the Government of Pakistan at the time of partition in 1947 and has been retained since that time. This tribal belt is inhabited by several tribes of Pathan origin who

jealously guard their tribal identification and even now indulge in inter-tribal feuds. The tribal areas are still largely outside the jurisdiction of the federal or provincial governments of Pakistan. Government structure and laws are replaced by local tribal laws, governed through local "jirgas" or councils of elders.

Traditional isolation and complex socio-economic structures based on "tribalism" render the Tribal Areas radically different from the rest of the country. A hostile social climate and very limited income-generating opportunities combined with inter-tribal rivalries that often result in bloodshed, make life in the Tribal Areas difficult and dangerous.

The economic base is mainly dryland agriculture with some irrigation provided by scattered tubewells and a small system of canals drawn from the Warsak Dam built on the Kabul River in Mohmand Agency. A large portion of the population rears goats and sheep, which they move from place to place with the change of weather. Many men move out of the tribal areas down to the plains, seeking employment in the army while others move to industrial cities, seeking a variety of different types of employment. A small segment of the population, particularly in the Khyber Agency, thrives on trade across the Afghan border. This trade has considerably diminished since the 1979 Soviet invasion of Afghanistan.

The federal government is represented in the Tribal Areas by the Political Agent, a government functionary. The Federally Administered Tribal Area Development Corporation which is financed from

federal funds, was established in 1971 to administer development projects in the tribal areas only. Some development has since taken place, but basically these areas remain underdeveloped.

Primary roads exist, but lateral access to agricultural land is limited. Construction of the Warsak Dam on the Kabul River has provided some canals for irrigation and has helped in a limited way to develop some parts of Mohmand and Khyber Agencies. Some industrial units have also been installed which provide employment to the local population. Electrification has been extended to some sub-regions, but the coverage is spotty.

## II Project Description

This project is designed to improve the quality of life of the people of the Tribal Areas who, with the exception of some areas of Baluchistan, are the most backward and deprived in Pakistan. The project will focus primarily on development schemes in the agricultural and transportation sectors. Activities will include the following:

- A. Improvement of existing irrigation schemes to maximize the water available for agriculture;
- B. Installation of tubewells to make available sub-surface water for drinking and irrigation purposes; and,
- C. Construction of roads to link remote areas to main roads or to main towns in the Tribal Areas.

Specific schemes and project sites will be identified during the first

year of project implementation.

### III Description of Environmental Impact

This project is not expected to have a significant impact on the air or water quality, climate or geography of the Tribal Areas. However, it is possible that the project will have a measurable socio-economic and cultural impact on the traditional tribal structures. The improvement of existing irrigation schemes, installation of tubewells, and construction of roads could result in modifications of the landscape, all of which would likely be favorable. More land would come under cultivation as a result of more water becoming available from improved irrigation systems and more tubewells. The settlement pattern could be modified from the present one where extended families tend to live on the farms to more concentrated villages as is found in other parts of Pakistan. Migration down to the plains could also be altered.

### IV Recommendation

In view of the possible socio-economic, cultural, and physical impact of this project, it is recommended that an environmental assessment be undertaken at the end of the first year of the project, by which time project activities will have been fully identified.

PAKISTAN  
ADMINISTRATIVE  
DIVISIONS & DISTRICTS  
1969 - 1970



Tribal Areas



SADDA-MARGHAN ROAD: ENGINEERING AND COST ANALYSES

	Level 4.8 Kms.	Rolling 9.4 Kms.	Mountainous 11.4 Kms.	Project Total 25.6 Kms.
	(Cost in Rs 000)			
<b>A. <u>Construction</u></b>				
1. <u>Direct Costs</u>				
Task 1: Clear & Grub	33.6	66.1	178.9	278.6
2: Stripping	8.4	18.9	25.6	52.9
3: Embankment	488.4	459.1	908.2	1,850.7
4: Execution	27.3	35.4	63.9	126.6
5: Culverts	368.1	1086.8	1807.7	3,262.6
6: Sub-base Course	246.9	485.6	584.3	1,316.8
7: Shoulder	70.8	130.2	167.6	377.6
Sub-Total Direct Costs	1,243.5	2,285.1	3,736.2	7,264.8
2. <u>Indirect Costs</u>				
Personnel	318.3	715.1	1,290.0	2,323.4
Support Facilities	309.6	696.2	1,256.7	2,262.5
Sub-Total Indirect Costs	627.9	1,411.3	2,546.7	4,585.9
Sub-Total Direct and Indirect Costs	1,871.4	3,696.4	6,282.9	11,850.7
3. <u>Other Contract Costs</u>				
Contingencies @ 10%	187.1	369.7	628.3	1,185.1
Fees @ 10%	205.9	406.7	691.1	1,303.7
Sub-Total Other Costs	393.0	776.4	1,319.4	2,488.8
Total Construction Cost	2,264.4	4,472.8	7,602.3	14,339.5
<b>B. <u>Engineering</u></b>	79.5	189.4	341.5	610.4
Total Project Cost	2,343.9	4,662.2	7,943.8	14,949.9

## SOCIAL SOUNDNESS BACKGROUND

### I. Tribal Society

Pashtun claim descent from their putative ancestor, Qais bin Rashid, who went to Arabia from Kohistan Ghor in Afghanistan and was converted to Islam by the Prophet himself in the seventh century. He is said to have married the daughter of the renowned Islamic general, Khalid bin Walid, from whom he had three sons, Sarbarn, the eldest, Bitan and Ghurghust. All Pashtun tribes proudly trace their origin to the offspring of Qais. The eastern Sarbarni include the Yusufzai, Khalils, and Mohmands (the latter two claim descent from Kand while the Yusufzai's apical ancestor is Yusuf). Other Sarbarnis are Hashtnagar Muhamadzais, descended from Samand, and the Shinwaris, descended from Kasi. Western Sarbarn tribes, mostly found in Afghanistan, include the Tarin, Abdalis (Durrani), Popalzai, the Achakzai, and Baraksai. Other Pashtun divisions are called the Bitanis, from Bitan, the second son of Qais, and numbered among them are the Chizzais, Niazis, Lodhis, and Suris (the last two at one time ruled Delhi) and the Ghurghust (which includes the Kakars, Gaduns, and Safis). The hill tribes are the Afridi, Khattak, Orakzai, Mahsud, and Wazir, all of whom claim descent from Karlanri, who is said to have been adopted into the family of the third son, Ghurghust.

The term "tribal" in the Pashtun context does not describe a primitive, preliterate people. The tribals are part of the great Islamic cultural tradition. They have their own treasure of poetry (the most famous Pashtun poets were contemporaries of John Milton). The historical role of warrior-king is part of the Pashtun consciousness, and Pashtun dynasties have ruled non-Pashtun kingdoms far from their ethnic homelands (in Bengal, Delhi, and Kabul). At the same time, their own tribal heartland was jealously guarded from any form of permanent invasion or non-Pashtun administration. Imperial generals leading great armies (including the Mughal, the Durrani, and the British) have been humbled and destroyed in the forbidding mountains.

The mountain ecology itself has had great influence in shaping Pashtun social identity, political strategy, and economic structure. It has in many ways defined the Pukhtunwali -- the highly codified moral code of behavior -- and it contributed profoundly to the Pashtun segmentary tribal system (which has been characterized as having an acephalous -- i.e. headless -- political system). One anthropologist who has done a great deal of research among

the Pashtun observes that "This system has been most successful and self-maintaining under anarchic conditions in low-producing areas".<sup>1/</sup>

To the Pashtun, there is no conflict between his tribal code, the Pukhtunwali, and the religious principles of Islam. Islamic principles, cultural mores, and traditions explain part of the Pashtun normative behavior. As Akbar Ahmad, the noted Pakistani anthropologist, emphasizes, however, the two most important operative features of Pukhtunwali are tarboorwali and tor.<sup>2/</sup> Derived from the word tarboor or "cousin" (explicitly the father's brother's son), tarboorwali is the "code of the cousin" and embodies the structured rivalry between male kin, particularly brothers and cousins in the male line. Such rivalry centers for the most part around land and leadership, and it is the cause of considerable conflict in Pashtun society. Feuds are common and are carried out on the basis of well defined rules. Shooting during a feud cannot last for more than a few days, especially when one party has captured the water-well, the key to the village, of the other party. Victory is then assumed and conceded and some sort of agreement invariably reached. A political point -- that of lineage hegemony -- has been clearly made. Tarboorwali functions as a mechanism that underlines the importance of male lineage structures and opposition between segmentary kin groups.

The second important Pukhtunwali element of tor concerns the preservation of the chastity of women, and it functions as a guarantee of perpetuation of the Pukhtunwali over generations. Tor, like tarboorwali, can also lead to feuds, which sometimes can be long and bloody.

Ahmad sees both tarboorwali and tor as being related to important facets of Pashtun social life, such as settlement patterns, marriage practices, and aspects of local economic systems. Marriage is strongly endogamous (i.e., it takes place within the tribe) and the preference is for a male to marry his father's brother's daughter. Marriage rites have six identifiable characteristics: (A) food and

<sup>1/</sup> Fredrik Barth, "Introduction" and "Pathan Identity and Its Maintenance", in Fredrik Barth (ed.) Ethnic Groups and Boundaries: the Social Organization of Cultural Difference, Allen & Unwin, London, 1969, 9.134.

<sup>2/</sup> Akbar S. Ahmad, Pukhtun Economy and Society: Traditional Structure and Economic Development in a Tribal Society, I, Routledge & Kegan Paul, London, Boston and Henley 1980.

services are reciprocated; (B) ceremonies are public and well attended; (C) the scale of the ceremonies is commensurate with wealth and rank; (D) there is a moral compulsion to attend; (E) those who dodge this expectation advertise their enmity; and, (F) the ceremonies give men a chance to establish political ties. The marriage is the most significant rite in Pashtun society. A man may marry a second wife for a variety of reasons but mainly because his first wife is barren. Plural marriages, however, are not common or even frequent.

After marriage, the couple resides at the groom's father's house, and this, as well as lineage relationships, determines to a great extent the settlement patterns. Each married son has his own compartment in the house, and each one is the basic socioeconomic unit of the society. Clusters of kin-related households comprise settlements. Settlements also function as forts and are constructed with a view to their effective defense. Every settlement, however small, has its hujra (male guest house where the men gather to discuss common problems, resolve disputes and form alliances). The hujra, therefore, is an institution that serves an important function in the whole matter of male-kin rivalry embodied in the tarboorwali. By the same token, the related concept of tor is manifested in household arrangements and settlement patterns in purdah, the seclusion of women. All of the household and settlement arrangements are geared to maintain this seclusion, which involves having no public role and remaining away from the view of any males, other than those within the kin group.

Ahmad sees both tarboorwali and tor as two of the three fundamental principles of Pashtun social organization. He states that:

"The underlying principles are threefold and interconnected: the primary principle rests on tarboorwali which in turn crudely ensures a ceiling to the wealth and power an individual may accumulate and therefore more or less forces the second principle, which is an intense spirit of democracy that finds ratification in the tribal charter. The third principle is that of honor deriving from certain features of the Pukhtun Code particularly regarding women and their chastity. The model as built through the case-studies reveals a man's world in the most chauvinistic sense of the concept. There is manifest and constant glorification of machismo. The entire concepts of Pukhto revolves around the concept of manhood (saritob) and honor which in turn involves

man's ideal image of himself. The highest compliment is "he is a man (saray day)". The three key and prestige-conferring symbols in tribal society, the male guest house (hujra), the gun (topak), and the council of elders (jirga) are exclusively the reserve of the Pashtun males. In the most profound sense it is a man's world".

While Pashtun traditional society continues to function, the winds of change have come to the Tribal Areas. Ahmad points out that the economic development activities that began in the 1970's will result in a greater encapsulation of the Pashtun via physical penetration of their mountain fastness. The method and tactics are conciliatory and the symbols of penetration are beneficial and economic: the road followed by electricity, schools, and health units. This is not to be seen as a situation where exploiters from different ethnic or economic backgrounds dominate and exploit local groups. The administrators now are largely tribesmen and often are enlisted from local sections. At the same time, these new opportunities have reordered the role of the Malik (an appointed chief or headman and the only symbol of exploitation in the Tribal Areas). His position as that of a broker between his section and the government may soon become redundant.

Furthermore, for the first time, large sums of money and several sources of employment have appeared in the midst of the Tribal Areas, and with these have come a spread of ideas that herald a change in traditional Pashtun values. Money and commerce are beginning to be viewed differently; trade or craft (gasab) are no longer considered socially inferior occupations. A certain failure to transmit successfully traditional social values to the younger generation is already developing.

Finally, the old isolation of the Tribal Areas is breaking down. Thousands of Afghan refugees have poured across the border where they are said to outnumber the local population in some Agencies (such as Bajaur and Kurram). They are reminders that the mountain fastness of the Pashtun could easily become an international no-man's land. At the same time, the outmigration of Pashtun has increased greatly with employment opportunities elsewhere. The Pashtun world is undergoing a transition and the advent of development has set into motion a process that is probably irreversible. Significantly, Ahmad concludes his analysis of Pashtun traditions in the face of encroaching economic development with the observation that in the Mohmand areas where he conducted his research, the last tarboorwali murder was committed in 1973, the same year the road crossed the Nahkki Pass and electricity came to the locale.

## II. Selected A.I.D. Activities

### A. The Bara Irrigation Scheme

Implementation of the Bara Irrigation Scheme, since the early 1970s, has resulted in vast socio-economic changes among the five sections of the Afridi tribe -- the Kokikhel, Qmbarkhel, Malikdin Khel, Sepah, and Akakhel -- whose indigenous territory was the upland Tirah, located to the west of the Khajuri plain, the site of the Bara project. The plain was a barren stretch almost totally devoid of water, but it provided a winter grazing area for the Afridi, who would also sell some of their cattle in the lowlands. Farming and cattle raising were the major occupations of the Afridi in the Tirah, and some of them also engaged in smuggling, kidnapping for ransom, and automobile theft.

In the 1960s, the first rumors of the proposed Bara irrigation scheme reached the Afridis' jirgas and hujras, prompting tribal section leaders to begin to demarcate land claims. By the early 1970s, land was being distributed by the jirgas to families in each subsection. Leaving some members in the Tirah to care for farms and herds, whole Afridi kin groups began to move to their new lands in Bara and soon the plain was dotted with their quilas (farmsteads/forts). FATA officials estimate that there are now some 15,000-16,000 quilas, each containing an average of seven people (the extended family consists of kin related through the male line).

FATA-DC officials indicate that Afridis who moved to the plain prior to the beginning of the irrigation scheme (most of these migrants were from the Malikin Khel and Qmbarkhel sections) earned their livelihoods as tenants of farmers already there and as wage-earners in the vicinity of Bara. The primary motivation in migrating was to obtain land and more available water with the new irrigation scheme. Other attractions included: (1) roads making Bara and Peshawar accessible; (2) education facilities for their children; (3) health facilities; and, (4) electricity.

#### 1. Changes in Livelihood Activities

The most obvious changes in Afridi society resulting from their move to Bara are in their livelihood activities. Farming in the Tirah was a micro-type of subsistence activity. All of their crops were consumed by the farmers themselves. Only in their livestock raising did they produce for the market; some of the livestock (particularly cattle) taken to the plain for winter

grazing were sold. In Bara, however, farming also has become geared to the market; cash cropping has become a new economic activity. Access to the Bara and Peshawar markets contributed greatly to the expansion of income sources all of which are oriented towards the non-farming sectors. One result is that the Afridi farmers are now more directly affected by macro-level policies, programs, and decisions formulated by FATA-DC or other government agencies in Peshawar or Islamabad.

## 2. Landholding

Despite the rise of entrepreneurship among the Afridis in Bara, the amount of land owned by an individual continues to determine his social status in the community. The importance of owning land is a value deeply rooted in Pashtun culture. Clearly, one of the motives for moving to Bara was to obtain additional land, and while many of the migrants received larger parcels than they already owned in the Tirah, this was not the case with some small farmers.

## 3. Farming

Although for many, it may no longer provide the major source of income, farming nonetheless continues to be a significant economic activity for the Afridis in Bara. It obviously is still viewed as an honorable occupation, and even the big entrepreneurs describe themselves first and foremost as farmers. They invest in their farms, and since the move to Bara, farming has undergone modernization with resulting increased production. The evidence suggests that there is a strong desire to increase output and yields further.

Changes in the more traditional farming found in the Tirah as a result of the move to Bara have been striking. The Tirah pattern is to farm staples of wheat, maize, sugar cane, and in some cases paddy rice (the short-grained, glutinous japonica variety) with secondary crops that include potatoes, onions, various kinds of beans (lentils, chickpeas, red beans and others), and tomatoes. Orchards produce apples, pomegranates and apricots. Farm labor is supplied by the kin group (usually the residential extended family). Only organic fertilizer is used, and no mechanized farm equipment is available. Tirah farmers do not produce any cash crops. Only the Kokikhel and Sepah sections located near Bara river have irrigation.

The Bara pattern reflects some basic changes. While the same range of crops grown in the Tirah are also farmed

in Bara, the warmer climate of the plain has permitted farmers to have citrus and banana trees. In addition, some farmers have adopted new strains of wheat as well as the indicus variety of paddy rice. The increase in yields has resulted in cash cropping in Bara. Some of the very big landowners sell wheat locally to other farmers. Maize, potatoes, tomatoes, onions, and citrus are transported to the market in Bara.

Farming techniques have been undergoing some drastic changes since the move to Bara. Many farmers now use tractors (rented for the most part) to prepare their fields (the exodus of labor to the Middle East appears to have accelerated the interest in mechanization). Most farmers now use chemical fertilizers, although smaller farmers continue to make use of organic fertilizer on some of their fields. Irrigation for many of the Afridi farmers is a new technique and for all of them (including the Sepah and Kokikhel who had irrigation in the Tirah), the need to have farmer cooperation in using the irrigation water is a new experience. Regulating the use of available water has become a new concern for the sub-sector jirgas. Further, marketing of crops also is a new experience for the farmers, requiring transport facilities (most of the big landowners have their own trucks, which also are needed in their entrepreneurial activities).

Farm management innovations have accompanied the other changes in livelihood activities. Larger landowners heavily involved in entrepreneurial activities do not have the time to spend in day-to-day farm operations as they did in the Tirah. Two new patterns have emerged: (a) to hire managers on a monthly salary to oversee operations; and (b) share-cropping.

#### 4. Development Impact

The improvement and expansion of the Bara irrigation system will set into motion a new phase in the developmental trends already taking place in the area. The project will in effect be a step further in realizing the full potential of Bara. It will accelerate the modernization of farming that began when the Afridis commenced their move from the more remote and restrictive Tirah environment to the Bara area, where the implementation of the FATA-DC irrigation scheme has created a situation favorable to socio-economic development.

#### B. The Sadda-Marghan Road

The improvement of this road will affect an estimated 20,000 people, about half of the total Ali Sherzai population.

The road will open the area and give its inhabitants access to the outside. For farmers, this means having the wherewithal to transport produce to the Sadda market. Research on the remote Shamkhi village reveals that as a result of the earthen trail being completed in late 1980, such innovations as tractors and chemical fertilizers have been adopted by some farmers. The road also has given villagers access to health facilities in Sadda. Village leaders also expressed their desire to have a primary school in the village.

### C. The Supplementary Development Fund

This fund will finance small development activities in areas served by other project components. Priority will be given to activities that involve local self-help participation. It is expected that many of the opportunities for such activities will be found in the fields of education -- e.g. construction or rehabilitation of schools and teacher housing, and health -- e.g., construction or upgrading of health facilities.

#### 1. Education

By and large, education has not been emphasized in the development program for the Tribal Areas. Two of the major problems are the lack of school buildings and the inadequacy of school facilities. On a limited scale, this situation will present useful opportunities for the Supplementary Development Fund. There is a total of about 1150 primary schools in the Agencies, but of this figure, almost 30 percent do not have buildings. Classes, as one FATA official put it, are held "under the blue sky." Of the total 197 middle schools, 98 (or 49.7 percent) use primary school buildings to hold their classes. There are 99 high schools, but 37 (or 37.3 percent) meet for classes in middle school buildings.

In addition, the FATA Education Directorate estimates that 400 school buildings (around 30 percent) are in a state of disrepair. Some 600 buildings are without potable water and/or electricity. It is estimated that a two-classroom building of 1,200 square feet, constructed of bricks and concrete with a metal roof would cost between Rs 120,000 and Rs 140,000 to build.

Schools are sexually segregated. Of the 99 high schools, 8 (or 8.1 percent) are exclusively for females and 10 of the 197 middle schools (or 5.1 percent) are for girls. Girls primary schools number 149 of the total 1150 (or 13 percent). The Education Directorate has plans to establish

40 additional girls' schools throughout the Agencies, but lack of adequate funds is a major constraint to implementation.

As of June 1981, there was a total of 93,266 students enrolled in tribal areas educational institutions. According to FATA Education Directorate officials, the problem of school leavers is general throughout the Tribal Agencies. They estimate that, of a beginning primary school class of 100, some 60 percent will have left by the fifth grade, and the percentage dropout for females will be considerably higher than for males. Poverty is one of the major causes; children are productive members of a farm family, and their labor is needed in both the household and on the farm. Boys also will leave school to work in nearby towns (in the Peshawar and Parachinar markets, boys of 12 or 13 were seen working in shops and in vending produce).

Of the total 7,210 teachers in the tribal areas, 2,035 (or 28.2 percent) are classified as "untrained", i.e. they have not received formal teacher training. Usually such teachers are recruited locally after they have received middle or high school level education. FATA Education Directorate officials indicated that there is a continual shortage of primary school teachers because of the arduous living conditions for teachers in most villages. Lack of housing is one problem, and another is lack of middle and high schools for the teacher's own children. Also the close-knit character of village society is such that a teacher coming from the outside will have difficulty in becoming a part of the life of the community. The situation for the female primary school teacher is even worse than it is for the males.

## 2. Health

Probably the most neglected aspect of development in the Tribal Areas is primary health (significantly, FATA has no health department or division). In many of the interviews, the matter of health facilities was raised. Afridis pointed out that one of the attractions of the Bara area was the availability of health services (but they complained that village dispensaries were still lacking). In Shamkai village, leaders noted that there were no health facilities whatsoever in the whole Ali Sherzai Tribal Area in which they were located. The closest were in Sadda, and only with the opening of the rudimentary earthen trail in late 1980 did they become accessible to the village.

GOVERNMENT OF PAKISTAN  
PLANNING COMMISSION



**SPECIAL DEVELOPMENT PLAN**  
FOR  
**TRIBAL AREAS**  
OF THE  
**NORTH WEST FRONTIER PROVINCE**

*January, 1982*

## PREFACE

With a view to accelerating the pace of development in the backward regions of Baluchistan and the Tribal Areas bordering on Afghanistan, Government has decided to formulate and implement special programmes for these regions to supplement the efforts being undertaken through the Annual Plans. Extraordinary foreign assistance, over and above routine commitments, is sought for these programmes and placed outside the development budgets of the regions. In this connection, a Special Development Plan for Baluchistan was published and circulated amongst prospective donors last year. A similar programme for the Tribal Areas of the North West Frontier Province is being presented in this volume.

The size of this Special Plan is much smaller than that for Baluchistan owing to the relatively smaller areas of the Tribal regions but the scope and pattern of the two programmes is similar in other respects. In keeping with the Plan for Baluchistan, the special programmes compiled for the Tribal Areas embody a blend that serves the diverse socio-economic needs of the area. The portfolio contains short gestation, quickly productive projects as well as necessary investment in infrastructure; and programmes for conferring the basic social amenities. The most essential requirement is similar to that of Baluchistan, viz., the pre-requisite of developing the road network and transport system both within the area and for linking it with the more developed parts of the country. The momentum of rapid development cannot be sustained for long without this essential infrastructure. It is hoped that this consideration will help determine the dimensions of support to the Special Plan.

GHULAM ISHAQ KHAN.

*Chairman,  
Planning Commission.*

*Islamabad, the 12th January, 1982.*

### CHAPTER III

#### SPECIAL DEVELOPMENT PLAN

63. The accelerated development of the under-developed regions including the Tribal Areas has been a principal objective of the Government. It has been the government's constant endeavour to mobilize the creative energies of the nation, stimulate socio-economic development and remove bottlenecks which have hampered economic progress, of all regions, specially in those areas of the country which were neglected in the past.

64. In recent years, projects/programmes are being implemented towards meeting this goal. The Fifth Five-Year Plan (1978—83) specifically recommended concerted efforts to overcome the problems faced by the less developed/under-developed areas of the country. In the Plan, substantial resources have been allocated for the development of infrastructure, improvement of productive capacity based on the better utilization of resource endowment of the areas and for creating social institutions. The public sector development programmes of the Tribal Areas, which are wholly financed by the Federal Government, between 1972-73 and 1981-82, have increased at an annual rate of 18 per cent as against the national average of 13 per cent. However, inspite of these substantial resource allocations and efforts, the tribal areas are still comparatively backward and it has not been possible to narrow the relative disparity with the developed regions of the country.

65. The meagre resources at the disposal of the government and commitments to other pressing demands restrict its ability to earmark required amounts, of funds to the under-developed regions. The allocations made to these regions and specifically the annual provision of approximately Rs. 600 millions in recent years to the Tribal Areas, are quite insufficient to the task of

accelerated socio-economic development particularly as the basic pre-requisite of providing physical infrastructure requires heavy initial investment. Without such investments, private sector will be shy of setting up of projects in this area while public sector or local activities and undertaking will not realize their potential. The present level of allocation to the Tribal Areas may have to be doubled if the objective of restoring balance with other regions is to be attained at moderately fast pace.

66. The Government, because of limited resources, is not in a position to provide any significant amount of resources that may be required to bridge the gap between this requirement and existing allocation to these areas. The Provincial Government of NWFP has a very small resource base and can hardly increase the development outlays in the Provincially Administered Tribal Areas (PATA) due to competing demand of other regions. The Federal Government which is directly responsible for the development of FATA and also financing the entire development programme of the NWFP is constrained from earmarking large funds because of the pre-emptive claims on a number of other public sector projects of national importance.

67. To overcome the resource constraint situation being faced by the government and to stimulate rapid socio-economic development of these areas, it is necessary to launch a Special Development Programme for the development of the Tribal Areas, the funds allocated to which will not be exposed to the competing claims of other national projects. It is clear that the financial contribution that the government can make to the Special Development Programme will not be very large. The bulk of financing rupee, as well as foreign exchange component will, therefore, have to come from international donors.

68. A portfolio of the projects and programmes under the Special Development Plan has been identified and attached at the end with brief summary descriptions in each case. The list includes projects already under implementation where additional

funds through the Special Development Plan would expedite their completion at an accelerated pace as well as the new projects which due to resource constraint cannot be funded through normal development programme in the near future even though they are expected to have a significant effect on the overall development of these areas. The projects would in some cases be conferring quick economic and social benefits. Further, the high public investment in agriculture and social and physical infrastructure would be positive incentive for attracting private investment.

### 1. SIZE OF THE PLAN

69. The Special Development Programme for Tribal Areas envisages an outlay of Rs. 4273.99 million with a foreign exchange component of Rs. 1148.26 million. It is planned to implement this programme in a phased manner over the next five to six years. It may, however, be noted that Tribal Areas both FATA and PATA cannot be treated as a separate economic unit and, therefore, its development plan will have to be coordinated with the development plan of the North West Frontier Province. The sector-wise allocations for the programme are summarized below :

#### SECTORAL ALLOCATIONS IN SPECIAL DEVELOPMENT PROGRAMME (Million Rs.)

Sl. No.	Sectors	Total Capital Cost	Foreign Exchange Component
1.	Agriculture .. .. .	422.45	142.98
2.	Water Resources .. .. .	383.72	93.94
3.	Energy .. .. .	631.11	131.31
4.	Industries ... .. .	478.87	292.90
5.	Minerals -- -- --	83.65	33.88
6.	Transport and Communications	1643.00	431.00
7.	Physical Planning and Housing ..	115.00	15.00
8.	Education .. .. .	209.17	7.25
9.	Health .. .. .	155.64	—
10.	Rural Development .. .. .	151.38	—
Total :		4273.99	1148.26

## 2. RATIONALE OF SECTORAL ALLOCATIONS

70. The poor infrastructure base has been a major bottleneck for accelerating the rapid development of these Tribal Areas. As such, more than 50 per cent of the allocations are earmarked for transport and energy sectors. The projects and programmes included in the Special Development Plan aim at constructing minimum physical infrastructure facilities necessary for long term socio-economic development of the area with a view to bringing it to a level comparable with the developed parts of the country in as short a time as possible.

71. The construction and improvement of roads and other transport facilities will require the highest priority in order to strengthen the links between major settlements within the area and between these settlements and the rest of the NWFP. It is quite clear that unless the pre-requisite of building a transport system which integrates hitherto inaccessible or not easily accessible areas with the rest of the country is completed, it would neither be possible to attract private investment nor to set up profitable public sector units.

72. The road projects included in the Special Plan are based upon three considerations :

- (a) to consolidate and upgrade the existing principal and arterial roads through improvement and metalling;
- (b) to extend roads to hitherto isolated and unopened areas ; and
- (c) to build and improve roads and bridges of strategic importance.

The proposed road programme envisages an addition of about 1070 Kms of which almost 50 per cent will be metalled roads.

73. The present telecommunication facilities in both FATA and BATA are insufficient compared to the importance of the area as well as to the rest of the country. Under normal development programme, these additional facilities receive a low priority

due to the pressing demands of more developed regions for trade, business and industry. It is proposed to establish several small telephone exchanges under this programme.

74. Presently, the whole of FATA and a major part of PATA is served by 33 KV system. It is proposed to extend 66 KV—132 KV system in these areas which will help in power supply stability and will also support for further rural electrification. It is further proposed to electrify 880 villages. The setting up of a number of Hydro Power Stations, not catered to by the WAPDA system, are also proposed.

75. The additional energy programme would greatly reduce the present abnormal disparity in energy consumption between this area and the rest of the country. The special rural electrification programme will lead to the economic uplift of the rural population by encouraging small scale industries and making water available through tubewells for drinking and irrigation purposes.

76. The production and employment structure of Tribal Areas is mainly agricultural. As such, the Special Development Plan also lays stress on its development. A sum of Rs. 800 million is earmarked for projects in the field of agriculture and water development. The projects are likely to confer quick benefits to the people of the Tribal Areas. The irrigation programme included in the Special Plan will bring additional area of 50 thousand hectares under cultivation. The production from this area, improvement in yields as a result of measures accommodated in the Plan and the actions to be taken in the normal development programme would double the foodgrain production in the Tribal Areas.

77. The Plan also stresses a significant increase in the drinking water supply coverage in both FATA and PATA which are currently faced with acute drinking water shortage. With the current level of outlays provided in the development programme, it would perhaps take more than a decade to merely reach the present national average of 21 per cent only. The Special Development

Programme in this case, together with normal ADP provision, would increase the coverage to the present national average in the next two to three years.

78. Another area within agriculture sector where the Tribal Areas are well placed is livestock which is the sole occupation of a substantial part of the population living in the area. However, the livestock, a major part of which is sheep and goat, are maintained on natural vegetation. The quality of breed, food intake, the rearing techniques and processing of skins offer much scope for improvement. The Special Plan includes several schemes both in FATA and PATA to remedy these deficiencies. The improvement in this case will benefit the entire country as the livestock situation, for Pakistan as a whole, presents a dismal picture.

79. The Tribal Areas are reported to be rich in mineral sources. However, very few minerals are currently being commercially exploited for lack of survey and studies. Therefore, significant acceleration has been provided for the programme already being implemented for investigation and exploration of minerals and for conducting technical studies to assess the feasibility of exploiting reportedly large mineral resources of this area.

80. The Special Development Plan includes a small programme in the industries sector. Only those projects are included in the Plan where raw material is locally available and their development would help improve agricultural development in the areas as well. For instance, in PATA, a fruit and vegetable processing unit and a kraft paper mill is proposed. Similarly, in the FATA programme, a card board unit has been included. Rest of the industrial projects are small units of various items such as nuts and bolts, cutlery, blanket weaving, wood working, agricultural tools and implements etc., which are needed to meet the local demand of these items.

81. A few projects for skill development and training have also been included. There has been considerable exodus of skilled manpower from these areas to the rest of the country as well as to the Gulf States. These steps will be instrumental in increasing

the output of skilled personnel which in addition to meeting the foreign demand would be helpful in the future industrialization of this area. It may be emphasised that a large number of inhabitants of the area belong to very poor category and they can not afford to seek admission in the Technical Institutions situated at a long distance.

82. The Social sectors are currently receiving a high priority in the normal development programme of these areas. A moderate programme, however, in the field of education and health have been included in the Special Development Programme which, when implemented, will bring the area at par with other parts of the provinces.

83. Both FATA and PATA have a very few urban settlements. Rural population constitutes 99 per cent of the total population in FATA and around 95 per cent in PATA. Therefore, rural development is a pre-requisite for development of these areas. The existing rural road network is highly inadequate. Other infrastructure is also poor.

84. The Fifth Five-Year Plan stresses the importance of rural development through local participation and programmes in this regard are being implemented throughout the country. Under the existing arrangements, funds are provided to District and Union Councils for carrying out development activities of local nature which are being implemented by the councils through a broad based participation of the local people on self-help basis. During 1981-82, an amount of over Rs. 20 million has been provided in Annual Plan for this purpose. However, this amount which comes to less than half a rupee per head, is considered to be too inadequate to meet all needs and requirements of these hitherto neglected areas. A sum of Rs. 250 million, therefore, is provided in the Special Plan to accelerate the tempo of these activities.

### 3. A SUMMING UP

85. The main objective of the Special Development Plan is the removal of the sense of economic deprivation resulting from

the past neglect and the laying down of an infrastructure base for future growth and development. The Plan, on a rough basis, will involve an aggregate outlay of Rs. 4 billion to be phased out in the next five to six years. Should they materialize, these outlays would double the public sector development expenditure and would help in bridging the widening disparity and reducing the economic imbalances between the Tribal Areas and the rest of the country. The sectoral programmes as well as the time-table would be flexible to incorporate adjustments, revisions and reordering, should these become necessary in the process of implementation, without deviating from the main objective of the Special Plan.

**ESTIMATED CAPITAL COST OF SELECTED DEVELOPMENT  
PROJECTS OF FEDERALLY ADMINISTERED TRIBAL AREAS  
AND PROVINCIALLY ADMINISTERED TRIBAL AREAS**

**SUMMARY**

(Million Rupees)

Sl. No.	Sector	FATA		PATA		TOTAL	
		Total Capital Cost	F.E.C.	Total Capital Cost	F.E.C.	Total Capital Cost	F.E.C.
1.	Agriculture.	295.09	135.53	127.36	7.45	422.45	142.98
2.	Water Resources ..	230.59	39.70	153.13	54.24	383.72	93.94
3.	Energy ..	400.10	101.90	231.01	29.41	631.11	131.31
4.	Industries ..	197.95	91.84	280.92	201.06	478.87	292.90
5.	Minerals ..	35.36	14.64	48.29	19.24	83.65	33.88
6.	Transport and Communications ..	997.98	363.40	645.02	67.60	1643.00	431.00
7.	Physical Planning and Housing ..	73.00	15.00	42.00	—	115.00	15.00
8.	Education ..	209.17	7.25	—	—	209.17	7.25
9.	Health ..	94.21	—	61.43	—	155.64	—
10.	Rural Development ..	29.18	—	122.20	—	151.38	—
	<b>Total ..</b>	<b>2562.63</b>	<b>769.26</b>	<b>1711.36</b>	<b>379.00</b>	<b>4273.99</b>	<b>1148.26</b>

**ESTIMATED CAPITAL COST OF SELECTED DEVELOPMENT  
PROJECTS LOCATED IN FEDERALLY ADMINISTERED  
TRIBAL AREA  
SUMMARY**

(Million Rupees)

Sl. No.	Name of the Project	Total Estimated Cost	Foreign Exchange Component
1	2	3	4
<b>A. Agriculture</b>			
1.	Intensification of Horticultural and Agricultural Activities in FATA ..	106.39	70.11
2.	Provision of Machinery for Land Development and Farm Operation in FATA ..	103.55	54.00
3.	Soil and Water Conservation Operational Project in Federally Administered Tribal Areas .. .. .	48.31	4.76
4.	Livestock Development in Tribal Areas ..	31.44	6.66
5.	Poultry Development in Tribal Areas ..	5.40	—
	Sub-Total ..	295.09	135.53
<b>Water Resources</b>			
1.	Sinking and Installation of 30 Tubewells on both sides of Mastura River in Orakzai Agency .. .. .	21.35	2.78
2.	Sinking and Installation of 80 Tubewells in Wana Plain of South Waziristan Agency ..	50.00	4.85
3.	Sinking and Installation of 80 Tubewells in Danday Plain of North Waziristan Agency ..	50.00	4.30
4.	Sinking and Installation of 60 Tubewells in Spin Plain of South Waziristan Agency ..	31.00	2.78
5.	Procurement of Rigs and Ancillary Equipment in FATA Development Corporation ..	33.24	24.99
6.	Improvement of Small Irrigation Schemes ..	45.00	—
	Sub-Total ..	230.59	39.70

1	2	3	4
<b>C. Energy</b>			
1.	Extension of 66/132 KV lines and Construction of 66/11 KV and 132/11 KV Grid Stations in FATA...	232.10	73.90
2.	Supply of Power to 560 Villages in FATA ..	168.00	28.00
	Sub-Total ..	400.10	101.90
<b>D. Industries</b>			
1.	Conversion of the under Implementation oil Expelling and Refining Plants at Bajaur into Ghee Unit. .. ..	39.90	—
2.	Card Board Unit .. ..	76.68	39.84
3.	Technical Training Centre at Para-Chinar and Darra Adam Khel .. ..	40.00	24.00
4.	Metal Training-cum-Production Centres at Karrigueram, Ghelani, Bajaur, Bara and Orakzai .. ..	41.37	28.00
	Sub-Total ..	197.95	91.84
<b>E. Minerals</b>			
1.	Geochemical Survey for Metallic Minerals and Precious Stones in FATA .. ..	3.50	1.00
2.	Survey and Investigation of Minerals in FATA .. ..	15.50	3.00
3.	Exploration of Gemstones in Mohmand .. and Malakand Agencies .. ..	5.96	1.14
4.	Marble Quarrying Project .. ..	10.40	9.50
	Sub-Total ..	35.36	14.64

1	2	3	4
<b>F. Transport and Communications</b>			
1. Construction, Improvement, Widening and Black-topping of roads and bridges in FATA (Details of schemes at enclosed Annexure A) ..		557.48	N. A.
2. Purchase of Road Building Machinery for FATA .. .. .		25.00	15.00
3. Telecommunication Facilities in FATA ..		103.50	41.40
4. Provision of Transport Facilities for Tribal Areas .. .. .		295.00	295.00
5. Depot and Workshop Facilities at Miran Shah and Parashinar .. .. .		17.00	12.00
	Sub-Total ..	997.98	363.40
<b>G. Physical Planning and Housing</b>			
1. Provision of Drinking Water in Rural Areas of FATA .. .. .		73.00	15.00
	Sub-Total ..	73.00	15.00
<b>H. Education</b>			
1. Establishment of Skill Imparting Institutions in FATA.. .. .		34.54	7.25
2. Construction of Buildings for existing 37 High and 98 Middle Schools in FATA ..		124.10	—
3. Provision of buildings for 328 Primary Schools Functioning in open Air in FATA ..		47.53	—
4. Improvement of Office Management in FATA .. .. .		3.00	—
	Sub-Total ..	209.17	7.25

1	2	3	4
<b>L. Health</b>			
1. Upgradation of Existing Agency Headquarters Hospitals .. .. .		51.01	—
2. Construction of 20 Basic Health Units in FATA .. .. .		43.20	—
	Sub-Total ..	94.21	—
<b>J. Rural Development</b>			
Project for Rural Development in FATA — — — — —		29.18	—
	Sub-Total ..	29.18	—
	Grand-Total ..	2562.63	769.26

Annexure A

Sl. No.	Name of the Scheme
1.	Construction of black-topped road from Kulangi to Khar via Sharbati (48.3 kilometre), Bajaur Agency.
2.	Construction and black-topping of Wara Mohmand in Salarzai Area (19.3 kilometre).
3.	Construction of Shingled road from Khar via Barong joining Kot Salai Patai including two Bridges (29 kilometre).
4.	Improvement and Extension of Shingled Road from Garang to Kota Trap in Mohmand Agency (12.9 kilometre).
5.	Black-topping of road from Kuz Chamarkand to Kawa Pass via Sarai Mohmand Agency (12.9 kilometre).
6.	Improvement of Ghalanai Yousuf Khel Road (9.7 kilometre) Mohmand Agency.
7.	Construction of Shingled Road from Darwazgai to Atto Khel and Gate Warsak (5.2 kilometre) Mohmand Agency.
8.	Construction of Shingled Balance Portion of Khapakh Gat Warsak—Ziarat Ghakhi Road (19.3 kilometre) Mohmand Agency.
9.	Black-Topping of Fort Salop Shin Kamar Road (9.7 kilometre) Khyber Agency.
10.	Black-topping of Sherkira—Shamshatoo Portion (12.4 kilometre) and improvement and Widening—Khyber Agency.
11.	Construction of two Bridges on washed Away Span in kilometre 1.6 and 8.0 Frandu Shamshatoo Road, Peshawar-Frontier Region.
12.	Black-topping of Road from Landi Kotal to Yakha China (8.0 kilometre).

1	2
13. Construction of Shingled Road Connecting Tor Chappar with Peshawar-Kohat Road at Darra Adam Khel (19.3 kilometre), Kohat F.R.	
14. Construction of Shingled Road from Bahri Banda to Paya Jawakai (25.7 kilometre), Kohat F.R.	
15. Construction of Metalled Road from Kadda to Daboori (14.5 kilometre) Orakzai Agency.	
16. Construction of Bridge over the Mastura River at Rangeen Khel in kilometre 4.8 of Kadda Daboori Road, Orakzai Agency.	
17. Black-topping of Balance Portion of Kacha Pakka Boya Kalaya Road (10.5 kilometre), Orakazi Agency.	
18. Black-topping of Marai Daulatzai Road (41.8 kilometre) Orakzai Agency.	
19. Construction of Shingled road from And Khel to Khawaja Khizer (12.9 kilometre) Orakzai Agency.	
20. Black-topping of Chiljo-Daboori Road (19.3 kilometre) Orakzai Agency.	
21. Black-topping of Kahi Zargari Road (12.1 kilometre) Orakzai Agency.	
22. Construction of Shingled Road from Shabu Khel to Ghiljo (29 kilometre) Orakzai Agency.	
23. Construction of Shingled Road from Parachinar to Peshawar via Parachankani (45 kilometre) Kurram Agency.	
24. Black-topping of Sadda-Dogar-Tarai Road (24.7 kilometre) Kurram Agency.	
25. Black-topping of Mali-Killi-Kharlachi Road—Kurram Agency (17.7 kilometre).	

1	2
26.	Construction of Shingled Road from Sadda to Marghan Village via Tindo (25.7 kilometre) Kurram Agency.
27.	Construction of Bridge over Kurram River at Sadda in Kurram Agency.
28.	Improvement of Parachinar to Karakhela Road (15.3 kilometre) Kurram Agency.
29.	Replacement of Washed Away Span of Existing Bridge over Kurram River at Manduri—Kurram Agency.
30.	Improvement of existing shingled road from Bagan to Chinark via Sra-Ghurga and Pastawari (25.7 kilometre) Kurram Agency.
31.	Construction of Shingled road from Torawarai via Shamakhai and Chinark (Zaimukht Area) (56.3 kilometre)—Kurram Agency.
32.	Construction of Bridge in kilometre 1.6 of Shewa Zarram Road (N.W. Agency).
33.	Construction of Shingled Road from Shahwali to Razmak (20.9 kilometre) N. W. Agency.
34.	Improvement and Widening of Bannu Miranshah Road (31.4 kilometre) N.W. Agency.
35.	Black-topping of Dosali Garium Road (21.7 kilometre) N.W. Agency.
36.	Replacement of Drum Culverts on Isha Razmak Road N.W. Agency.
37.	Black-topping of Mirali Bichi Kashkai Road (20.1 kilometre) N.W. Agency.
38.	Black-topping of Ghulam Khan Saidgi Road (12.2 kilometre) N.W. Agency.

1	2
39.	Construction of 6 Nos. Bridges on Thall Mirali Road in kilometre 6.4, 9.7, 11.3, 19.3, and 46.7—N.W. Agency.
40.	Black-topping of Datta Khel Gardai Road <i>via</i> Mami Rogha (24.1 kilometre)—N.W. Agency.
41.	Construction of Prestressed Concrete Bridge on Boya Datta Khel 66 Rft. in N.W. Agency.
42.	Construction of Black-topped Road from Mirian to Jani Khel (12.0 kilometre) in Bannu F.R.
43.	Construction of Black-topped Road from Kamar Khan Killi to Gul Ikram Khan Killi (3.2 kilometre) in Bannu F.R.
44.	Improvement and Black-topping of Daryoba Chapari Road (19.3 kilometre) in Bannu F.R.
45.	Improvement and Metalling of Wana Tiarza Ladah Road (77.2 kilometre) S.W. Agency.
46.	Improvement and Black-topping of Kotkai Imar Roghza-shinkai to Sam Road (41.8 kilometre) S.W. Agency.
47.	Construction of Shingled Road from Gul-katch to Azam Warsak <i>via</i> Khan Kot Phase-I (40.2 kilometre) in S.W. Agency.
48.	Improvement of Jandola Wana Road (82.0 kilometre) in S. W. Agency.
49.	Construction of Shingled Road from Kanigurram to Manitoi (24.1 kilometre) in S.W. Agency.
50.	Black-topping of Wana Azam Warsak Road (12.9 kilometre) S.W. Agency.
51.	Widening and Improvement of Jandola Sararogha Razmak Road (77.2 kilometre) S.W. Agency.
52.	Construction of Shingled Road from Sallsar to Birmal (38.6 kilometre) S.W. Agency.

1	2
53.	Improvement of Taway Gulkatch Road (39.4 kilometre) S.W. Agency.
54.	Construction of Shingled Road from Barwand to Karana via Natto Gurgurri (24.1 kilometre) S.W. Agency
55.	Construction of Shingled Road from Makeen to Spin Kama. (14.5 kilometre) S.W. Agency.
56.	Construction of Shingled Road from Jandem to Tajon Saraghar--Gabbari 65.2 kilometre) in S.W. Agency.
57.	Black-topping of Road from Ahmed Wani to Shaatoi (45.5 kilometre) in S.W. Agency.
58.	Construction of Black-topped Road from Ladha to Petwan and Barakai (16.1 kilometre) S.W. Agency.
59.	Improvement and Black-topping of Wana Birmal Road (62.8 kilometre) S.W. Agency)
60.	Construction of Shingled road from Tiarza to Sharka. (19.3 kilometer, in S.W. Agency.
61.	Construction of Bridges on Dawatoi and Marohi in (kilometre 159.0 and 168.5) khirji Jandola Sararoghas Road in S.W. Agency
62.	Construction of 3 Nos. washed away bridges Badar No. I and III and Dara Bridge on Wana Tiarza Ladha Road in S.W. Agency.
63.	Purchase of Road Making Machinery for FATA Schemes.

SUMMARY DETAILED BUDGET FIGURES FOR  
I. WATER RESOURCES, II. ROADS, III. SUPPORTING ACTIVITIES  
(FX in \$ and LC in Rs)  
('000 omitted)

Expense Category	FY 1982		FY 1983		FY 1984		FY 1985		FY 1986		FY 1987		Total	
	FX	LC	FX	LC	FX	LC	FX	LC	FX	LC	FX	LC	FX	LC
1. Technical Assistance														
a. Long term	1,241	3,275	-	3,137	-	2,838	-	-	-	-	-	-	1,241	9,250
b. Short term	65	194	60	150	79	279	73	217	-	-	-	-	277	840
2. Training														
a. U.S.														
i. Long term	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ii. Short term	-	-	-	-	32	72	37	86	-	-	-	-	69	158
b. Third Country														
i. Long term	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ii. Short term	-	-	-	-	-	-	-	-	-	-	-	-	-	-
c. In-Country	-	-	-	75	-	90	-	106	-	-	-	-	-	271
3. Commodities														
a. Vehicles	209	195	-	1,014	-	1,217	-	1,037	-	684	-	821	209	4,968
b. Other	874	32	479	15	-	-	-	-	-	-	-	-	1,353	47
4. Other Costs														
a. Construction - LC	-	-	-	26,476	-	32,565	-	22,221	-	26,815	-	765	-	108,842
- U.S. Owned Rupees	-	-	-	-	-	31,930	-	37,710	-	30,133	-	-	-	99,773
b. Research & Evaluation	-	-	-	480	-	503	-	584	-	701	-	841	-	3,109
Sub-Total	2,389	3,696	539	31,347	111	69,494*	110	61,961*	-	58,333*	-	2,427	3,149	227,258*
Contingency - LC	276	381	16	3,212	0	3,852	0	2,487	-	2,892	-	249	292	13,073
- U.S. Owned Rupees	-	-	-	-	-	3,273	-	3,865	-	3,088	-	-	-	10,226
<b>TOTAL</b>	<b>2,665</b>	<b>4,077</b>	<b>555</b>	<b>34,559</b>	<b>111</b>	<b>76,619*</b>	<b>110</b>	<b>68,313*</b>	<b>-</b>	<b>64,313*</b>	<b>-</b>	<b>2,676</b>	<b>3,441</b>	<b>250,557*</b>

\* Figure reflects local cost requirements as well as U.S. owned rupee requirements.

**DETAILED BUDGET FIGURES**  
**I. WATER RESOURCES COMPONENT**  
(FX in \$ and LC in Rs)  
('000 omitted)

Expense Category	FY 1982		FY 1983		FY 1984		FY 1985		FY 1986		FY 1987		Total	
	FX	LC	FX	LC	FX	LC	FX	LC	FX	LC	FX	LC	FX	LC
<b>A. Technical Assistance</b>														
1. Long term	1,241	3,275	-	3,137	-	2,838	-	-	-	-	-	-	1,241	9,250
2. Short term	21	137	12	82	25	197	14	118	-	-	-	-	72	534
<b>B. Training</b>														
1. Short term - U.S	-	-	-	-	32	72	37	86	-	-	-	-	69	158
2. Short term - In-country	-	-	-	75	-	90	-	106	-	-	-	-	-	271
<b>C. Commodities</b>														
1. Vehicles	152	134	-	618	-	742	-	466	-	-	-	-	152	1,960
2. Investigation	290	4	-	-	-	-	-	-	-	-	-	-	290	4
3. Tubewell	168	14	-	-	-	-	-	-	-	-	-	-	168	14
<b>D. Other Costs</b>														
1. Barr Construction	-	-	-	8,099	-	9,719	-	11,662	-	13,995	-	-	-	43,475
2. Barr Demonstration	-	-	-	182	-	153	-	184	-	220	-	265	-	1,004
3. Tubewell Construction	-	-	-	5,715	-	6,858	-	-	-	-	-	-	-	12,573
4. Water Deval. Schemes	-	-	-	6,000	-	6,000	-	6,000	-	9,000	-	-	-	27,000
<b>TOTAL I.</b>	<b>1,872</b>	<b>3,564</b>	<b>12</b>	<b>23,908</b>	<b>57</b>	<b>26,669</b>	<b>51</b>	<b>18,622</b>	<b>-</b>	<b>23,215</b>	<b>-</b>	<b>265</b>	<b>1,992</b>	<b>96,243</b>

**I.A.1 LONG TERM TECHNICAL ASSISTANCE**  
**IRRIGATION WATER MANAGEMENT AGRONOMIST - PASA (3 Years)**  
(FX in \$ and LC in Rs)  
('000 omitted)

Expense Category	FY 1982		FY 1983		FY 1984		FY 1985		FY 1986		FY 1987		Total	
	FX	LC	FX	LC	FX	LC	FX	LC	FX	LC	FX	LC	FX	LC
<b>I. Dollar Costs</b>														
A. Annual Recurrent	434	-	-	-	-	-							434	-
B. One-Time	33	-	-	-	-	-							33	-
<b>II. Rupee Costs</b>														
<b>A. Travel &amp; Related Exp.</b>														
1. Annual Recurrent	-	151	-	182	-	218							-	551
2. One-Time	-	85	-	63	-	321							-	469
3. R & R Travel	-	-	-	180	-	216							-	396
<b>B. Housing Exp.</b>														
1. Annual Recurrent	-	236	-	284	-	341							-	861
2. One-Time	-	344	-	-	-	-							-	344
<b>C. Office Exp.</b>														
1. Annual Recurrent	-	105	-	125	-	150							-	380
2. One-Time	-	33	-	-	-	-							-	33
<b>D. Annual Admin. Supp.</b>														
	-	120	-	144	-	173							-	437
<b>TOTAL</b>	<b>467</b>	<b>1,074</b>	<b>-</b>	<b>978</b>	<b>-</b>	<b>1,419</b>							<b>467</b>	<b>3,471</b>

**1. A.1. LONG TERM TECHNICAL ASSISTANCE**  
**IRRIGATION WATER MANAGEMENT ENGINEER - PASA (3 Year)**

(FX in \$ and LC in Rs)  
('000 omitted)

Expense Category	FY 1982		FY 1983		FY 1984		FY 1985		FY 1986		FY 1987		Total	
	FX	LC	FX	LC	FX	LC	FX	LC	FX	LC	FX	LC	FX	LC
<b>I. Dollar Costs</b>														
A. Annual Recurrent	434	-	-	-	-	-							434	-
B. One-Time	33	-	-	-	-	-							33	-
<b>II. Rupee Costs</b>														
A. Travel & Related Exp.														
1. Annual Recurrent	-	151	-	182	-	216							-	551
2. One-Time	-	85	-	63	-	321							-	469
3. R & R Travel	-	-	-	180	-	216							-	396
B. Housing Exp.														
1. Annual Recurrent	-	236	-	284	-	341							-	861
2. One-Time	-	344	-	-	-	-							-	344
C. Office Exp.														
1. Annual Recurrent	-	105	-	125	-	150							-	380
2. One-Time	-	33	-	-	-	-							-	33
D. Annual Admin. Supp.	-	120	-	144	-	173							-	437
<b>TOTAL</b>	<b>467</b>	<b>1,074</b>	<b>-</b>	<b>978</b>	<b>-</b>	<b>1,419</b>							<b>467</b>	<b>3,471</b>

I. A.I. LONG TERM TECHNICAL ASSISTANCE  
ENGINEERING GEOLOGIST - PASA (2 Years)  
(FX in \$ and LC in Rs)  
('000 omitted)

Expense Category	FY 1982		FY 1983		FY 1984		FY 1985		FY 1986		FY 1987		Total	
	FX	LC	FX	LC	FX	LC	FX	LC	FX	LC	FX	LC	FX	LC
<b>I. Dollar Costs</b>														
A. Annual Recurrent	275	-	-	-									275	-
B. One-Time	32	-	-	-									32	-
<b>II. Rupee Costs</b>														
<b>A. Travel &amp; Related Exp.</b>														
1. Annual Recurrent	-	151	-	182									-	333
2. One-Time	-	137	-	267									-	404
3. R & R Travel	-	-	-	180									-	180
<b>B. Housing Exp.</b>														
1. Annual Recurrent	-	236	-	284									-	520
2. One-Time	-	344	-	-									-	344
<b>C. Office Exp.</b>														
1. Annual Recurrent	-	105	-	125									-	230
2. One-Time	-	33	-	-									-	33
<b>D. Annual Admin. Supp.</b>														
1. Annual Recurrent	-	120	-	144									-	264
<b>TOTAL</b>	<b>307</b>	<b>1,126</b>	<b>-</b>	<b>1,182</b>									<b>307</b>	<b>2,308</b>











**I.C.2. COMMODITIES - INVESTIGATIVE EQUIPMENT**

(FX in \$ and LC in Rs)  
('000 omitted)

Expense Category	FY 1982		FY 1983		FY 1984		FY 1985		FY 1986		FY 1987		Total	
	FX	LC	FX	LC	FX	LC	FX	LC	FX	LC	FX	LC	FX	LC
Investigation Equipment														
A. Elec. Resistivity Unit	41	-											41	-
B. Reflection Seismograph	62	-											62	-
C. Soil Test Unit	41	-											41	-
D. Meterology-Hydrology Gauging	31	-											31	-
E. Diesel Turbine, Pump and Jet. Unit	77	-											77	-
Miscellaneous Equipment (From Patterson/Hackbart Reports)	38	-											38	-
Inland Transport	-	4											-	4
<b>TOTAL</b>	<b>290</b>	<b>4</b>											<b>290</b>	<b>4</b>









II. ROAD COMPONENT

(FX in \$ and LC in Rs)  
('000 omitted)

Expense Category	FY 1982		FY 1983		FY 1984		FY 1985		FY 1986		FY 1987		Total	
	FX	LC	FX	LC	FX	LC	FX	LC	FX	LC	FX	LC	FX	LC
A. Technical Assistance														
Short Term	44	57	49	68	53	82	59	99	-	-			205	306
B. Training	-	-	-	-	-	-	-	-	-	-			-	-
C. Commodities	416	15	479	15	-	-	-	-	-	-			895	30
D. Other														
1. Engineering														
a. Sadda-Marghan- LC	-	-	-	244	-	586	-	-	-	-			-	830
- U.S. Owned Rupees	-	-	-	-	-	-	-	-	-	-			-	-
b. Selected - LC	-	-	-	-	-	-	-	1,705	-	1,363			-	3,068
- U.S. Owned Rupees	-	-	-	-	-	1,103	-	-	-	-			-	1,103
2. Construction														
a. Sadda-Marghan- LC	-	-	-	5,736	-	8,750	-	-	-	-			-	14,486
- U.S. Owned Rupees	-	-	-	-	-	5,016	-	-	-	-			-	5,016
b. Selected - LC	-	-	-	-	-	-	-	2,170	-	1,736			-	3,906
- U.S. Owned Rupees	-	-	-	-	-	25,811	-	27,710	-	30,133			-	93,654
<b>TOTAL</b>	<b>460</b>	<b>72</b>	<b>528</b>	<b>6,063</b>	<b>53</b>	<b>41,348*</b>	<b>59</b>	<b>21,684*</b>	<b>-</b>	<b>33,232*</b>			<b>1,100</b>	<b>122,399*</b>

\* Figure reflects local cost as well as U.S. owned requirements.









III. SUPPORTING ACTIVITIES

(FX in \$ and LC in Rs)

('000 omitted)

Expense Category	FY 1982		FY 1983		FY 1984		FY 1985		FY 1986		FY 1987		Total	
	FX	LC	FX	LC	FX	LC	FX	LC	FX	LC	FX	LC	FX	LC
A. Technical Assistance	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B. Training	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C. Commodities - Vehicles	58	61	-	396	-	475	-	570	-	684	-	821	58	3,007
D. Other														
1. Research & Evaluation	-	-	-	480	-	503	-	584	-	701	-	841	-	3,109
2. Supp. Devel. Fund	-	-	-	500	-	500	-	500	-	500	-	500	-	2,500
TOTAL	58	61	-	1,376	-	1,478	-	1,654	-	1,885	-	2,162	58	8,616





## BACKGROUND NOTES ON ECONOMIC ANALYSIS

Both the benefits and cost estimates reflect 1982 prices. No inflation factor has been applied. Shadow pricing of foreign exchange and labor for purposes of these analyses was considered unnecessary. The country's foreign exchange rate essentially reflects market supply and demand as reflected in the free market rate of the Pakistani rupee. There were no indications of wage rates being at variance with freely established market rates for construction workers.

### 1. Bara Irrigation Scheme

Water savings estimates and new acreage brought into cultivation as a result of savings were based on engineering and water budget estimates. Reduction in water losses from 37.7 percent with the present system to 5.2 percent with the new system would result in provision of sufficient water for an additional 40,000 crop acres: 20,000 as a result of watercourse construction over a period of 4 years and another 20,000 as a result of irrigation water management training over a period of 10 years.

Direct benefits were based on estimated net revenues from agricultural production in irrigated areas of Khyber Agency which consist entirely of the lands served by this Scheme. Production cost data were available for only the major crops of the area: wheat, maize, onion, and sugarcane. For other crops, an average of the returns on wheat, maize and sugarcane was used. The weighted net return from a crop acre has been worked out on the assumption that the current cropping pattern will be followed during the economic life of the watercourses.

Project cost data were based mainly on engineering estimates provided by FATA-DC. The categories of costs included were watercourse construction, water management training, land levelling and watercourse maintenance. Land costs were not included because the land to be irrigated is not currently used. The opportunity cost of the new land is negligible if not zero.

### 2. Tubewell Improvement

Although the locations of the 20 tubewells have not yet been identified, many are likely to be located in the Wana Plain of South Waziristan Agency. Therefore, the analysis is based on cropping patterns and production cost data for that particular area.

Sixty percent of the cultivated land in Wana Plain is under orchards, 99 percent of which are apple. The other crops are maize, wheat and fodder. Production cost data and net returns from an apple orchard are unusual in that, in the first 7 years of the plant's life, there is no return and only costs are incurred, and return varies over the years depending upon the maturity of the fruit plants. Based on discussions with agronomists, it has been assumed that when a one-year old tree is planted, there is no fruit for the first 6 years, 50 percent production during the 7th and 8th years, 100 percent production in the 9th thru 19th years and 60 percent in the 20th thru 24th year. The cost of production also varies due to less or more labor used for picking. Since life of the tubewells is 10 years, the net revenues data for the first 10 years has been averaged out to get net return on apple orchards. The farmgate prices are as given by the Extra Assistant Director of Agriculture, South Waziristan Agency. For apples a weighted price of Rs 1,945 per Mt was worked out based on 5 percent losses, 20 percent local sale and 75 percent to contractors at different rates.

Production cost data for fodder crop was not available. Based on the average yield in South Waziristan, gross returns on this crop were calculated. Net return was calculated by assuming that costs equal 50% of gross returns. Cropped acreage is only 100 acres. Production cost data for all the crops did not include the cost of land and water. Based on existing cropping patterns and estimated net revenues, a weighted net return of Rs 7,632 per hectare or Rs 3,088 per acre was calculated and used to derive the total benefits.

The cost estimates include costs to be incurred under this component, land levelling, watercourse construction, and operation and maintenance costs.

Fifty percent of the tubewells will be installed in the first year of the project and the rest in the second. With the use of improved screens and completion methods (i.e. continuous wire screens, pressure jetting, and the like), at least 20 percent more water could be discharged from a given capacity of tubewell, which means that 20 percent more area could be irrigated. Normally a 1 cusec discharge can irrigate 150 acres of land. In this case, it would be 180. An average discharge of 0.625 cusec per tubewell has been assumed based on the current average in the Tribal Areas. In all, 2,250 acres of new land will be irrigated.

### 3. Sadda-Marghan Road

One half of the cultivated land in the Ali Sherzai area of 8,000 acres was assumed to fall within the area of influence of the road. The land was assumed to be successfully

cultivated on a double crop basis. In addition, it was assumed in year 3 of the project that an additional 2,525 acres would be brought under cultivation as a result of the implementation of two irrigation schemes by FATA-DC.

Based on data collected for Kurram Agency as a whole, Tables 1-4 provide the basis for estimates of net revenue per hectare weighted by crop for summer (Kharif) and winter (Rabi) crops. The value for orchard products was the average net revenue over the life of the tree. The annual net weighted revenue per hectare was estimated at Rs 2,798 or Rs 1,133 per acre. It was assumed that the change in agricultural net revenue attributable to lower transport costs will be 10 percent in years 2-7, 5 percent in years 8-13, and zero in years 14-20.

Average daily traffic of non-agricultural vehicles is assumed to be 10 trips of 16 miles each per day. Based on data from one of the World Bank studies, cost savings which include items such as fuel, tires, repair costs and drivers' salaries were assumed to be about 8 Rs per mile. Traffic was assumed to grow at a rate of 10 percent per annum.

The employment generated for construction of the road was also included as a benefit. Given the seasonal nature of employment and the relative absence of surplus labor in the area, it was assumed that the opportunity cost of one-half of the unskilled labor employed will be zero.

Construction costs in the first two years, including commodities, construction and engineering expenses exclusive of duties and taxes, were estimated at Rs 7,278 thousand each year. Maintenance begins in year 2 on one half the road and in year 3 on the full road. Major maintenance is undertaken in years 9 and 16. The road's life is estimated at 20 years.

TABLE 1  
 CROPPING PATTERN  
 BARA IRRIGATION SCHEME  
1980-81

Crop by Season	Acres	Percentage
<u>Kharif</u> <sup>a/</sup>		
Maize	6,936	27.3
Sugarcane	269	1.1
Other Crops	166	0.6
	<u>7,371</u>	<u>29.0</u>
<u>Rabi</u> <sup>b/</sup>		
Wheat	14,624	57.6
Onion	1,510	6.0
Other Crops	<u>1,874</u>	<u>7.4</u>
	18,008	71.0
 Total Crop Acres	 25,379	 100.0

a/Kharif = Wet season crops (mid-April to mid-October)  
b/Rabi = dry season crops (mid-October to mid-April)

SOURCE: Director of Agriculture ( FATA ) NWFP, Peshawar.

TABLE 2

NET REVENUE PER HECTARE  
BARA IRRIGATION SCHEME

Crop	Percent of Total Crop Acres (%)	Gross Revenue per Hectare (Rs )	Cost per Hectare (Rs )	Net Revenue per Hectare (Rs )
Wheat	57.6	3,048	2,364	684
Maize	27.3	2,540	2,008	532
Onion	6.0	28,620	2,364	25,927
Sugarcane	1.1	5,425	4,160	1,265 <sup>a/</sup>
Other Crops	8.0	-	-	827

a/ The other crops are: fruits, vegetables, shaftal (fodder), oilseeds, barley, and potato. Net revenue per hectare was derived by taking the average for wheat, maize and sugarcane crops.

Weighted Net Revenue per crop Hectare = Rs 2,174.92  
 Weighted Net Revenue per crop Acre = Rs 880.00

SOURCE: Estimates based on data from the Extra Assistant Director of Agriculture(EADA), Khyber Agency, and field visits.

TABLE 3

BARA IRRIGATION SCHEMEProject Costs  
(In Rs 000)

Year	Watercourse Improvement	Watercourse Maintenance	Water Management Training	Land Levelling	Total Cost
1	6,888	-	4,656	5,833	17,377
2	6,888	675	3,638	5,833	17,034
3	6,888	1,350	3,611	5,833	17,682
4	6,888	2,025	178	5,833	14,924
5	-	2,700	178	1,667	4,545
6	-	2,700	72	1,667	4,439
7	-	2,700	72	1,667	4,439
8	-	2,700	72	1,667	4,439
9	-	2,700	72	1,667	4,439
10	-	2,700	72	1,667	4,439
11	-	2,700	-	-	2,700
12	-	2,700	-	-	2,700
13	-	2,700	-	-	2,700
14	-	2,700	-	-	2,700
15	-	2,700	-	-	2,700
16	-	2,700	-	-	2,700
17	-	2,700	-	-	2,700
18	-	2,700	-	-	2,700
19	-	2,700	-	-	2,700
20	-	2,700	-	-	2,700

TABLE 4  
BARA IRRIGATION SCHEME

New Crop Acreage

Year	New Crop Acreage Attri- butable to Water course Construction	New Crop Acreage Attri- butable to Water Management Training	Total New Acreage
1	-	-	-
2	5,000	2,000	7,000
3	5,000	2,000	7,000
4	5,000	2,000	7,000
5	5,000	2,000	7,000
6	-	2,000	2,000
7	-	2,000	2,000
8	-	2,000	2,000
9	-	2,000	2,000
10	-	2,000	2,000
11	-	2,000	2,000
<b>Total</b>	<b>20,000</b>	<b>20,000</b>	<b>40,000</b>

TABLE 5  
BARA IRRIGATION SCHEME

Project Benefits  
(In Rs 000)

Year	Annual Net Revenue from New Acreage Attributable to Watercourse Construction	Annual Net Revenue from New Acreage Attributable to Water Management Training	Annual Total Net Revenue
1	-	-	-
2	4,400	1,760	6,160
3	8,800	3,520	12,320
4	13,200	5,280	18,480
5	17,600	7,040	24,640
6	17,600	8,800	26,400
7	17,600	10,560	28,160
8	17,600	12,320	29,920
9	17,600	14,080	31,680
10	17,600	15,840	33,440
11	17,600	17,600	35,200
12	17,600	17,600	35,200
13	17,600	17,600	35,200
14	17,600	17,600	35,200
15	17,600	17,600	35,200
16	17,600	17,600	35,200
17	17,600	17,600	35,200
18	17,600	17,600	35,200
19	17,600	17,600	35,200
20	17,600	17,600	35,200

TABLE 6  
TUBEWELL IMPROVEMENT  
WANA PLAIN (SOUTH WAZIRISTAN AGENCY)  
CROPPING PATTERN  
(1980-81)

Crop by Season	Acreage	Percentage
<u>Khharif</u>		
Maize	1,700	37.8
Orchard <sup>a/</sup>	2,700	60.0
Fallow	100	2.2
	4,500	100.00
<u>Rabi</u>		
Orchard	2,700	36.9
Wheat	1,650	60.0
Fodder	100	2.2
Fallow	50	1.1
	4,500	100.00

a/ Whole year crop.

Source: Extra Assistant Director of Agriculture (EADA),  
South Waziristan Agency

TABLE 7  
GROSS REVENUE, COSTS AND NET REVENUES  
PER HECTARE  
SOUTH WAZIRISTAN AGENCY

Crop by Season	Percent Area Under Crop	Revenue (Rs )	Costs (Rs )	Net Revenues (Rs )
<u>Kharif</u>				
Maize	37.8	2,966	1,343	1,623
Apple	60.0	16,138	5,341	10,797
Fallow	2.2	-	-	-
	100.0			
<u>Rabi</u>				
Wheat	36.7	3,164	1,775	1,389
Apple	60.00	(taken in Kharif)		-
Fodder	2.2	-	-	1,367 <sup>a/</sup>
Fallow	1.1	-	-	-
	100.0			

a/ Based on a yield of 5.1 MT/Ha, Rs 534 MT and assuming costs at 50 percent of the Gross Revenues.

Weighted Net Return Per Hectare

Kharif	Rs	7,091.69	
Rabi		539.84	
Total	Rs	7,631.53	or Rs 3,088 per acre

SOURCE: Estimates based on data from EADA, South Waziristan Agency and field visits.

Kharif = Wet Season Crops (mid-April to mid-October)

Rabi = Dry Season Crops (mid-October to mid-April)

**TABLE 8**  
**TUBEWELL IMPROVEMENT**  
**PROJECT COSTS**

(In Rs 000)

Year	Tubewell Installation	Land Levelling <sup>a/</sup>	Watercourse Construction <sup>b/</sup>	Operation & Maintenance Costs	Total Cost
1	12,383	1,406	431	-	14,220
2	6,671	1,406	431	280	8,508
3	357	-	-	560	917
4	-	-	-	560	560
5	-	-	-	560	560
6	-	-	-	560	560
7	-	-	-	560	560
8	-	-	-	560	560
9	-	-	-	560	560
10	-	-	-	560	560
11	-	-	-	560	560
12	-	-	-	280	280

a/ 5 Hours of bulldozing per acre @ Rs 250/hour.

b/ Rs 383 per acre; 1125 acres in the first year and 1125 in the second.

TABLE 9  
EXISTING CROPPING PATTERN  
KURRAM AGENCY

Crop by Season	Acres	Percentage
<u>KHARIF</u>		
Rice	12,000	46.3
Maize	10,000	38.6
Vegetable	800	3.1
Groundnut	400	1.5
Pulses	1,500	5.8
Orchard	1,200	4.7
	<u>25,900</u>	<u>100.0</u>
<u>RABI</u>		
Wheat	25,000	96.8
Vegetable	400	1.6
Barley	400	1.6
	<u>25,800</u>	<u>100.0</u>

SOURCE: Extra Assistant Director of Agriculture, Kurram Agency.

TABLE 10

NET REVENUE PER HECTARE IRRIGATED LAND  
KURRAM AGENCY

Crop by Season	Percent Area under Crop	Gross Revenue Per Hectare (Rs.)	Costs (Rs )	Net Revenue Per Hectare (Rs )
<u>KHARIF</u>				
Rice	46.3	5,024	3,590	1,434
Maize	38.6	2,722	2,284	438
Vegetable	3.1	19,756	11,378	8,018
Groundnut	1.5	9,378	4,555	4,823
Pulses	5.8	2,952	2,426	536
Orchard	4.7			23,009
	<u>100.0</u>			
<u>RABI</u>				
Wheat	96.8	2,955	2,552	403
Vegetable	1.6	19,756	11,378	8,018
Barley	1.6	2,589	1,926	663
	<u>100.0</u>			

Weighted Net Revenue Per Hectare

KHARIF = Rs 2,266.56  
RABI = Rs 531.90

Annual Net Revenue

= Rs 2,798.46 per Hectare  
or = Rs 1,132.52 per Acre

SOURCE: Estimates based on data from the Extra Assistant Director Agriculture (EADA), Kurram Agency and field visits.

TABLE 11COSTS OF THE SADDA - MARGHAN ROAD

(In Rs 000)

Year	Investment	Maintenance	Total Cost
1	7,278	-	7,278
2	7,278	60	7,338
3	-	120	120
4	-	120	120
5	-	120	120
6	-	120	120
7	-	120	120
8	-	120	120
9	-	120	120
10	-	120	120
11	-	120	120
12	-	120	120
13	-	120	120
14	-	120	120
15	-	120	120
16	-	120	120
17	-	120	120
18	-	120	120
19	-	120	120
20	-	120	120

TABLE 12  
SADDA - MARGHAN ROAD  
ESTIMATED COSTS AND BENEFITS

(In Rs 000)

Year	Annual Net Increased Revenue from Crop Production	Annual Cost Savings of Non-Agricultural Vehicles	Annual Construction Employment	Annual Benefits
1	-	-	520	520
2	453	234	525	1,207
3	1,238	494	-	1,732
4	1,362	544	-	1,906
5	1,498	598	-	2,096
6	1,648	658	-	2,306
7	1,813	724	-	2,537
8	1,903	796	-	2,699
9	1,998	876	-	2,874
10	2,098	963	-	3,061
11	2,203	1,059	-	3,262
12	2,313	1,165	-	3,478
13	2,429	1,282	-	3,711
14	2,429	1,410	-	3,839
15	2,429	1,551	-	3,980
16	2,429	1,706	-	4,135
17	2,429	1,877	-	4,306
18	2,429	2,065	-	4,494
19	2,429	2,271	-	4,700
20	2,429	2,498	-	4,927



**UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT  
MISSION TO PAKISTAN**

Cable : USAIDPAK

**HEADQUARTERS OFFICE  
ISLAMABAD**

THE DIRECTOR

USAID/PAKISTAN MISSION DIRECTOR'S WAIVER FOR A.I.D.  
PAYMENT OF INTERNATIONAL PARTICIPANT TRAVEL COSTS

A.I.D. Handbook 10, Chapter 15B1, provides that the cost of international travel, including incidental costs en route as well as the cost of travel between the participant's city and the points of departure and return in the participant's home country, shall be paid by the host government or other sponsor unless, in the case of Mission-funded programs, the Mission Director has justified and authorized full or partial waivers and has so notified S&T/IT.

Training and institution-building are important components of the \$1.625 billion economic assistance program negotiated between the Governments of the U.S. and Pakistan. USAID/Pakistan's experience, however, has been that the Government of Pakistan (GOP), due to serious foreign exchange and budgetary constraints, has been historically unable to fund international travel costs for short-term training programs. The consequence has been that Pakistani participants have, on numerous occasions, been denied worthwhile and much needed training, inhibiting the achievement of project targets.

I have carefully reviewed the advisability of requiring full GOP funding for travel costs for participant training of one year or less and the alternative of funding such travel with grant and loan funds provided through USAID/Pakistan to the GOP. Recognizing the objectives of many of our projects and the fact that project success will be enhanced by encouraging opportunities for short-term training, I have determined that it would be prejudicial to U.S. interests to require that the GOP pay the entire international participant travel costs for training programs of one year or less.

Therefore, on all Mission-funded training programs up to and including one year, USAID/Pakistan shall be responsible for the entire cost of the round-trip economy class air ticket and other necessary incidental costs en route. Where a FIO/P has been originally written for a program of one year or less, but, after the participant has initiated his or her program, the program is extended so that it exceeds one year in total, USAID/Pakistan shall also fund the round-trip ticket. The justification for funding programs that are extended is to minimize administrative problems which are otherwise likely to occur.

On the basis of the above justification and pursuant to Handbook 10, Chapter 15B1a, I, Donor M. Lion, principal officer of the Agency for International Development in Pakistan, do hereby waive the requirement that the host government fully fund international travel for training courses of one year or less and authorize payment with USAID/Pakistan loan and grant funds for travel costs as specified above.

*Donor M. Lion*

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Donor M. Lion  
Director  
USAID/Pakistan

*March 17, 1982*

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Date

LIST OF COMMODITIES FOR THE  
WATER RESOURCES, ROADS, AND  
SUPPORTING ACTIVITIES COMPONENTS

<u>I. Water Resources Component</u>	<u>Estimated CIF Cost(In \$)</u>
<u>A. Vehicles and Spares</u>	
3 AMC Wagoneers (4 x 4)	57,750
1 AMC J-20 Pickup	31,320
2 1½-ton Trucks	62,640
Total	<u>151,710</u>
 <u>B. Equipment</u>	
1 Electrical Resistivity Unit, 0-10,000 Ohms	41,200
1 Reflection Seismograph Unit, 12-channel	61,800
1 Soil Test Unit	41,200
Meteorology-Hydrology Gauging Equipment:	30,900
4 Rain Guages	
2 Stage Recorders	
2 Current Meters	
1 Diesel Turbine Pump Test and Well Jetting Unit	77,250
20 Well Screens	126,800
20 Well Recorders	41,200
1 Stream Flow Meter, 1 Speedy Moisture Meter (Large size), 1 Ely Volumeter, 10 Tile Spades, other miscellaneous tools and equipment, survey equipment, generators, local flumes and the like to be determined after the arrival of the resident advisors.	37,500
Total	<u>457,850</u>

II. Roads Component Estimated CIF Cost (In \$)

Equipment

2 140 H.P. Bulldozers 445,000

6 Agricultural Tractors 178,000

2 Vibratory Compactors (towed) 272,000

Total 895,000

III. Supporting Activities Component

Vehicles and Spares

3 AMC Wagoneers (4 x 4) 57,750

Total Commodities 1,562,310

No 1(I4)US.VI/81.  
GOVERNMENT OF PAKISTAN  
MINISTRY OF FINANCE AND  
ECONOMIC AFFAIRS  
(ECONOMIC AFFAIRS DIVISION)Telegram : ECONOMIC  
Telex : ECDIV : 05-634

Islamabad, the 25th Mar 1972.

SECRETARY

Dear Mr. Lion,

The Government of Pakistan shares with the Government of the United States an awareness of and concern for the serious consequences which result from the illicit growing and processing of opium poppy into heroin. The Government of Pakistan, working with the provincial authorities, has taken several steps to eradicate opium poppy cultivation and to curtail the processing of opium into heroin. The effort will continue.

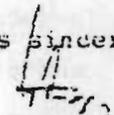
The Government of Pakistan is fully cognizant of the U.S. Congressional and public concern which is reflected in Section 126 of the U.S. Foreign Assistance Act requiring U.S. assistance to "...give priority consideration to programs which would help reduce illicit narcotics cultivation by stimulating broader development opportunities." On behalf of the Government of Pakistan, may I assure you that assistance provided by the Agency for International Development will in no manner, directly or indirectly, be allowed to abet opium poppy cultivation, opium distribution or processing of opium into heroin.

The Government of Pakistan is in full accord with the position of the U.S. Government as set forth in its legislation and, further, acknowledges the desirability of, wherever appropriate, linking the

provision of U.S. assistance to the efforts of the Government of Pakistan to discourage illicit poppy cultivation, opium distribution and the processing of opium into heroin.

Please be assured of the Government of Pakistan's continued best efforts in this area of mutual concern.

Yours sincerely,



(Ejaz Ahmad Nakh)

Mr. Donor M. Lion,  
Director,  
Agency for International  
Development,  
Islamabad