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# Kurram Tangi Dam Construction



## Vulnerable Tribes Plan

December, 2013

This publication was produced for review by the  
United States Agency for International Development.  
It was prepared by MWH under contract AID-391-C-13-00002

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## Map to Kurram Tangi Dam Project Documents

Shown below is the suite of documents submitted to USAID under Contract AID-391-C-13-00002 for the KTDP. This report is shaded in red in order to show its relationship to the full set of documentation.

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### ENVIRONMENTAL ASSESSMENT

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VOLUME I: MAIN REPORT

VOLUME II: PROJECT ECONOMIC BENEFITS

VOLUME III: MAPS

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### ENVIRONMENTAL MITIGATION AND MONITORING PLAN

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MAIN REPORT

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ANNEX II: WATERSHED MANAGEMENT PLAN

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ANNEX IV: FISHERIES MANAGEMENT PLAN

ANNEX V: EMERGENCY PREPAREDNESS PLAN

ANNEX VI: INSTRUMENTATION AND MONITORING PLAN

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### LAND ACQUISITION AND RESETTLEMENT

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RESETTLEMENT POLICY FRAMEWORK

RESETTLEMENT ACTION PLAN (COMPONENT I)

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### CULTURAL HERITAGE PRESERVATION PLAN

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### VULNERABLE TRIBES PLAN

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### GENDER PLAN

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### KEY SUPPORTING TECHNICAL REPORTS

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SUPPLEMENTAL REPORT ON GEOLOGY

SUPPLEMENTAL REPORT ON GEOTECHNICAL ASPECTS

SUPPLEMENTAL REPORT ON SEISMIC HAZARD

SUPPLEMENTAL REPORT ON HYDROLOGY

SUPPLEMENTAL REPORT ON CLIMATE CHANGE

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All documents may be read as stand-alone documents, but the reader should be aware of the full set of documents available. Any one document may reference other documents in the suite in order to avoid duplication.

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# **Kurram Tangi Dam Construction Vulnerable Tribes Plan**

USAID Environmental Assessment of Kurram Tangi Dam Construction

Contract Number: AID-391-C-13-00002

From MWH Americas, Inc.

To USAID/Pakistan

December 2013

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The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

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### List of Acronyms

<b>Acronym</b>	<b>Term</b>
ACE	Associated Consulting Engineers
AOI	Area of Influence
APWA	All Pakistan Women Association
CA	Cultivable Command Area
CEDAW	Convention on the Elimination of Discrimination Against Women
CFR	Code of Federal Regulations
CFRD	Concrete Faced Rockfill Dam
CHPP	Cultural Heritage Protection Plan
DEM	Digital Elevation Model
EA	Environmental Assessments
EIA	Environmental Impact Assessment
EMMP	Environmental Mitigation and Monitoring Plans
ESIA	Environmental and Social Impact Assessment
FATA	Federally Administered Tribal Areas
FORT	Frontier Organization for Reforms and Transformation
FR	Frontier Region
FCR	Frontier Crime Regulations (1901)
FWF	Fatima Welfare Foundation
FWO	Frontier Works Organization
GAD	Gender and Development Framework
GCISC	Global Change Impact Study Center
GIS	Geographic Information System
GoP	Government of Pakistan
GPS	Global Positioning System
HDI	Human Development Index
IEE	Initial Environmental Examination
ICOLD	International Commission on Large Dams
IUCN	International Union for Conservation of Nature
IWASRI	International Water Logging and Salinity Research Institute
IWMI	International Water Management Institute
JNT	Jawad Nazir Trust
KADO	Khushal Awareness and Development Organization
KP or KPK	Khyber Pakhtunkhwa
KTDC	Kurram Tangi Dam Consultants
KTDP	Kurram Tangi Dam Project
M and E	Monitoring and Evaluation
MDE	Maximum Design Earthquake
MMP	Mott MacDonald Pakistan
MWH	MWH Global, Inc. or MWH, Inc.
NCSW	National Commission on the Status of Women-Pakistan
NESPAK	National Engineering Services Pakistan

Kurram Tangi Dam Construction  
Vulnerable Tribes Plan

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NEQS	National Environmental Quality Standards
NGO	Non-governmental Organization
OBE	Operating Basis Earthquake
PAP	Project Affected Persons
Pak-EPA or PEPA	Pakistan Environmental Protection Agency
PID	Provincial irrigation Department
PMD	Pakistan Meteorological Department
PMF	Probable Maximum Flood
PMP	Probable Maximum Precipitation
PMS	Pakistan Meteorological Services
PSHA	Probabilistic Seismic Hazard Analysis
RLACAP	Resettlement Land Acquisition and Compensation Action Plan
REA	Rapid Environmental Assessment
ROD	Road Open Day
SCF	Standard Conversion Factor
SEE	Safety Evaluation Earthquake
SSP	Soil Survey of Pakistan
SUPARCO	Pakistan Space and Upper Atmosphere Research Commission
SWM	Site Waste Management
SWR	Shadow Wage Ratio
TESCA	Tribal Area Electric Supply Corporation
TGP	Towards Gender Party
UET	University of Engineering and Technology
UN	United Nations
UNEP	United Nations Environment Program
USAID	United States Agency for International Development
USAID/Pak	United States Agency for International Development/Pakistan
USBR	United States Bureau of Reclamation
USDA	United States Department of Agriculture
USG	United States Government
USGS	United States Geological Survey
VTP	Vulnerable Tribes Plan
WAPDA	Water and Power Development Authority
WWF-P	World Wide Fund for Nature – Pakistan

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# Vulnerable Tribes Plan

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## EXECUTIVE SUMMARY

Experience from all over the world including many projects in Pakistan shows that:

- The physical and economical relocation of vulnerable tribes is particularly complex and may have significant adverse impacts on their cultural identity and livelihoods.
- Significant in-migration of job-seekers, workers and security personal from different cultural backgrounds exposes tribal societies to a speed of modernization they often cannot cope with in their totality.
- The transformation of transhumant pastoralists and small scale rain-fed agriculturalists into large irrigated farmers not only contains significant potentials for enhancing the standards of living and tribal livelihoods, but it also has proven to miss these goals and result in people's impoverishment and aggravated marginalization when not managed carefully and in line with cultural preferences and traditions.

To avoid such deleterious impacts, the Constitution of Pakistan has granted the most vulnerable tribes of Pakistan a kind of semi-autonomy where they can govern their territory according to their own customary rules and regulations. The Kurram Tangi Dam Project (KTDP) will impact on two of these areas: North Waziristan and the Frontier Region Bannu (FR Bannu). Normally the existing rules and regulations should provide sufficient protection for tribal societies to defend their rights and assure sufficient benefits from external interventions. However, the on-going conflicts in nearby Afghanistan which have led to the abuse of the traditional hospitality and , have transformed North Waziristan into a safe haven for jihadists and al-Qaeda operatives, as well as the overall development process, challenge the safeguards established by the Constitution of Pakistan.

To bridge these challenges, this Vulnerable Tribes Plan (VTP)

- identifies all vulnerable tribes potentially affected by the KTDP;
- provides measures to ensure that the project fully respects their dignity, human rights, economies, and culture;
- develops guidelines to avoid potentially adverse effects on these tribes or
- when avoidance is unfeasible, to minimize, mitigate, and compensate for such effects; and,
- ensures that the vulnerable tribes receive benefits.

Vulnerable tribes are distinct, social and cultural groups possessing the following characteristics in varying degrees:

- self-identification as distinct cultural group and recognition of this identity by others;
- collective attachment to geographically distinct habitats or ancestral territories in the project area and to the natural resources in these habitats and territories;
- customary cultural, economic, social, or political institutions that are separate from those of the dominant society and culture; and
- a separate language, often different from the official language of the country or region.

Within the KTDP footprint, the vulnerable tribes are the Wazirs in the Mir Ali, Spinwam and Shewa Tehsils of North Waziristan as well as in the central part of the FR Bannu. They belong mostly to various clans of the Thuri Khel and Kabul Khel sub-tribes as well as in smaller numbers to the Ahmadzai, Momand Khel and Asperka sub-tribes. Their total number within the lowest administrative unit is estimated to be around 190,000 people, while the number of Wazir directly affected by the project is estimated to be around 120,000.

The project is expected to offer significant potentials to enhance livelihoods of the Wazirs through new and enhanced irrigation systems, but these benefits comes at a significant price and will only become available three to four years after the following adverse impacts occur:

- More than 10 percent of the Wazir will lose their houses and more than 60 percent their present landholding. Beside the normal challenges associated with such massive land acquisition and resettlement, the relocation of entire settlements of tribal people entails specific challenges as the affected clans do not accept to relocate to territories of different, sub-tribes or clans and/or the resettlement site proposed by WAPDA.

- KTDP Component 2 requires the resettlement of 14,000 people and takes productive land from more than 22,000 people, while offering few or no benefits to the affected Wazirs.
- The resettlement and land allocation process in the Command Areas contains high risks of conflicts between the various clans over conflicting claims and outstanding grievances, but also between the Wazirs and outsiders over benefit sharing, land allocation and decision making:
  - Presently there is no commitment or indication that the Sheratalla and Spaira Ragma Command Areas are reserved for Wazirs from the affected areas.
  - There are diverging interests between the different resource users, more specifically between a) those using the Sheratalla Command Areas, those using the Spaira Ragma Command Areas, the people downstream of the Kaitu weir and WAPDA, which aims to use the water for hydropower generation, but has no plans about how to manage water resources in a way that establishes a sound balance between the different interests.
- Construction will create employment opportunities and the Wazirs have requested to benefit from that, but presently no strategies are in place to maximize local benefit.
- During construction, there will be an influx of more than 2,000 workers, security guards and military personal from different cultural background. While this could be a chance to integrate Wazir into the workforce to overcome mutual resentments, no strategy for that has been established.
- Experience has also shown that the transformation of transhumant pastoralists to irrigation farming is extremely challenging for tribal societies as their traditional livelihoods and resource use are inextricably linked to their culture and decision making.

To address and mitigate these adverse impacts as well as to assure an equitable benefit sharing the following action shall be implemented:

Issue	Vulnerable Tribes Plan for KTDP (Budget 40m Rupees)
Assure the participation of affected Wazirs in the decision making process	Sensitize all clans about the opportunities of the VTP
	Train and assist the different clans to establish and operate the various committees
	Establish code of conduct for camps, workers
	Integrate tribes into decision making of design
	Integrate tribes in Command Areas development and management
	Train WAPDA and contractor of FCR.
Resolve land disputes	Facilitate process and document results
	Support the process through surveys.
Local content development program	Demand and supply side analysis of labor force, goods and services
	Development of training curricula
	Implementation of training
Land acquisition	Pay particular attention to the needs of the Wazir
	Provide training in irrigated agriculture
Studies	Commission study on optimal water use to balance benefits
	Commission study on production based benefit sharing system for hydropower project
	Commission study on how to enhance FATA regulations to assure benefit sharing
Rural electrification	Frontend engineering design study
	Implement project

It is assumed that if the measures elaborated in this VTP are implemented, KTDP will be able to deliver on its objective and

- reduce poverty for vulnerable tribes in one of the poorest regions of Pakistan,
- promote an effective management and utilization of land and water resources, which offers benefits to the entire population,
- foster the full respect for the dignity, rights and culture of the Wazirs,
- assure that the Wazirs receive culturally appropriate benefits equal to any other groups
- protect the Wazir from suffering adverse effects, thus
- comply with international standards.

## I INTRODUCTION

Experience from all over the world including many projects in Pakistan shows that the physical and economical relocation of vulnerable tribes is particularly complex and may have significant adverse impacts on their cultural identity and livelihoods. Therefore, international best practice suggests exploring alternative project designs to avoid at least the physical relocation of vulnerable tribes and in exceptional circumstances where this is not feasible – such as for the reservoir areas of the Kurram Tangi Dam Project (KTDP) -- to carry out such relocations only after the relocation package including the resettlement site(s) have obtained the free, prior, and informed consent of the affected tribal peoples.

Experience similarly shows that significant in-migration of job-seekers, workers and security personal from different cultural backgrounds exposes tribal societies to a speed of modernization they often cannot cope with in their totality. Finally, to transform transhumant tribal livelihoods and small scale rain-fed agriculture into large irrigated farming – as intended by KTDP – contains significant potentials for enhancing the standards of living and tribal livelihoods. But it also has proven too often miss these goals and result in their impoverishment and aggravated marginalization when not managed carefully and in line with cultural preferences and traditions.

One of the underlying reasons for these risks is that identities and cultures of vulnerable tribes are inextricably linked to the lands on which they live, the natural resources on which they depend and the feeling of being free from any external rulers. In many countries, vulnerable tribes are among the most marginalized and vulnerable segments of society, because their economic, social, and legal status often limits their capability to defend their interests in and rights to lands, territories, and other productive resources, exposes them to different types of risks and levels of impacts and/or restricts their ability to participate in and benefit from development.

To avoid such deleterious impacts, the Constitution of Pakistan has ruled that unless specifically enacted by the President, the laws of Pakistan do not apply to the Federally Administered Tribal Areas (FATA), which includes the Frontier Region Bannu (FR Bannu) and North Waziristan (Constitution 1973; Article 246b) i.e. granting the most vulnerable tribes of Pakistan a kind of semi-autonomy where they can govern their territory according to their own customary rules and regulations.

Normally the rules and regulations of the FATA provide sufficient protection for tribal societies to defend their rights and assure sufficient benefits from external interventions. However, the on-going conflicts in nearby Afghanistan (including the abuse of the traditional hospitality) have transformed North Waziristan into a safe haven for jihadists and al-Qaeda operatives. In addition, the overall development process challenges the safeguards established by the Constitution of Pakistan.

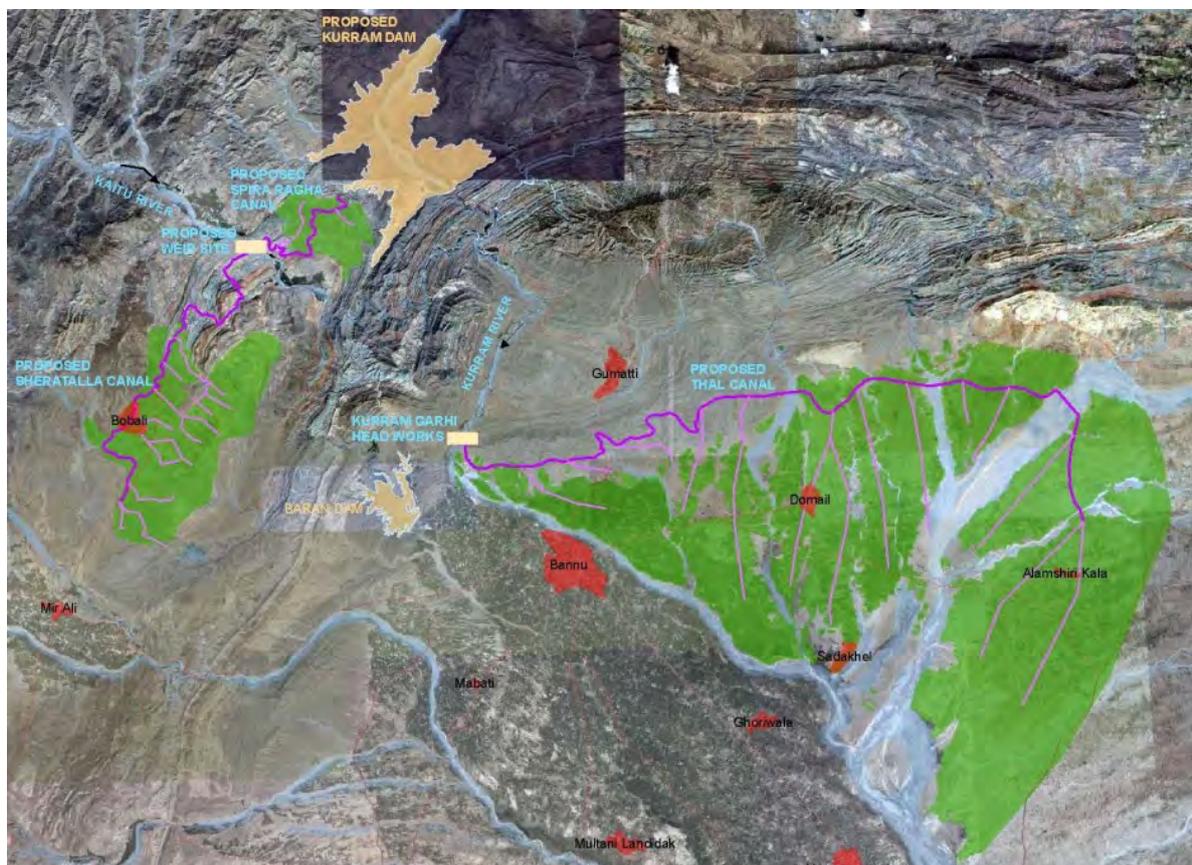
This changing balance is experienced through an increasing presents of Pakistan security services in North Waziristan and the FR Bannu, as well as revisions of the legal framework. The 2011 revision of the Frontier Crime Regulations (1905) has enhanced the influence of the Government of Pakistan in the FATA, and ruled, for example, that land acquisition no longer need be achieved through negotiated settlements between willing buyers and willing sellers. Rather, certain elements of the Land Acquisition Act (1895), which rules land acquisition in the rest of Pakistan, now also apply partly to the FATA.

The objective of this Vulnerable Tribes Plan (hereinafter VTP) is therefore

- (a) to identify all vulnerable tribes potentially affected by the KTDP,
- (b) to ensure that the project fully respects their dignity, human rights, economies, and culture, (c) to develop guidelines to avoid potentially adverse effects on these vulnerable tribes or
- (d) when avoidance is not feasible, minimize, mitigate, or compensate for such effects; and,
- (e) ensure that the vulnerable tribes receive social and economic benefits that are culturally appropriate and gender as well as inter-generationally inclusive.

## Kurram Tangi Dam Construction Vulnerable Tribes Plan

Consequently, this VTP (a) screens the area of impact of the KPDP to identify vulnerable tribes, (b) assesses potential impacts on them, (c) outlines processes and procedures to avoid adverse impacts where feasible and (d) establishes a plan to minimize and mitigate any unavoidable impacts and (e) outlines measures to assure an equal participating of vulnerable tribes in the benefits of the project.



**Map I-1: The project area with the reservoir in orange and the command areas in green**

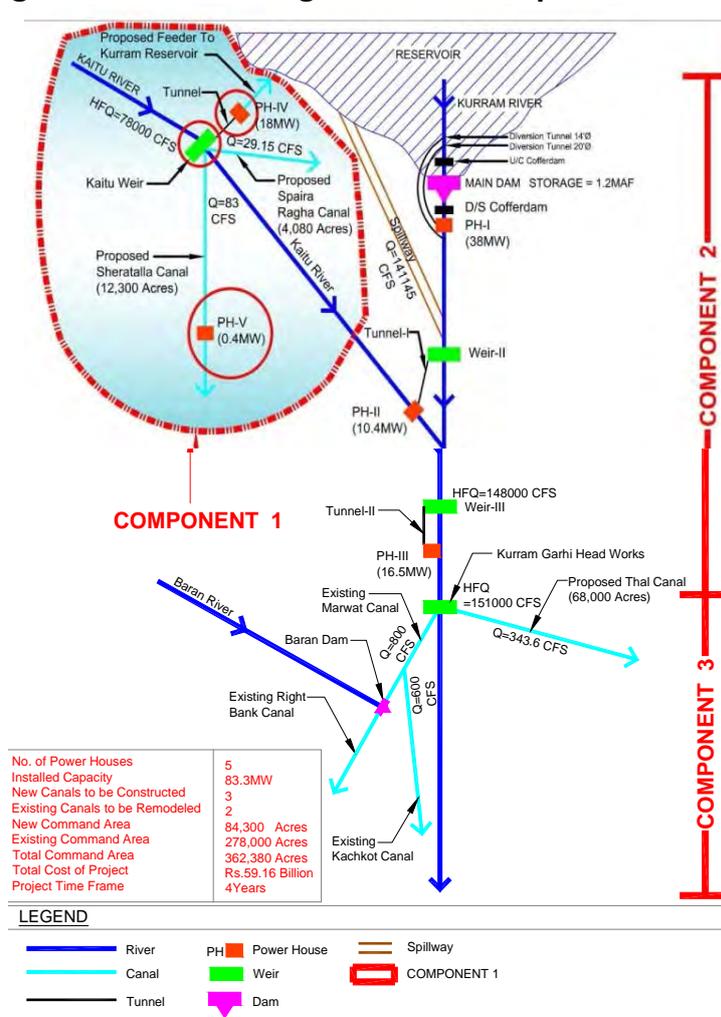
## 2 PROJECT DESCRIPTION AND AREA OF IMPACT

KTDP aims: i) to increase agricultural production in one of the most underdeveloped regions of Pakistan through the comprehensive development of available land and water resources by establishing new canals and command areas, remodelling and/or improving existing ones and ii) to generate hydropower, through the construction of two dams, a weir on the Kaitu River and subsequently a large dam on the Kurram Tangi river.

The KTDP will be implemented in three stages over at least 10 years, as follows:

- **Component 1**, Tribal Area Development, will build a weir on the Kaitu River for hydropower and irrigation of two proposed perimeters, Spira Ragha to the north and Sheratalla to the south. The Component includes also two powerhouses (IV and V), canals, transmission lines and roads linking these elements as well as a transmission line from powerhouse 4 to the Domail substation near Bannu. These investments are scheduled to commence in 2014.
- **Component 2**, Kurram Tangi Dam, will build a large dam and two smaller dams on the Kurram Tangi River for electricity and irrigation purposes.
- **Component 3**, Irrigation Development, will move water from the Kurram Tangi reservoir to existing and new Command Areas in the Bannu plains. It cannot start within the foreseeable future due to the lack of detailed engineering plans.

Figure 2-1: Overall Diagram of the Components of KTDP



The KTDP will impact five districts/areas in North West Pakistan: i) North Waziristan, ii) Frontier Region Bannu, iii) Bannu District, iv) Lakki Marwat and v) Karak. The first two are located in the Federally Administered Tribal Area (FATA), the last three in the settled areas of the Khyber

Pakhtunkhwa Province (KP). Thus, Components 1 and 2 with the exception of minor parts of the access roads and transmission line lie in the FATA, while, Component 3 plus minor parts of the access roads and the transmission line of Components 1 and 2 are located in the Districts of Bannu, Lakki-Marwat and Karak.

## **2.1 Component I: Tribal Area Development**

Component I involves the construction of Kaitu Weir, Sheratalla Canal System, Spaira Ragha Canal System, Feeder Tunnel, Pump Stations, Powerhouse IV, Powerhouse V and other ancillary works such as roads and transmission lines. While WAPDA is the overall implementing agency, the tertiary canals and the development of the Command Areas will be done by the FATA Irrigation Department, the transmission lines will be done by the Peshawar Electric Supply Company (PESCO) and road construction by the Works and Service Department of the FATA.

**Kaitu Weir:** A weir will be constructed on the Kaitu River about 400 feet upstream of the Mirali - Thal Road Bridge, and about 17.5 miles upstream of the confluence of the Kaitu and Kurram Rivers. The weir forms a pool of water facilitating the diversion of water to irrigation canals and to the Kurram Tangi Dam Reservoir via Powerhouse IV. In addition, the weir provides a means to safely pass Kaitu flood during monsoon.

**Sheratalla and Spaira Ragha Irrigation Canals:** From the Kaitu Reservoir, there will be two separate off-takes for the Sheratalla and Spaira Ragha Canals. The proposed Sheratalla Canal will irrigate a Command Area of 12,300 acres, while the proposed Spaira Ragha Canal will irrigate 4,080 acres.

The proposed Spaira Ragha Canal System, located on the left bank of the Kaitu River, will comprise concrete lined gravity and lift channels provided with regulating structures, cross drainage structures, bridges, culverts, escape structures and outlets. This canal divides into two canals, one of which will have a 55-foot lift and a pumping station using electricity produced from Powerhouse V to feed water to the lift minor of the Spaira Ragha Canal. The pumping station will comprise a pump house, five electric pumping sets and ancillary electrical and mechanical works.

The proposed Sheratalla Canal System on the right bank will comprise eight distributaries, seven minors and sub-minors, regulating structures including head regulators, cross drainage structures, bridges, escape structures and outlets.

The canals will have differing sizes at various segments but will have a trapezoidal shape and will have a concrete lining throughout. The construction of the primary and secondary canals will be done by WAPDA while the tertiary canals will be constructed by the Irrigation Department.

**Powerhouse IV:** There will be a third off-take from the Kaitu Reservoir to provide water for a powerhouse located in the Kurram River watershed. A sediment excluder is provided at the beginning of the waterway. This 60-ft wide and 120-ft long concrete structure allows the suspended sediment to settle out before entering the feeder channel. Water then travels through a 950-ft long feeder channel leading to a 14-ft diameter feeder tunnel excavated under the high mountain located in the left bank of the Kaitu River. The 6,100-ft long tunnel is followed by a 15,000-ft long headrace channel and a 900-ft steel penstock culminating in Powerhouse IV. A short tailrace channel will discharge water from the powerhouse to the Kurram Tangi Dam Reservoir. Powerhouse IV and associated waterways thus facilitate the diversion of Kaitu River flows in excess of irrigation requirements at the Spira Ragha and Sheratalla systems and the downstream minimum release for storage in Kurram Tangi Dam and generate a maximum of 18 MW of hydropower.

A new 30 miles long 132-kV transmission line will connect the Powerhouse IV switchyard to the existing substation at Domail near Bannu, where power will be delivered into the national grid.

**Powerhouse V:** A small powerhouse will be constructed along the Sheratalla Canal to provide electricity to operate the pump facilities. Water will be conveyed to the surface type powerhouse via a waterways system consisting of a feeder tunnel, headrace channel and two parallel penstocks. A new 11-kV transmission line will connect the Powerhouse V switchyard to the Spaira Ragha Canal Pumping Station via the Kaitu Weir. The 11 kV transmission line will have poles every 200 ft.

### Construction Phase

**Access Roads:** The Mirali-Thal Road and the bridges along the road will be upgraded to make them suitable for handling the design loads required to transport the heavy piece of equipment used in the Project. The Spinwam Bridge, especially, will be inspected for soundness. If its design loading is found to be insufficient to carry heavy-load construction vehicles, the existing ford downstream could be modified with the addition of a concrete slab crossing.

The Bannu-Thal road will also be used as a main access road to link with the Mirali-Thal road and to provide transportation from Bannu to all the proposed facilities within Component I. Prior to start of construction, the construction contractor will further assess and upgrade - under the supervision of the Works and Service Department of the FATA - the Bannu-Thal road and bridges along the road to make them suitable for handling the design loads required to transport the heavy piece of equipment used in the Project.



**Plate 2-1: A road in the area of the proposed Sheratalla canal**

### Construction Phase and Schedule

**Figure 2-2: Construction Schedule for Component I**

Activities	Period of Construction								
	Year 1			Year 2			Year 3		
<b>Construction and Housing Camps</b>	■								
<b>Roads, Bridges and Culverts</b>	■	■							
<b>Kaitu Weir</b>									
Excavation and preparation of weir foundation		■	■						
Construction of weir and drainage systems			■	■					
Construction of undersluices		■							
Construction of head regulators			■						
Construction of silt excluder		■							
Construction of feeder tunnel		■	■						
<b>Construction of Spaira Ragma Canal</b>									
Construction of primary canal			■	■	■				
Construction of secondary canals				■	■	■			
Construction of tertiary canals					■	■	■	■	
<b>Construction of Sheratalla Canal</b>									
Construction of primary canal			■	■	■	■	■	■	
Construction of secondary canals				■	■	■	■	■	■
Construction of tertiary canals					■	■	■	■	■
<b>Powerhouse IV &amp; V</b>									
Construction of powerhouses (civil works)				■	■	■	■	■	
Installation, testing and commissioning of electromechanical equipment						■	■	■	
Transmission lines					■	■	■	■	
<b>Development of Command Areas</b>									
Development of Spaira Ragma Command Area	■	■	■	■	■	■	■	■	■
Development of Sheratalla Command Area		■	■	■	■	■	■	■	■

It is expected that construction of Component I will take about 3 years, but this would require that the three implementing agencies (WAPDA, PEPCO and FATA Department for Irrigation) work hand in glove to assure for example that the secondary canals deliver water where it can be linked into tertiary canals most effectively.

**Construction Camps:** The construction camp facilities specific have yet to be defined. It is a requirement in the existing Tender Documents for the construction contractor to decide on the most appropriate locations. WAPDA mentioned recently the possibility of using an old army base located on the left bank of the Kaitu River, upstream of the proposed Kaitu weir site. This base could be used as the Headquarters for the construction contractor but most likely it will not be large enough for a full construction camp.

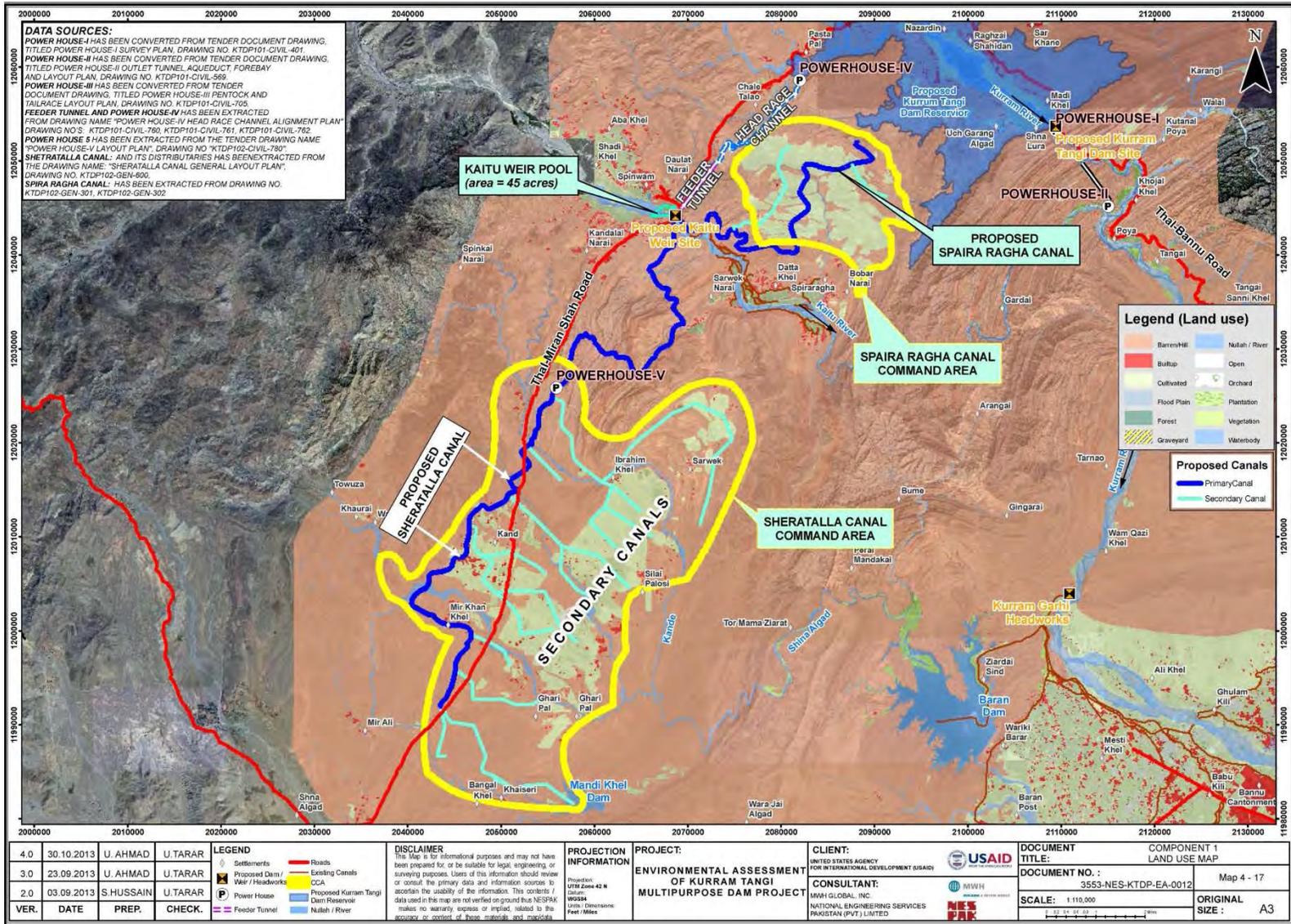
**Labor Force:** The labor force for the weir construction is expected to be about 400. Among this number about six percent will be management and supervisory staff, 20 percent skilled workers (electricians, plumbers, machinists, mechanics, etc.), 40 percent semi-skilled workers (drivers, cement layers, excavators), and the remaining 30 percent unskilled laborers and support staff (cooks, gardeners, nonmilitary guards, domestic staff).

For both canals, it can be assumed that the construction crews will live in tents along the right-of-way, provided with food, water, fuel and other amenities from the central camp near the weir. For the tunnel, powerhouse, and ancillary structures of Powerhouses IV and V, site accommodations for construction crews of about 100 workers and supervisors will be required.

**Operation Phase.** The Kaitu Weir will be operated to provide water to the Sheratalla and Spaira Ragha canals, after the release of enough flow to ensure the ecological conditions of the downstream channel and the irrigation and domestic water needs of the Datta Khel population complex. The combined design release to the two canals will be 116.5 cfs. Additional incoming flows above these amounts, up to 1,200 cfs, will be discharged through the diversion tunnel and powerhouse IV to the Kurram River.

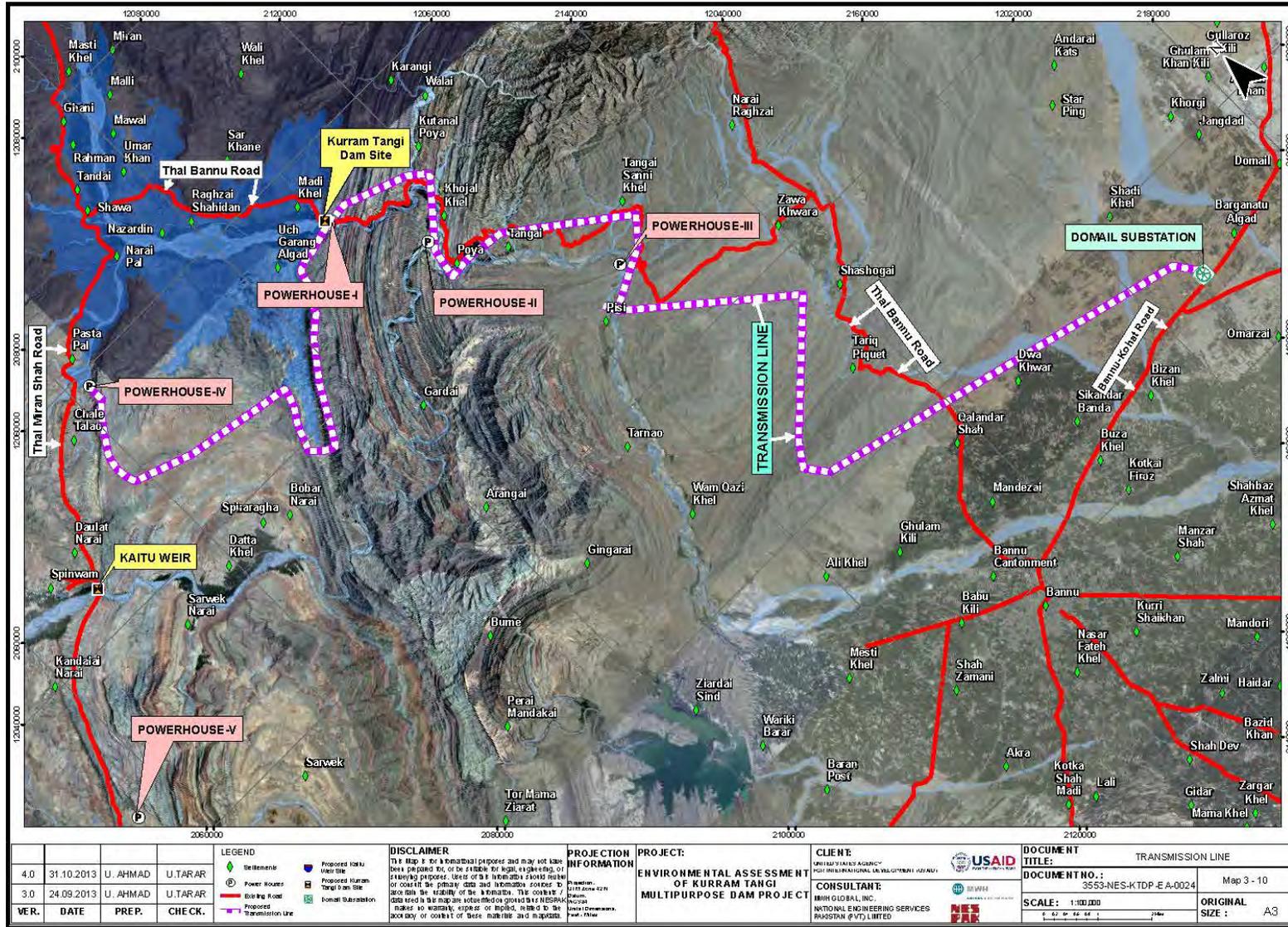
Presently no operations philosophy and/or management plan has been developed and it is therefore unclear how water resources will be managed to strike a balance between the three main interest groups: a) WAPDA for Hydropower Generation, b) people using land in the Spaira Ragha and Sheratalla Command Areas and c) downstream users of water resources in and around Datta Khel. Similarly, no decommissioning strategy has been developed to inform what happens during or after decommissioning to the resources and assets established by Component I.

Map 2-1: Component I Land Use Map



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Map 2-2: Transmission Line



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## 2.2 Component 2: Kurram Tangi Dam

The basic purpose of the proposed Kurram Tangi Dam is the storage of water for irrigation and power generation. At present, up to 50 percent of the flows from the Kurram River are underutilized, as there is a lack of storage capacity within the river basin. By constructing the proposed Kurram Tangi Dam, flows from the Kurram River will be regulated through the dam and reservoir and water will be released according to the irrigation requirements and downstream user demands, while the excess water will be stored for use during low flow periods. The Kurram Tangi Dam will also store excess water from the Kaitu River basin that will be diverted via a diversion tunnel. A main powerhouse, with an installed capacity of 38 MW, is proposed at the foot of dam, and two additional powerhouses with capacities of 10.4 and 16.5 MW are proposed between the Kurram Tangi Dam and Kurram Garhi Headworks.

**Main Dam:** This will be a rockfill (or an earth/rockfill) dam with a concrete face slab over the upstream slope. The face slab is between 0.25 and 0.6 m thick, with vertical and horizontal joints to accommodate deformation which occurs during construction and when the water load is applied.

**Main Dam Roadways:** Improvements to existing roads and construction of new roads will be required for construction of the main dam to allow for heavy vehicles and increased traffic during the construction phase. The roadway from Bannu to Mirali to Spinwam will require improvements. The distance along existing road from Bannu to Mirali is 21 miles and from Mirali to Spinwam is 28 miles. The carriageway from Bannu to Mirali to Spinwam is 20 ft wide paved track with shoulders of 5 ft on each side. The total width of the carriageway is 30 ft. Generally the condition of the bridges and the road is not in very good conditions. Most of the bridges are designed for 12 ton loading, which meets the requirement. However, improvement of the existing road is needed.

The construction of a new access road from Spinwam to the main dam will be needed. This new proposed road will take off from the Mirali-Thal Road at Spinwam near Kaitu River Bridge and follow the route along the proposed Spaira Ragha irrigation canal and subsequently the periphery of the reservoir. It will be 9 miles in length, of which about 4 miles will be in the Spaira Ragha Plain without involving rock excavation and 5 miles will require rock excavation. It does not involve any bridge construction. The elevation varies from 2,115 to 2,345 ft. The proposed road width is 30 ft with 20 ft paved and 5 ft shoulders on either side.

**Kurram Tangi Reservoir:** The proposed Kurram Tangi Reservoir will be used mainly to meet irrigation needs of the existing Civil Canals, Marwat Canal and the new Command area in Thal Plain. Water from the reservoir will also be used to generate electrical power and released back to the Kurram River. These releases will reach Kurram Garhi Headworks, at River Mile 56, after passing through the main powerhouse (Powerhouse I) and the two powerhouses located in between the Kurram Tangi Dam and Kurram Garhi Headworks (Powerhouses II and III). At the Kurram Garhi Headworks water will be diverted to the respective canals as per their requirements and quotas. Filling of the reservoir will submerge part of the existing road from the Mirali-Thal Road near Shewa Post; therefore the construction of a new roadway will be required. The length of the new road will be 6 miles with a 30 ft carriage way and a 20 ft paved surface, and will involve the construction of two bridges.

**Kurram Tangi Spillway:** The spillway is proposed to be located on the right bank of the Kurram River at River Mile 67. The main features of the spillway were established during the feasibility study. The spillway and its various components include piers, a bridge, guide walls, chute, and stilling basin. The spillway and its various components were designed to safely pass the Probable Maximum Flood (PMF). The spillway capacity at Kurram Tangi Dam is being fixed so that the flood surcharge due to the PMF including wave-run-up would be lower than the top of the dam. The spillway is capable of passing the PMF, with normal flood surcharge 5.8 ft above normal reservoir level. The spillway will be 200 ft wide, having four bays, and the energy will be dissipated through a 300 ft long by 200 ft wide spillway with chute blocks.

**Diversion Tunnels:** Two diversion tunnels, one of 20 ft diameter and the other of 14 ft diameter, will be constructed on the right bank of the Kurram River between the dam and the spillway. The 20

ft diameter tunnel will be used later as power tunnel for the main powerhouse, located at the foot of dam. The length of the power tunnel, including the intake portal, is 1,013 ft and it will lead to Powerhouse I. The 14-ft-diameter tunnel will be used as a low-level outlet for providing irrigation water during the initial few years after construction of dam, as during these years, the river flows may be just close to irrigation requirements. Following this period, the 14-ft-diameter tunnel will be plugged with a bulk head gate. In addition, this tunnel would be used for flushing of sediments.

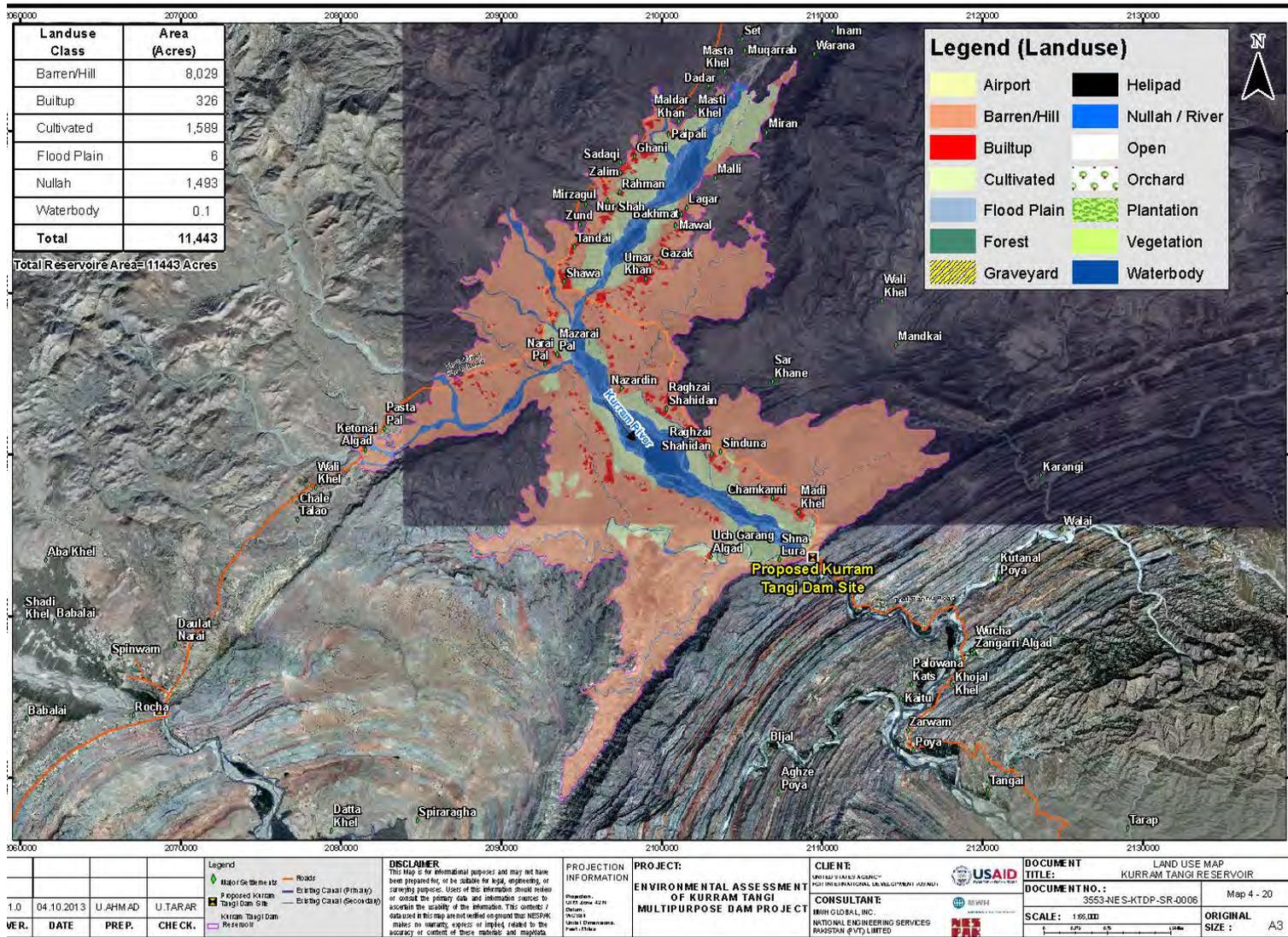
**Weirs II and III:** There will be two weirs along the Kurram River downstream of the Kurram Tangi dam to create small reservoirs for power generation. Weir II will be located approximately 8,000 ft downstream of the main dam at River Mile 65.5, used to divert water to Powerhouse II, and will be 418 ft long and 20 ft high. For control of seepage and uplift pressures, a slurry trench cutoff tied to the bedrock has been provided under the structure. Additionally relief wells at 25 ft spacing have also been provided through a 5 x 7 ft gallery located in the structure. Weir III will also be located along Kurram River, about 30,000 ft downstream of the main dam at River Mile 61. Weir III will be 1,190 ft long and 75 ft high. The downstream face of the weir has been provided with a cascade type of chute for dissipation of energy. The chute will terminate in a stilling basin 62.0 ft. long. Two low level conduits of 12.0 ft. diameter, which will initially be used for river diversion, have been provided in the weir for the sluicing of sediments. These conduits will have vertical gates at upstream, operated from the crest of the weir.

**Powerhouses I, II, and III.** Three powerhouses are proposed:

- Powerhouse I, the main powerhouse, will be located at the toe of the dam on the right bank of Kurram River, at River Mile 67, and have an installed capacity of 38.0 MW. The size of the semi-surface powerhouse was determined after dimensioning the spiral case, draft tube and generator dimensions. The total length and width of the powerhouse including the loading bay and control building have been determined to be 180 ft long and 111 ft wide, having galleries on the upstream and downstream sides for positioning the electrical and mechanical equipment.
- Powerhouse II will be located 2.1 miles downstream of the dam, or roughly 0.17 miles from the confluence of Kaitu and Kurram Rivers, and will have an installed capacity of 10.4 MW. It will be constructed downstream of the main dam to utilize the natural slope of Kurram River by bypassing a bend in it. The tunnel will be connected to penstock through a forebay for conveying water to the powerhouse.
- Powerhouse III will be located 4.8 miles downstream of Powerhouse II, at River Mile 60, and have an installed capacity of 16.5 MW. Powerhouse III will be constructed on right bank of Kurram River. The size of the power station, which would basically be a semi-surface powerhouse, was determined after dimensioning the spiral case, draft tube and generator dimensions. A 16 ft wide, 3,250 ft long horse shoe shaped tunnel will convey water to the powerhouse. The total length and width of the powerhouse including the loading bay have been determined as 145 ft long and 105 ft wide, having a downstream gallery for disposition of the electrical equipment. The powerhouse building will be a reinforced concrete structure. The powerhouse has also been provided with an under-drainage system to take care of seepage and uplift pressures. This under-drainage system will comprise horizontal and vertical drains. It is also proposed to conduct consolidation grouting of foundations before erecting the structure.

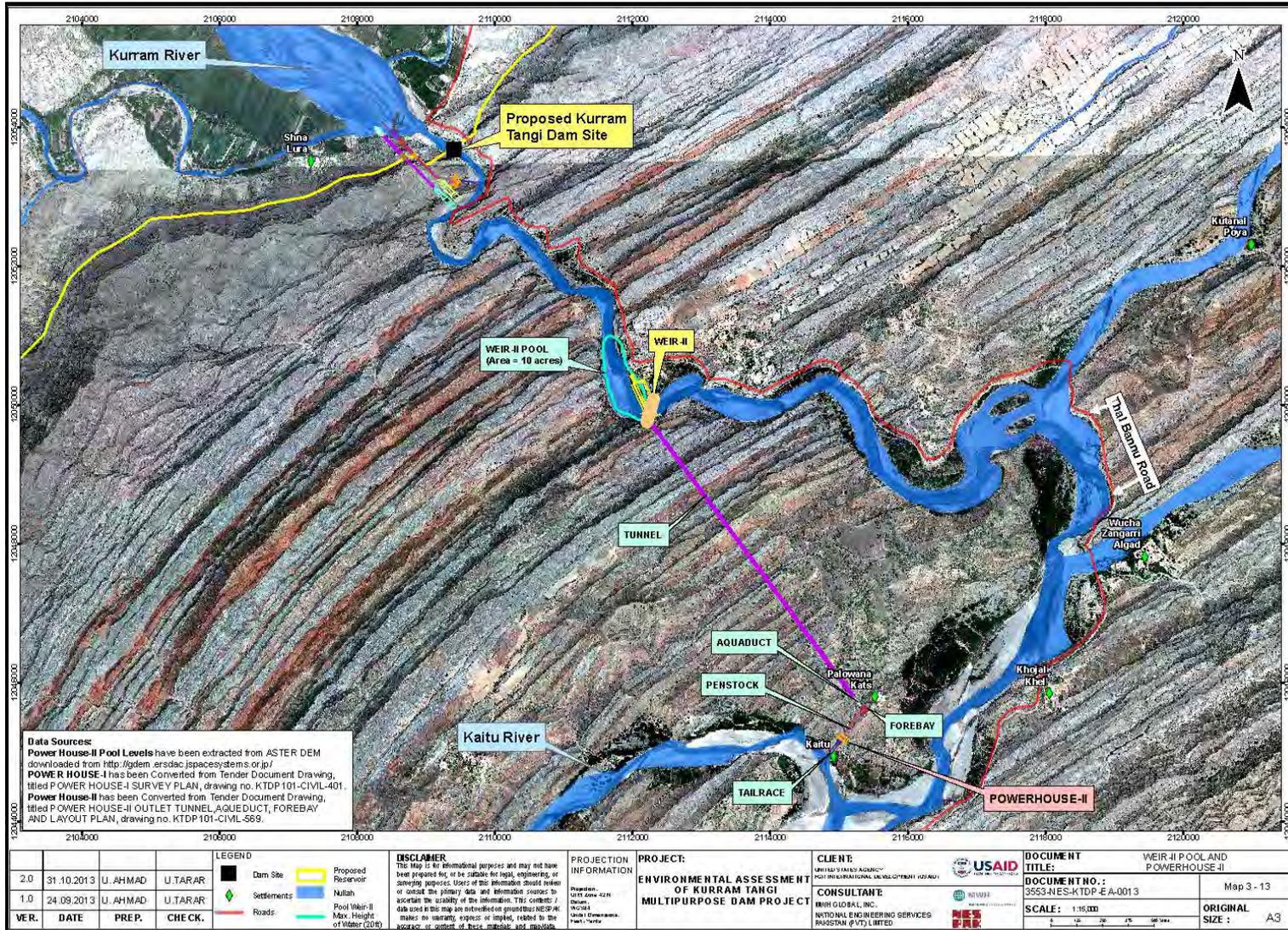
The three powerhouses will be connected to the new transmission line to the existing substation at Domail that will be built as part of Component I.

Map 2-3: Land Use Map (Kurram Tangi Reservoir)



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Map 2-4: Weir II Pool and Power House II



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### Construction Phase and Schedule

Figure 2-3: Construction Schedule for Component 2

Item No.	Activities	Period of Construction			
		Year 1	Year 2	Year 3	Year 4
<b>1</b>	<b>Construction and Housing Camps</b>				
<b>2</b>	<b>Roads, Bridges and Culverts</b>				
<b>3</b>	<b>Main Dam</b>				
<b>3.1</b>	<b>Diversion works</b>				
<b>3.2</b>	<b>Main Dam</b>				
3.2.1	Construction of U/S cofferdam				
3.2.2	Dewatering of dam foundation				
3.2.4	Preparation of dam foundation				
3.2.5	Main dam placement and compaction				
3.2.6	Laying down the concrete Pad				
3.2.7	Anchoring				
3.2.8	Consolidation and grouting @ 10' C/C				
3.2.9	Curtain grouting				
3.2.10	Laying of u/s concrete slab				
3.2.11	Construction of parapet wall				
3.2.12	Instrumentation				
3.2.13	Instrumentation house				
<b>3.3</b>	<b>Spillway and Other Structures</b>				
3.3.1	Construction of d/s cofferdam				
3.3.2	Excavation of spillway approach channel and weir				
3.3.3	Excavation of chute and stilling basin				
3.3.4	Construction of spillway weir				
3.3.5	Construction of chute and stilling basin				
3.3.6	Spillway gate installation				
3.3.7	Spillway deck				
3.3.8	Excavation of switchyard and placement of material in embankment				
3.3.9	Excavation of material in front of tunnel's stilling basin and placement in embankment				
<b>4</b>	<b>Powerhouse I</b>				
4.1	Construction of powerhouse (civil works)				
4.2	Installation of penstock trifurcation				
4.3	Installation, testing and commissioning of electromechanical equipment				
4.4	Transmission lines				
<b>5</b>	<b>Powerhouse II</b>				
5.1	Excavation and preparation of weir foundation				
5.2	Construction of weir and drainage systems				
5.3	Construction of undersluices				
5.4	Construction of tunnel				
5.5	Construction of forebay				
5.6	Construction of powerhouse (civil works)				
5.7	Installation of penstock				
5.8	Installation, testing and commissioning of electromechanical equipment				
5.9	Transmission lines				
5.10	Construction of embankment				
<b>6</b>	<b>Powerhouse III</b>				
6.1	Excavation and preparation of weir foundation				
6.2	Construction of weir and drainage systems				
6.3	Construction of tunnel				
6.4	Construction of surge chamber				
6.5	Construction of powerhouse (civil works)				
6.6	Installation of penstock				
6.7	Installation, testing and commissioning of electromechanical equipment				
6.8	Transmission lines				

There will be some road improvements include construction of a new access road for Powerhouse II on the right bank of the river. It involves rock cutting but does not involve any bridges. Its length will be 5 miles and its width 30 ft. A new access road for Powerhouse III will also be needed. The road involves construction of a bridge. The road will be constructed on the right bank of the river for access to the intake tunnel and powerhouse. The total length will be 2 miles. The existing road from the dam site to Powerhouse III, on the left bank of the river, will be improved. It is about 10 miles long. Upgrades will include construction of one bridge, 12 culverts, and 12 causeways.

**Construction Camps:** It is anticipated that about 200 engineers, geologists and other professionals will be working for the construction supervision of the project. Due to the short duration of the project and its isolated location, it was considered uneconomical to provide residential accommodation at site with all amenities available at Bannu; therefore only two colonies with residential and office accommodation have been proposed; one at a site in the Spaira Ragha Plain with reasonable amenities and the other at Bannu with all amenities available in the city. The colony proposed in the Spaira Ragha Plain is at a convenient distance of 8 km from the dam site.

A camp will also be needed for the contractor's personnel. The camp will be constructed by the contractor to his requirements and it is anticipated that the labor force will be about 1,100 persons at peak, for which appropriate provisions shall be made. Provision for construction of works shall include a medical dispensary, water supply and sewerage system, access roads, electricity and illumination, shops, hard furnishing of offices and accommodations. Land shall be leased or acquired, as appropriate, for camp construction.

**Operation Phase:** The Kurram Tangi Reservoir will be operated to provide water to the downstream irrigation canals. Reservoir operation was simulated for planned irrigation target releases using historical/simulated river flow values, gross storage of 1,200,000 AF, and dead storage of 300,000 AF. Over the study period (1971-2001) analyzed in prior studies, seven years would have water shortages, with an average shortage during shortage years of 10,900 AF/year, and an average over all shortage of 2,500 AF/year.

The flows of the Kurram and Kaitu Rivers are stored in varying amounts at multiple sites: Kurram Tangi Dam, Weir III Reservoir, Kurram Garhi Head Works, and Baran Dam. Water is to be released to different canals to ensure that planned crop water requirements are met for the Civil Canals, Marwat Canal and the proposed Thal canal.

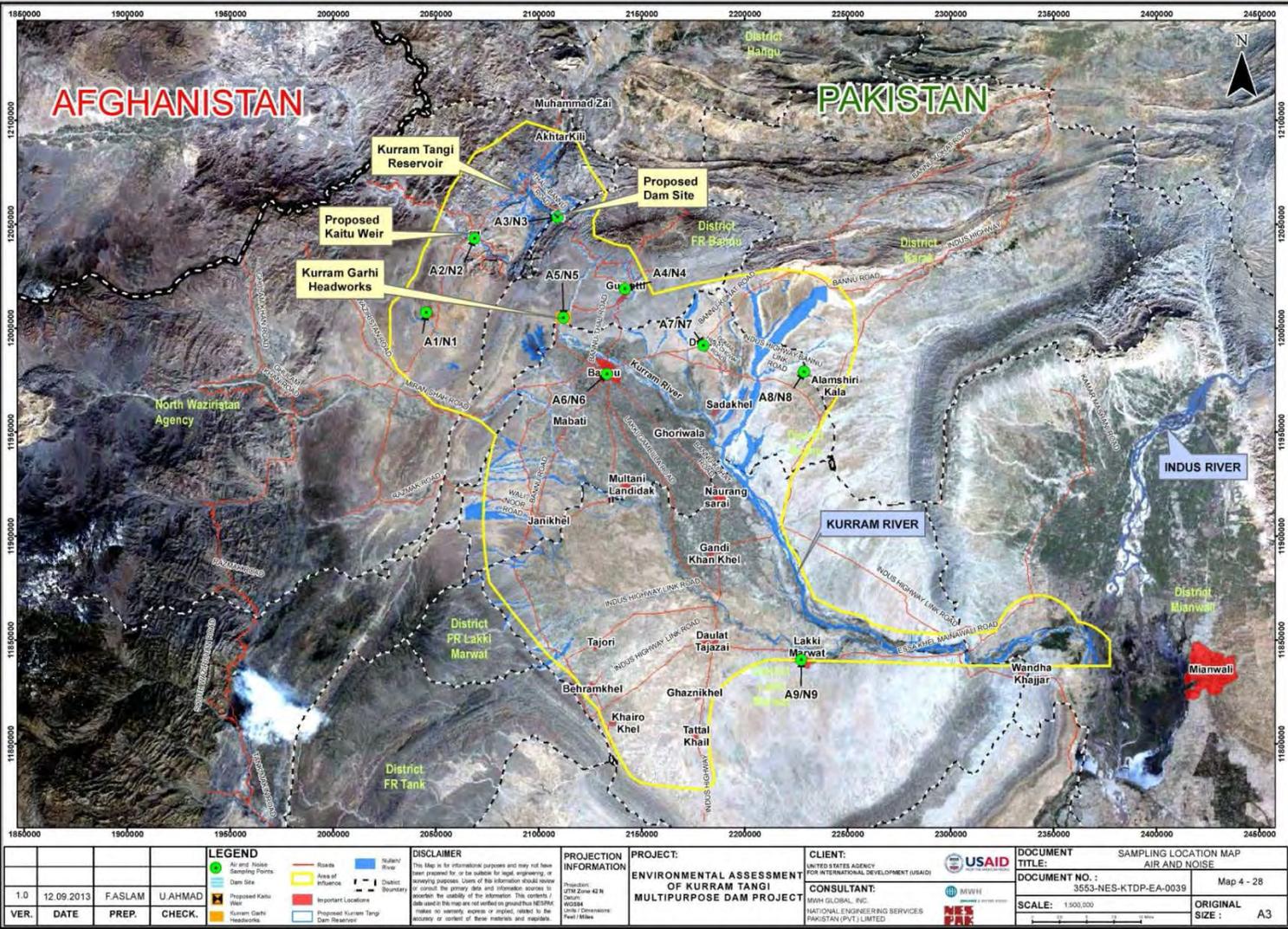
### 2.3 Component 3: Irrigation Development

Component Three includes the new Thal Canal and rehabilitation and upgrade of the existing Civil and Marwat Canals to improve the water conveyance performance of the present systems. The tertiary canals and the development of Command areas for the Thal canals will be done by the Irrigation Department. Transmission and distribution (rural electrification) will be done by other entities operating in the project area.

**Thal Canal:** The existing Kurram Garhi Headworks, constructed during 1959-1969, regulates flow to the existing Civil Canals. A new head regulator will be constructed at the Kurram Garhi Headworks to service the new Thal Canal. The head regulator will have one bay with vertical lift gate and off-take from the left bank of Kurram Garhi Headworks and lead to a tunnel. A tunnel will run underneath the hill range for 3,100 ft before it transitions back into a trapezoidal channel. The canal takes its course through undulating hills, crosses various streams and ends in the Karak District.

**Rehabilitation and Upgrade of the Civil and Marwat Canals:** The project will also upgrade about 200 miles of old canals, collectively called Civil Canals, built by landowners, with a command area of approximately 107,000 acres, and the Marwat Canal, with a command area of 170,000 acres. The Civil Canals have been the means of irrigation in Bannu area for a long time. These channels were originally laid down, probably sometime in the first half of the 20<sup>th</sup> century, by the landowners and promoted by the local community. As such, these channels were constructed with an indigenous design approach and gradually expanded the irrigation to a large area over the decades. With the construction of Kurram Garhi Headworks in 1959 to regulate the Kurram River flows, these canals were given a sound base for further development. However, the Kurram Garhi Headworks lack seasonal regulation capability. Due to the fluctuations in river flow, realizing a sustainable agriculture has been hard. In 1962 Baran Dam and Marwat Canal system were added. Usefulness of the Baran Dam was badly affected by silting up of the reservoir within a relatively short span of 30-years with loss of 70% of its capacity. The existing Civil Canals have neither proper alignments nor bed grades. The canals flow generally along the course of depressions and nullahs. Present cross sections of the canals cannot cope with the discharges being conveyed and as such, there are overflows of the canals, as there is no freeboard.

Map 2-5: Sampling Location Map (Air and Noise)



Except at the main feeder and canal heads, there are no regulators on any distributary or minor. The outlets have no controlling structure but function freely at user's discretion. The channels run with disproportional withdrawal resulting in inequitable distribution. Over-withdrawal in upper reaches of the canal results in colossal wastage of irrigation water which gives rise to water-logging and salinity conditions and also results in acute shortages of water in the lower reaches, thus reducing the intensity and crop yields

The upgrade of the Marwat and Civil canals, along with the construction of the Kurram Tangi Dam for the seasonal regulation of the Kurram River flows (see Component 2) has been identified as a solution for the development of a sustainable agriculture in the region. The canals will have differing sizes at various segments but will have a trapezoidal shape and will have a concrete lining throughout. The construction, or upgrade, of the primary and secondary canals will be done by WAPDA while the tertiary canals will be constructed by the Irrigation Department.

### Construction Phase and Schedule

**Figure 2-4: Construction Schedule for Component 3**

Item No.	Activities	Period of Construction					
		Year 1		Year 2		Year 3	
1	Construction and Housing Camps	■	■				
2	Roads, Bridges and Culverts	■	■	■			
3	Construction of Thal Canal						
3.1	Construction of head regulator at Kurram Garhi headworks	■	■				
3.2	Construction of primary canal		■	■	■		
3.3	Construction of secondary canals				■	■	■
4	Upgrade/Remodeling of Existing Canals						
4.1	Marwat canals	■	■	■			
4.2	Civil canals				■	■	■
5	Development of Command Areas and WUAs						
5.1	Development of Thal Command Area				■	■	■
5.2	Upgrade of Marwat and Civil Command Area				■	■	■

**Operation Phase:** No information is yet available on the operation of the new Thal canals and the organization of Command Areas and potentially the creation of Water Users Associations.

### 2.4 Land and Resource Needs of KTDP

As detailed in **Table 2-1** the overall footprint of the project is presently estimated to be 182,000 acres of which more than 90 percent are earmarked for the development of command areas. 65 percent of this land is presently used for agricultural purposes, 16 percent is undeveloped land (Worsho), 14 percent is water, riverbed and 5 percent is used as residential land. In addition quite some land will need to be acquired to provide ground, rocks and gravel to fill the dams as well as limestone for cement. As the detailed location of the quarries that will provide the required resources (see **Table 2-1**) is presently unknown, the associated land acquisition will need to be covered in more detail in the RAPs.

**Table 2-1: Land acquisition need for KTDP**

Package	Affected land and land use (acres)				
	Total	Agric	residential	Water	Worsho
Kaitu weir with other permanent facilities	3.5	0.0	0.0	3.2	0.3
Kaitu reservoir	45.2	16.5	0.0	27.2	1.6
Kaitu weir construction camp, quarry . (temporary facility)	10.0	2.0	0.0	0.0	8.0
Subtotal Kaitu Weir, reservoir, camps, quarries .	58.7	18.5	0.0	30.3	9.9
Mains and secondary canals of the Spaira Ragha CA	78.7	33.6	0.1	0.5	44.4
Mains and secondary canals of the Sheratalla CA	319.2	79.5	2.5	8.3	229.0
New 12 mile road from Spinwam to Spaira Ragha	129.0	12.9	1.2	2.7	112.1
Access road to power house 4	1.1	0.5	0.0	0.0	0.5
Access road to power house 5	2.3	0.0	0.0	0.0	2.3
Powerhouse 4 at the Kurram + Transfer canal and tunnel	24.0	0.0	0.0	0.5	23.3

**Table 2-1: Land acquisition need for KTDP**

Package	Affected land and land use (acres)				
	Total	Agric	residential	Water	Worsho
Pumphouse for lift canal, housing, support/security staff	0.6	0.0	0.0	0.0	0.6
Powerhouse 5	0.1	0.0	0.0	0.0	0.1
Canals, roads, powerhouses, tunnel etc.	554.9	126.5	3.8	12.0	412.4
Transmission lines from Power House 4 to Domain Substation	302.4	67.8	3.3	28.0	203.3
Transmission line from Kaitu Weir to pump house	4.8	0.5	0.2	0.0	4.1
Transmission lines from Powerhouse 5 to Weir	28.4	5.7	0.0	0.0	22.7
Transmission lines	335.6	74.0	3.6	28.0	230.1
Overall area of Spaira Ragha Command Area	4,302	2,668	4	42	1,588
Overall area of the Sheratalla Command Area	18,427	5,983	309	573	11,561
Command Areas	22,729	8,651	313	616	13,149
<b>Kurram Tangi Dam and Reservoir</b>	<b>1,589.0</b>	<b>326.1</b>	<b>1,499.8</b>	<b>8,028.6</b>	<b>1,589.0</b>
Kurram Tangi construction & security camps	2.6	0.0	0.0	7.5	2.6
Powerhouse 1, weir and appurtenant structure	0.1	0.0	1.0	7.2	0.1
Powerhouse 2, weir and appurtenant structure	2.1	0.0	1.5	8.0	2.1
New access road to power house 2 and 3	1.1	0.0	0.0	55.0	1.1
Powerhouse 3, weir and appurtenant structure	0.0	0.0	3.8	3.8	0.0
New alignment of Mirali-Spinwam-Thal road	0.0	2.5	1.9	56.0	0.0
Additional land take for enhancement of Bannu-Shewa road	4.0	2.0	0.0	10.0	4.0
Resettlement sites	483.3	161.1	0.0	1,933.2	483.3
Canals to Thal Command Area	589.4	23.8	85.5	180.7	589.4
Thal Command Area	107,276	7,600	22,910	6,017	107,276
<b>Grand Total</b>	<b>118,818</b>	<b>8,436</b>	<b>25,190</b>	<b>30,109</b>	<b>118,818</b>

**Table 2-2: Resource required for the construction of KTDP**

Resources	Component 1	Component 2	Component 3	Total
Excavation	53 million ft <sup>3</sup>	250 million ft <sup>3</sup>	125 million ft <sup>3</sup>	428 million ft <sup>3</sup>
Filling	176 million ft <sup>3</sup>	4.5 million ft <sup>3</sup>	160 million ft <sup>3</sup>	340 million ft <sup>3</sup>
Concrete	6.5 million ft <sup>3</sup>	20 million ft <sup>3</sup>	17 million ft <sup>3</sup>	33.5 million ft <sup>3</sup>
Steel Reinforcement	7.3 million lbs	44 million lbs	36 million lbs	87 million lbs
Cement	900,000 bags	4 million bags	4 million bags	4 million bags



**Plate 2-2: Kaitu pool area (Component One) Plate 2-3: Component Two area**

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### 3 VULNERABLE TRIBES IN THE PROJECT AREAS

Vulnerability is commonly understood as the limited ability of people and/or societies to withstand adverse impacts from multiple stressors to which they are exposed. For purposes of this VTP, the term "Vulnerable Tribes"<sup>1</sup> is used in a generic sense to refer to distinct groups characterized in varying degrees by:

- self-identification as distinct cultural group and recognition of this identity by others;
- collective attachment to geographically distinct habitats or ancestral territories in the project area and to the natural resources in these habitats and territories;
- customary cultural, economic, social, or political institutions that are separate from those of the dominant society and culture; and
- a separate language, often different from the official language of the country or region.

As indicated earlier, KTDP will impact on people in North Waziristan, FR Bannu, the Bannu District, the Karak District as well as the Lakki Marwat District. The two first are located in the FATA while the three others are in the Khyber Pakhtunkhwa Province of Pakistan.

This chapter focuses first on identifying vulnerable ethnic groups and tribes affected by the KTDP, informing about their background, status, attachment to territory and use of cultural, economic and political institutions and assessing their vulnerability with a view to key socioeconomic parameters.

#### 3.1 Language, tribe and identity

Pakistan is a multi-ethnic and multi-lingual federation in which the FATA have a semi-autonomous status. Acts of Parliament for example do not apply to FATA unless the president orders their implementation (Constitution §247.3). This semi-autonomy goes back to the colonial period when the British used a combination of political agents and maliks, government appointed and paid liaison officers, to influence decision-making while allowing the people in the FATA largely to govern their territories and societies according to their own distinct traditions and governing systems. Pakistan inherited this system and more or less continues with it even today.

However, “since the independence of Pakistan, FATA has not been accorded the same priority in terms of the development process being undertaken in other parts of the country. The development initiatives and allocations in FATA followed a compartmentalized approach, concentrated around sectorial facilities and benefiting few influential and politically active sections. This ad hoc approach has deprived large segments of the population from social uplift and economic empowerment” (FATA webpage).

Pakistan ratified in 1960 the ILO Convention 107 on Indigenous and Tribal Peoples, which is a legally binding international instrument that calls for special measures to safeguard rights of vulnerable tribes. There is a common view in Pakistan that the special provisions for the FATA implements to some extent the objective of self-governance outlined in the ILO Convention 107. The ILO estimates “that the population of indigenous/tribal people in Pakistan is about 15%. As in other parts of the world, indigenous and tribal peoples in Pakistan are among the most marginalized and excluded groups in society, although considerable diversity exists between the different groups. The most numerous tribal populations of the country are the Pakhtun (15%), the Sindhis (8%) and the Baluchs (4%). Among them, Pakhtun tribal groups enjoy special status under FATA” (ILO country webpage Pakistan).

Northwest Pakistan is inhabited predominantly by Pakhtuns, who are typically characterized by the usage of the Pashto language and practice of Pashtunwali, which is a traditional set of ethics guiding individual and communal conduct. Provincially, the Pakhtuns constitute 74% and nationally 15% of the population, while the various FATA agencies are each inhabited by a single Pakhtun tribe, making up around 99% of its population.

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<sup>1</sup> Vulnerable tribes, indigenous peoples, scheduled tribes and marginalized ethnic minorities are all synonymous terms.

The origins of the Pakhtuns are unclear, but historians have come across references to various ancient peoples called Pakthas between the 2nd and the 1st millennium BCE, inhabiting the region between the Hindu Kush and Indus River (see Caroe 1958). Often characterized as warriors and martial people, their history is spread amongst various countries of South, Central and Western Asia, centered around their traditional seat of power in southern Afghanistan (see Map 3-1: Language groups in the larger region). During the Delhi Sultanate, the Pakhtun Lodi dynasty replaced the Turkic rulers in the northern part of the Indian subcontinent and established an independent state in the early-18th century.

Map 3-1: Language groups in the larger region



Pakhtuns are the largest language group in Afghanistan and reigned as the dominant ethno-linguistic group for about 300 years, with nearly all rulers being Pakhtun. They are also an important community in Pakistan (15% of the total population). Estimates of the number of Pashtun tribes and clans range from about 350 to over 400.

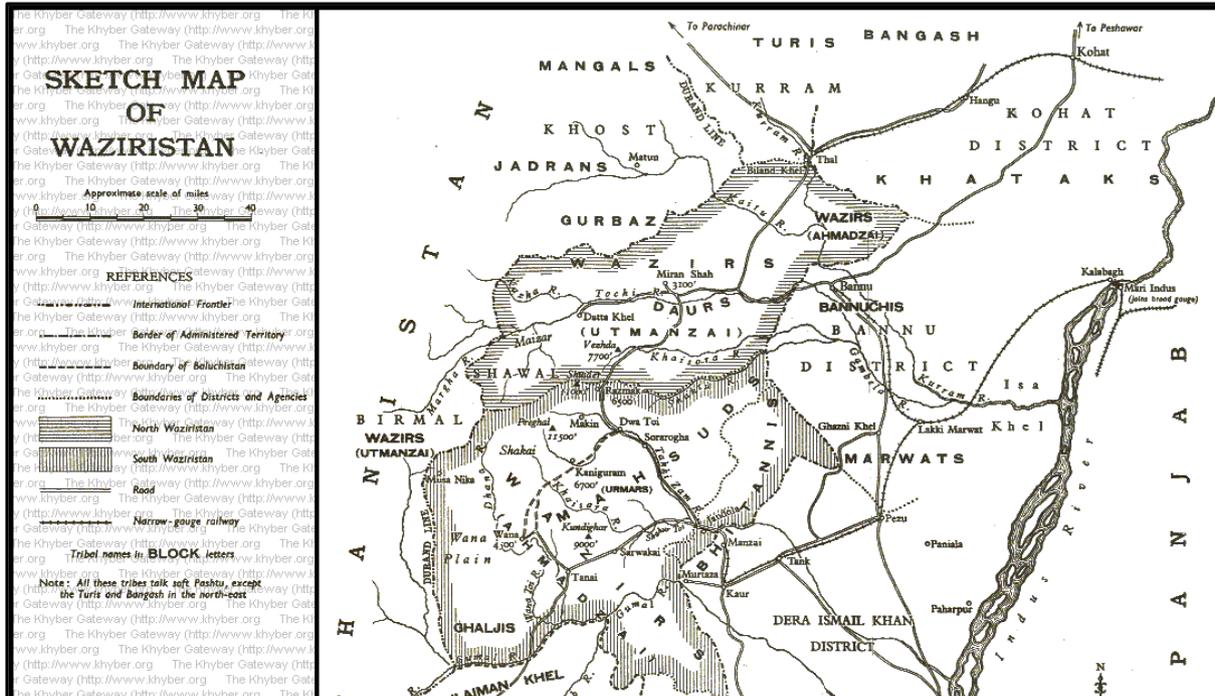
While Pashto-speaking people are at times described as constituting one socio-cultural entity within Pakistan, they have historically been divided into various tribes, sub-tribes, clans, quams (extended family in one location) and households. Although people of tribal origin are often considered Pakhtun by outsiders, they primarily consider themselves Afridi, Mohmand, Mahsud, Wazir, and the like. Similarly, while the Pakhtun community of Pakistan is often said to comprise the people of both the tribal areas and the 'settled' districts (for example the Bannu, Karak and Lakki Marwat District), the Pakhtun tribes of the settled districts have altered over the last 150 years certain aspects of their culture, customs and social structure. For example, elders have lost much of their traditional authority, nuclear families are more common and hujras, historically meeting places at the center of village decision-making, have lost much of their practical relevance. Courts of law must now reinforce decisions of the local jirga, that were once considered indisputable and the Pukhtunwali, the Pakhtun code of honor, has lost much of its significance.

The vast literature on this issue suggests that the tribe and sub-tribe is a much more binding socio-cultural group than speaking Pashto, as tribal origin defines access to land and participation in decision making. It is a common view that in the FATA, the tribal system is still the main structuring and ordering principle of the local society and consists not only of a the patrilineal model of an ever ramifying society, but also of rules of solidarity and conflict resolution, of social forms how to gain and loose political power, and of a very elaborate code of honor and shame: the Pashtunwali which is closely linked to the historical memories of tribes and sub-tribes rather than whether one speaks Pashto. These competing identities of tribe, sub-tribe, clan and qawm co-exist and compete within the overarching tribal system of Pashto speaking people. The qawm is considered to be the main unit of identification and solidarity, and could be based on kinship, residence or occupation. It is a flexible term that is commonly used to describe an extended family, and is used to differentiate "us" versus "them." Nonetheless, to say that Pakhtuns in a particular area identify themselves only with a particular valley in which they live as opposed to a tribe misunderstands how a decentralized tribal system works. There are many examples of segmented tribes that are deeply divided. But this does not make them any less tribal. In turn, it would be also a mistake to dismiss the overarching identity. Thus, each Pakhtun individual or community can have multiple identities, from the overarching confederation of Pashto speaking people to tribe, sub-tribe, clan, qawm to household.

If one looks at the level of tribes one finds that each of the five administrative units affected by the KTDP is inhabited almost exclusively by one tribe each:

- North Waziristan: Wazir
- FR Bannu: Wazir
- Bannu District: Bannuchi
- Karak District: Khattak
- Lakki Marwat District: Marwat.

**Map 3-2: Tribes and Sub-tribes in and around Waziristan**



### 3.2 Are all tribes equal?

Research suggests that Pakhtun societies can be divided into two categories: (a) acephalous, egalitarian bands, living in low-production zones and (b) those with a ranked society living on irrigated lands usually within larger state systems. “Nang” (honor) is the foremost symbol of the former society, as “qalang” (taxes/rent) is of the latter (Ahmed 1983: 8). With minor variations the boundaries established between FATA and settled areas follow this diversion: i.e. the Wazir in North Waziristan and FR Bannu are part of the acephalous group that is quite distinct from mainstream society as they do not centralize decision making and power, while the Bannuchi, Khattak and Marwat are significantly more integrated into the Pakistan state and quite prepared and used to accept the instructions of centralized decision making bodies.

Large-scale development such as the KTDP typically impacts small, egalitarian groups (“Nang” tribes) more than larger, more hierarchical societies (Galang groups). Nang tribes are significantly less well equipped to deal with physical and economical relocation, cope with significant in-migration of job-seekers, workers and security personal from different cultural backgrounds and adjust to the transformation of transhumant tribal livelihoods and small scale rain-fed agriculture to large irrigated farming. One of the underlying reasons for these vulnerability is that identities and cultures are inextricably linked to the lands on which they live, the natural resources on which they depend and the feeling to be free from any external rulers. To assure the operations of an egalitarian society requires that information are equally available to all members of society, that decisions can be negotiated, that there is no technical imperative and that solidarity offers more advantage to the individual than egoism. As it can be assumed that the Bannuchi, Khattak and Marwat are able to cope with the development process triggered by KTDP, this change process is much more challenging for the Wazirs in North Waziristan and FR Bannu, which consequently will stand at the focus of what follows.

### 3.3 The Wazirs in the project region

“Waziristan, the land of the Wazirs, is bounded on the north by the Turi country and the Khost valley, on the west by the Kharoti country and on the east by the British Districts of Dera Ismail Khan, Bannu and Kohat and on the south by the Gumal valley. Its area is 6,500 square miles, which is not only larger than any one district in the North West Frontier Province, but equal to nearly half its whole settled area. The Wazirs divided this large tract amongst the different sections, the two main ones being the Ahmadzai and Utmanzai. Some sub-sections of the Ahmadzai live in the north-western corner of Bannu and the hills around Gumatti in the Saro plan and Zarwan and the junction of the Kurram and Kaitu rivers, Wana Spin, the Dhana valley, Shakai and Bardar. The Utmarzai live towards the south-west corner of Bannu, and also in the Kurram valley, on the Kaitu, in the Tochi and Khaisora valleys, Sham, Shawal and the Birmal valley” (Rose, Ibbetson and Maclagan 1919 V3: 495/496).

Much has been written about the origin of the Wazir and their link and difference from other Pashtun speaking people (see Caroe 1958). One of the first detailed accounts of the Wazirs was established by the British Army, and summarizes that “the Wazirs are largely a nomadic race and have comparatively few permanent villages and settlements. Relying on the inaccessibility of their country, the Wazir have for centuries defied the power of the rulers of India and Afghanistan, and on more than one occasion in the past they engaged and defeated the invading armies of the Moghuls. Their character, organization and instincts have made them independent and strongly democratic” (Operations in Waziristan 1919-1920: 3/4).

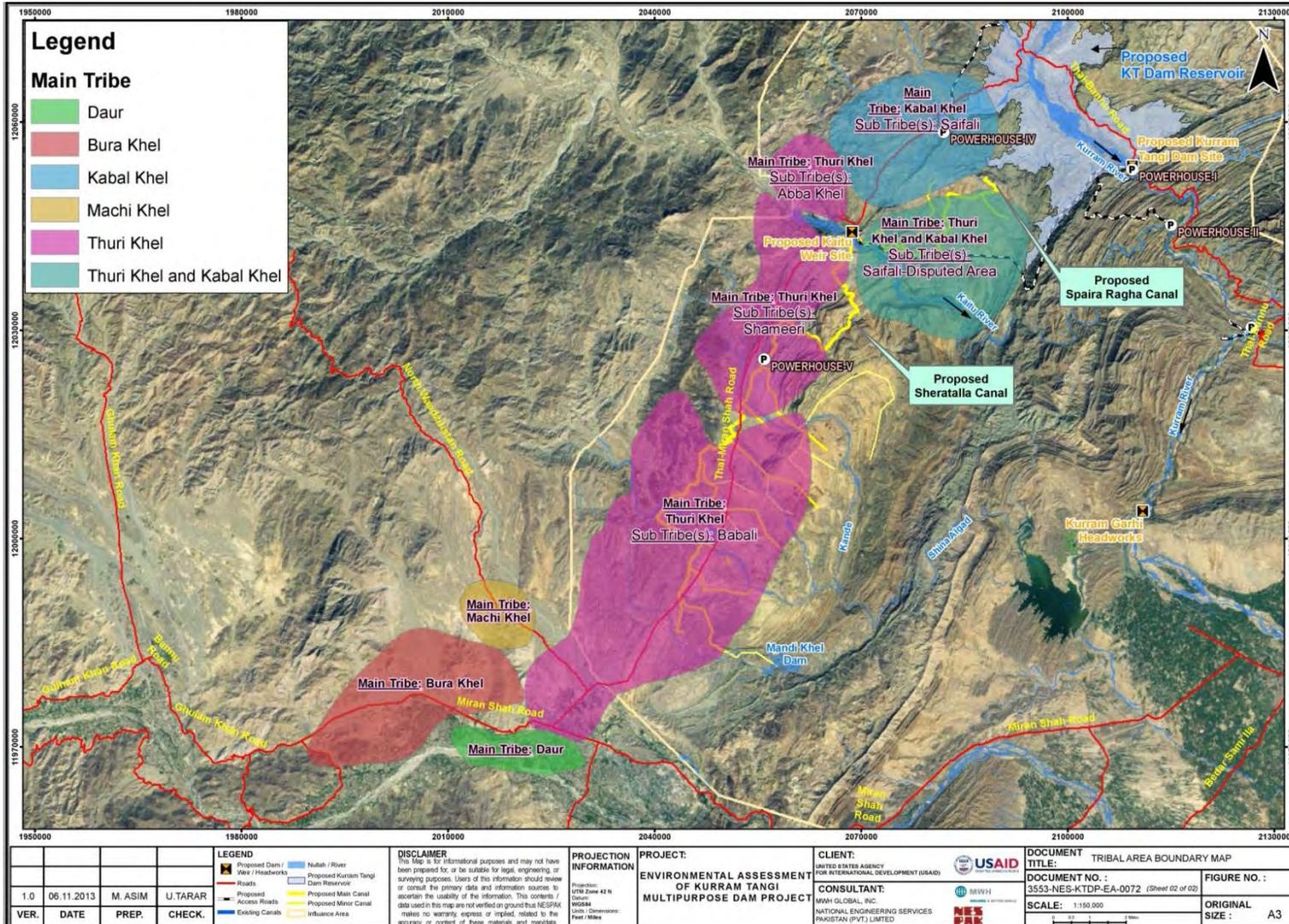
If one assesses the area today, one notes most prominently that the Wazir are no longer a nomadic race, but small scale farmers that practice a resident transhumant livelihood, but in contrast to the Bannuchi, Khattak and Marwat they did not decide themselves to settle down and become peasants, but they were forced to do so by external influence. Their livelihoods of have changed over the last 100 years not because they wanted this, but they were forced to settle down due to the ever increasing influence of “external forces”, which from their perspective includes the British Colonial Administration as well as the Government of Pakistan. While their access to the Bannu Plain became more and more restricted in the first half of the 20<sup>th</sup> century, the mountain ranges of Afghanistan became more or less off limited after the Soviet invasion in 1979 and the ongoing conflicts in Afghanistan. What remained is certainly their homeland and has been the center of their tribe since time immemorial, but without access to the plains along the Indus and the mountains of Afghanistan, they were reduced to one vegetation zone and it was therefore no longer feasible to practice full fledged transhumant livelihoods that depend on the free access to various vegetation zones.

But while their livelihoods were forcefully changed, their culture and political system remained mostly intact and still today the sub-tribes, clans and quams are much more important for the identity and live of the Wazir than the decision making in Islamabad, Peshawar or Bannu. While the Wazirs in total have more than 30 sub-tribes (see Annex 2) not all are present in the project area. Component 1 will impact on the Wazirs in the Mir Ali and Spinwam Tehsils of the Mir Ali subdivision of North Waziristan, while Component 2 will impact on the Wazirs of the Shewa Tehsil in North Waziristan as well as the people in the central part of the FR Bannu.

**In Component 1** (see map 3-3) the area

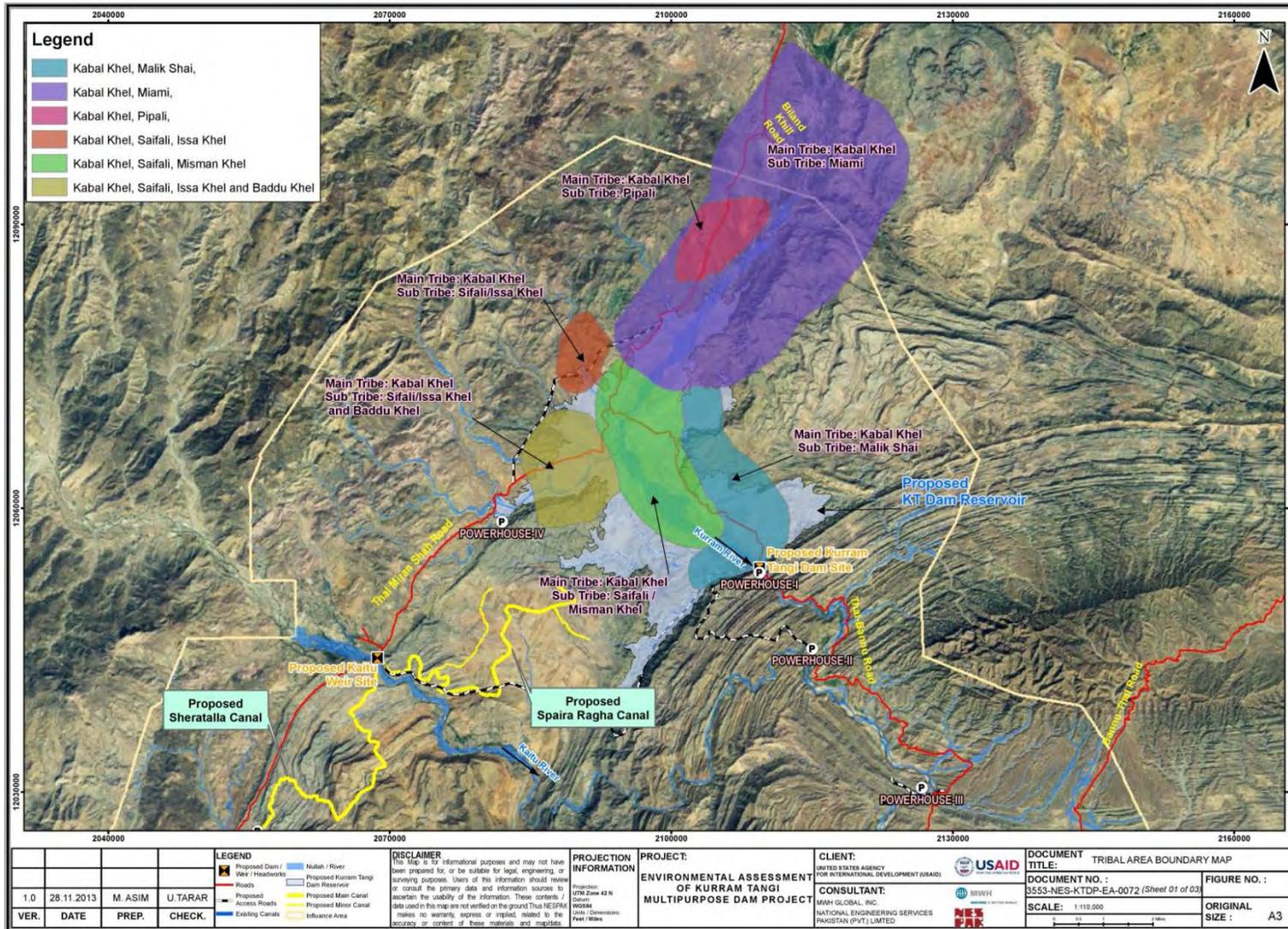
- south of Spinwam is mostly inhabited by four clans of the Thuri Khel sub-tribe: Mir Ali, Babali, Shogi and Shameeri.
- north of Spinwam is mostly inhabited by three clans of the Kabul Khel sub-tribe: Saif Ali, Issa Khel and Misman Khel.

Map 3-3: Tribal Area Boundary Map 1 of 3



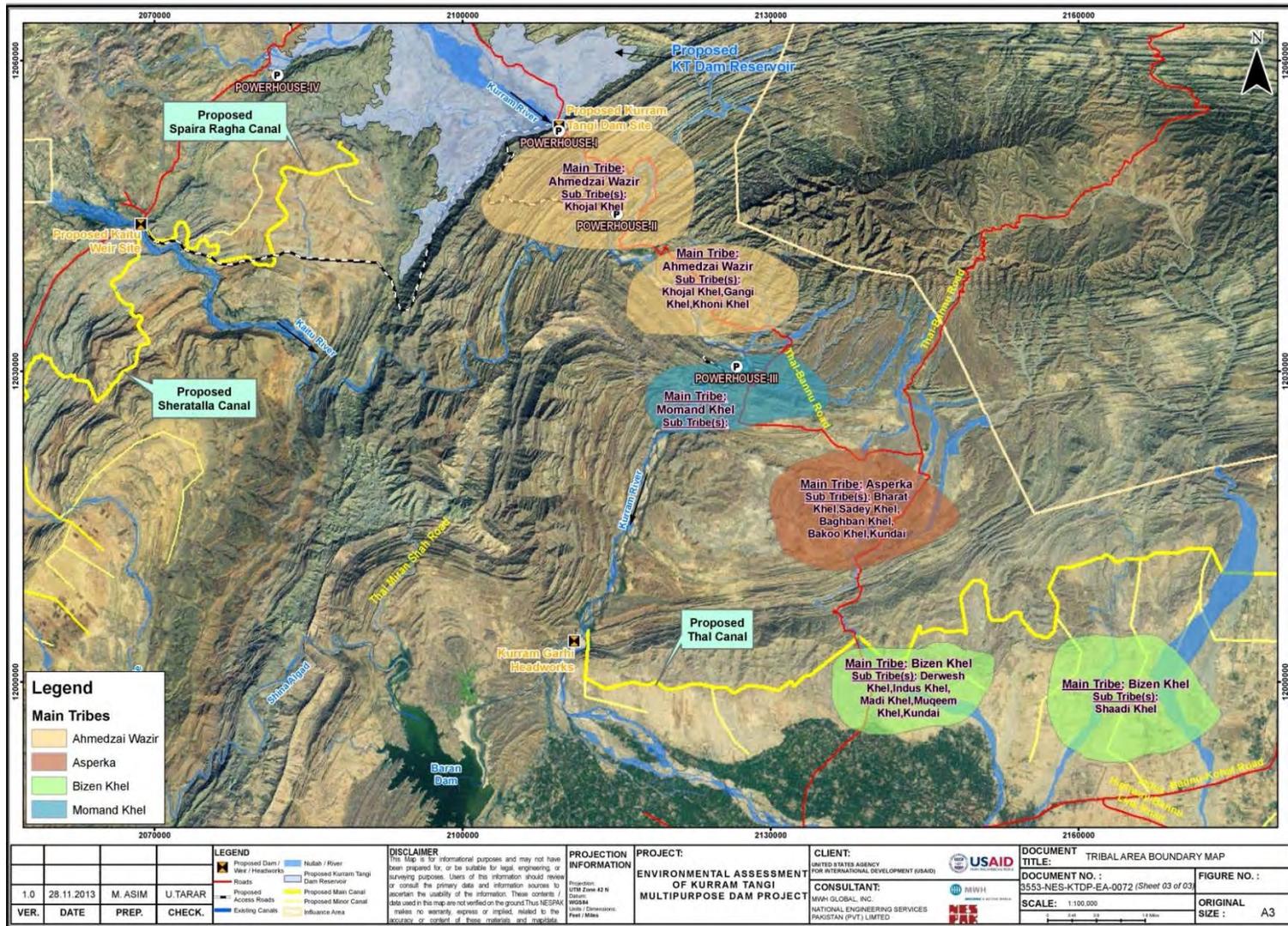
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Map 3-4: Tribal Area Boundary Map 2 of 3



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Map 3-5: Tribal Area Boundary Map 3 of 3



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- along the transmission line from Powerhouse 4 to Bannu (see map 3-4) is inhabited
  - around Tangai by three Ahmadzai clans: Gangi Khel, Khojal Khel and Khoni Khel,
  - around Taluam by two Momand Khel clans: Kaloot Khel and Grumi Khel,
  - around Gumbati by five Asperka clans: Bharat Khel, Sadey Khel, Baghban Khel, Bakool Khel and Kundai, and finally
  - around Bizen by five Asperka clans: Kundai, Muqeem Khel, Indus Khel, Madi Khel and Derwesh Khel.

As in most tribal societies there are significant conflicts between the sub-tribes and clans. This is not different in the KTDP Component I region. Component I contains three areas of conflicts:

- **Spaira Raghzai:** This area, which includes but is not limited to the Spaira Ragh Plain that is earmarked for Command Area development, is claimed by various clans of the Kabul Khel sub-tribe including the Saif Ali, Mismam Khel and Issa Khel. As the land is presently hardly used, the conflict is not subject to much debate. But it is all but certain that as soon as the construction of Component I commences and confirms that Spaira Ragh will become a Command Area, conflict will break out between these two groups and might result in open conflicts and killings. The reason for these conflicts is rather unclear, but might result from the fact that there are no clear natural boundaries that could be used to demarcate territories so that all neighboring clans claim to own the entire region up the main rivers.
- **Sheratalla Plain:** This area, which is also earmarked for Command Area development, is mutually considered to be within the territory of the Thuri Khel sub-tribe, but the inner-boundaries between the Mir Ali, Babali, Shogi and Shameeri are subject to ongoing disputes and fights. It can be assumed that these conflicts will increase as soon as it becomes certain that the Sheratalla Plain will be transformed into a Command Area.

**Component 2** (see map 3-5) is mostly inhabited by the following clans of the Kabul Khel sub-tribe:

- Saif Ali
- Pippali
- Issa Khel
- Mismam Khel
- Miami
- Malik Shai

### 3.4 Tribal governance

Legally, North Waziristan and the FR Bannu are “semi-autonomous” and are governed by customary rules that are characterized by an egalitarian and collective decision-making through consensus building on four levels: the household, the qawm, the clan, the sub-tribe and the tribe. The Government of Pakistan interacts with these tribal structures through local intermediaries: maliks are appointed by the Government to represent the sub-tribes and lungi holders appointed to represent clans. Both are appointed by, and paid by, the Government. Meanwhile, in North Waziristan the Government itself is represented by the Political Agent and on a day-to-day basis by the Assistant Political Agent in charge of the Mir Ali subdivision, the two tehsildars (heading the two tehsil) with their niab tehsildars (deputy tehsildar), the local police (“khassadars”) and additional security forces (here particularly the Tochi Scouts based in Mir Ali). In the FR Bannu the Government is represented by the Deputy Commissioner of Bannu, assisted by an Assistant Political Agent as well as members from local police and other security forces.

As indicated earlier, it is important to remember that similar to other egalitarian tribal societies, the Wazirs are not a homogenous group, but a network of sub-tribes, clans and quams. “Their character, organization and instincts have made them independent and strongly democratic, so much that even their own maliks have little real control over the unruly spirits. Any man may rise by courage and wisdom to the position of malik, but many who have attempted an undue assumption of authority have been assassinated. The democratic character of the tribes has the disadvantage ... that their jirgas, or

assembly of tribal leaders, have little restraining influence over the more lawless elements, and are therefore not truly representatives of tribal opinion.” (Operations in Waziristan 1919-1920: 3/4).

It needs to be highlighted that this statement might be a bit biased as it comes from the British Army that failed to take control over Waziristan and there are accounts that suggest that prior to the advent of the British the jirga system (i.e. the establishment of consensus through compromises and discussion) was functioning in the Wazir society and that for example the house of tribesmen that defied the findings of a jirga were burned down (Richards 1990:182; Roe 2010:47). In sum, one might need to stress, that the indirect rule used since 1895 is in the end a rule and that the transformation of the maliks from respected and elected spokesperson into government paid liaison officers opened the door for conflict of interests, self-serving behavior and redefinition of tribal processes for the needs of administration (Ahmed 1983). Consequently, while the maliks are generally perceived as tribal leaders, they are in fact merely auxiliaries of the political agents to facilitate decision making processes and not decision makers or in all cases respected representatives of the sub-tribes. It is therefore imperative for any engagement with stakeholders in the tribal areas to not use the maliks as intermediates, rather than as rulers or representatives and it has been stressed that contrary to the perception of the British Colonial Administration, the Jirga was and is an institution that is highly respected and whose outcomes are considered binding for those that participated and therefore had a chance to voice their concerns.



**Plate 3.1:** A typical jirga

It has been suggest that the mullahs have taken over the roles of the maliks. But while being a devoted Muslim is important for the Wazir, even more important is the Pushtunwali, the Wazir code of ethics, which contains many elements also found in the Sharia but which is considered to be pre-Muslim. Pushtunwali was and is the tribal code, and has many concepts and precepts, including melmastia (hospitality to strangers), nanawatai (hospitality to fugitives), the preservation of personal honor (nang), and badal (revenge against all enemies). While Barth (1959) suggests that the Wazir have a “predilection for embracing jihad” that is closely related to their anarchic society, Ahmed (2003) suggests that the growing influence of the Mullahs is basically a social problem as they can offer the impoverished youths food and a perspective. This seems to echo the assessment by the British Colonial Army, that suggested that “the Wazirs are not very much under the influence of their Mullahs and are consequently less fanatical than many tribes of the frontier” (Operations in Waziristan 1919-1920: 3/4).

### 3.5 Socio-economic situation within KTDP's tribal areas

The total number of Wazirs within the footprint of Component 1 is estimated to be around 150,000, while the footprint of Component 2 is inhabited by around 35,000 Wazirs. The annual population growth rate in North Waziristan is estimated to be 2.5 percent per year, while in the FR Bannu the population growth is negative, mostly because younger people prefer to live in the nearby Bannu. Component 3 is inhabited by the Bannuchi, Khattak and Marwat, which all as indicated earlier do not meet the characteristics of vulnerable tribes. There are obviously some Wazirs living in the footprint of Component 3, but these have voluntarily moved out of the tribal homeland and therefore again are not covered under this VTP.

**Table 3-1: Demography of the KTDP Areas**

Area of Impact	Population (2013) <sup>2</sup>
Mir Ali Tehsil North Waziristan	122,123
Spinwam Tehsil North Waziristan	30,604
<b>Component 1 North Waziristan</b>	<b>152,727</b>
Shewa Tehsil North Waziristan	29,870
Component 2 FR Bannu	4,955
<b>Component 2</b>	<b>34,825</b>
Component 3 Bannu	312,657
Component 3 Karak	198,133
Component 3 Lakki Marwat	5,772
<b>Component 3</b>	<b>516,562</b>
<b>Total</b>	<b>704,113</b>

#### 3.5.1 Livelihoods

The entire project area in North Waziristan and FR Bannu is rural, with Mir Ali being the only center with around 15,000 inhabitants. According to the Multi-Donor 'Pakistan Poverty Alleviation Fund', North Waziristan and FR Bannu are among the poorest of the 145 districts in Pakistan with the lowest Human Development and Food Security Index.

**Table 3-2: Economic Activities in the KTDP Areas**

Category	North Waziristan	F.R. Bannu	Bannu	Lakki Marwat	Karak
Rural Population	98%	100%	93%	90%	94%
Employment	<10 %	25.9%	29.6%	25.8%	22.4%
Average size of agric. Land/household (acres)	0.83	1.1	2.44	1.79	2.03
Households having < 1 acre of agric land	35%	5%	36%	5%	2%
Households having 1-5 acres of agric land	59%	44%	47%	39%	70%
Road Network (miles per square miles of area)	0.04	0.08	0.51	0.12	0.29
Literacy Ratio (10 +)	10.63%	9.71%	32.11%	29.70%	41.90%

<sup>2</sup> All data in this report, if not indicated otherwise, are from the 1998 Census and subsequent updates and/or the Agricultural Census 2000 and 2010 all done by the Pakistan Bureau of Statistics (<http://www.pbs.gov.pk/>) and the Bureau of Statistics of the Khyber Pakhtunhwa Province that also covers FATA (<http://www.khyberpakhtunhwa.gov.pk/Departments/BOS/>). The most detailed reports are five District Census Reports: North Waziristan 2000, FR Bannu 2001, Bannu 1999, Karak 2000 and Lakki Marwat 2000. The population figures here are the data presented in the census for the second lowest level of disaggregation presented in the Census (Tehsil for North Waziristan and Kanungo Circle in Bannu, Karak and Lakki Marwat). As there is no special subdivision found in the Census of FR Bannu, the figure here is based on the assumption that 20 % of the overall population of FR Bannu is affected. The projection from 1998 to 2013 follows the projection provided by the FATA data available through the Bureau of Statistics of the KP Province.

While traditionally the Wazir were transhumant, their separation from the settled areas as well as from the mountain ranges in Afghanistan, further aggravated by the long standing conflicts within the region, has turned most Wazir into resident farmers with very limited landholdings. Due to the rugged nature of the terrain with a very limited road network and the extremely low level of literacy (under 10 percent) little employment is available. In turn, significant numbers of people migrate as seasonal laborers to other parts of Pakistan or abroad. One of the economic activities many Wazirs are involved in the region is working as truck drivers or other jobs in the transport sector.

Those who stay, practice rain-fed agriculture on very small plots that are on average only one-sixth of what is available to households in other parts of Pakistan and less than half of what is available to the people in the settled areas nearby. Each household has on average three plots with a total surface area of around one acre. Most of the land is farmed by peasant owners. There are very few landlords who cultivate fields with farm laborers and/or tenants. Most of the work is done by the adult men. Relatively few women and children below the age of 12 reportedly work in agriculture (around 5 % each). The low participation rate of women in agriculture is partly due to the cultural pattern that adult women below 40 years of age are generally not allowed to leave the compound without a male escort.

Agricultural production is almost exclusively for family consumption. Wheat is the dominant rabi crop, and maize the main kharif crop. Other common crops are rice, sugarcane and barley. Less than 10 percent of the production is marketed. Around 10 percent of the farms also have perennial crops: apricot, plums, dates, grapes, pomegranates, mulberry, malta, guavas, peaches, walnuts and lemons. Finally, nearly every household has chickens, goats and sheep, as well as a few large animals such as oxen, buffaloes, mules, camels and horses.

While there are a large number of studies on the livelihoods in North Waziristan, very few are based on actual field research. One of the few exceptions is the 1963 study "Some Land Problems in Tribal Areas of West Pakistan" by Khalid Ashraf. This study provides insight into land use and land use patterns in 14 settlements of North Waziristan based on 100 in-depth household interviews and a survey of 76 farms. In 1963, 24 percent of the sampled households were landless laborers, pastoralists or for other occupations not based on land (traders, etc.). The average farm size among households with farmland was calculated to be around 3 acres and had to feed on average 6.4 people i.e. 0.5 acre/person. The fact that the figure of available farmland per household in 2013 is significant lower (less than 1 acre per household) indicates that while the population is growing relatively quickly at 2.5 percent per year on average, no additional land has become available over the last 50 years. Similar to today, 50 years ago most of the farm labor was done by adult men, while the involvement of women and children below the age of 12 was reported to be rather minor (around 5 % each).

The main purpose of farming was in 1963 consumption, and wheat was the most prominent crop (36 % of the surveyed farms), with maize, rice and barley following covering each around 20 percent of the cultivated lands. The productivity itself was rather poor with 451 kg/acre for wheat, 389 kg/acre for barley, 882 kg/acre for rice and 540 kg/acres for maize. Only 6 percent of the wheat, 12 percent of the barley and 2.4 percent of the maize were marketed, and all of the rice produced by families was consumed by the households. Thirteen percent of the farms also contained permanent crops: plums, grapes, pomegranates, mulberry, malta, guavas, peaches, apricots, walnuts and lemons. With a view on livestock more than two-thirds of the farmers had oxen and chickens, around 40 percent goats and sheep, and around 20 percent buffaloes and donkeys. Camels and horses were rare.

When compared with today, it becomes obvious that the Wazir of North Waziristan and FR Bannu have not benefited from improved agriculture, as have other regions of Pakistan where yields have gone up significantly. . Based on the available agricultural data, yields of the main crops in 2012 are on average only 2 percent above the yields of 50 years ago in the project area. One of the underlying reasons is the absence of effective and efficient irrigation systems and modern farming techniques. While the yields have not increased, the farmland available for each Wazir household has decreased over the last 50 years due to an annual population growth of 2.5 per cent from 3 acres per household in 1963 to less than 1 acre per household in 2012, while at the same time the size of households have increased from 6.4 to 9.1 people per household. This means that with a view on

agricultural land available per person, the Wazirs have experienced over the last 50 years a reduction from around 0.5 acres per person to around 0.1 acres per person; i.e. a significant impoverishment.

### 3.5.2 Land Administration

While other parts of Pakistan and some other parts of North Waziristan have a quite elaborated system of land registration. no such system exists in the project area in North Waziristan and FR Bannu. The system used in these tribal areas is rather simple: Within the overall territory of the tribe-- today basically defined by the boundaries of North Waziristan and FR Bannu -- the various clans have established through negotiations and/or warfare separate territories as shown in the maps 4 and 5 that are more or less respected by their neighbors. Within these territories, all land is customary owned by the entire clan, but all farmland and residential plots have been used for generations by specific quams and/or households. These hold “permanent user rights” that are inherited from generation to generation (i.e. from the father to the sons as women are traditionally not entitled to own land). Additional land (“worsho” i.e. undeveloped land) can be requested from the clan, but needs to be developed by the household as only developed and used land is owned by households. If for whatever reason land is not used over a longer period or abandoned, it reverts back to the clan. (This obviously does not apply if land is left fallow to regenerate for a year or two.)

In sum, residential and farmland is de facto owned by the households and de jure by the clans, while non-developed land, water, and other natural resources are owned and managed by the clans through the jirga system i.e. by consensus. While the de-facto system is rather straightforward, it was not recognized by the Government of Pakistan until 2011. In turn, the Government considered the clans represented by the maliks as owners. This meant that compensation monies, whether for undeveloped land, farmland, residential land or houses, were disbursed to the maliks. In some cases this provided the ground for sever conflicts and fatalities as quite some money seems to have got missing. In reaction and based on advice from the World Bank, the Asian Development Bank and USAID, compensation for residential land, houses and farmland is now directly disbursed to the households while the clan receives compensation for all undeveloped land (for more details see the Resettlement Policy Framework and the Resettlement Action Plan for Component One).

### 3.5.3 Settlement Patterns

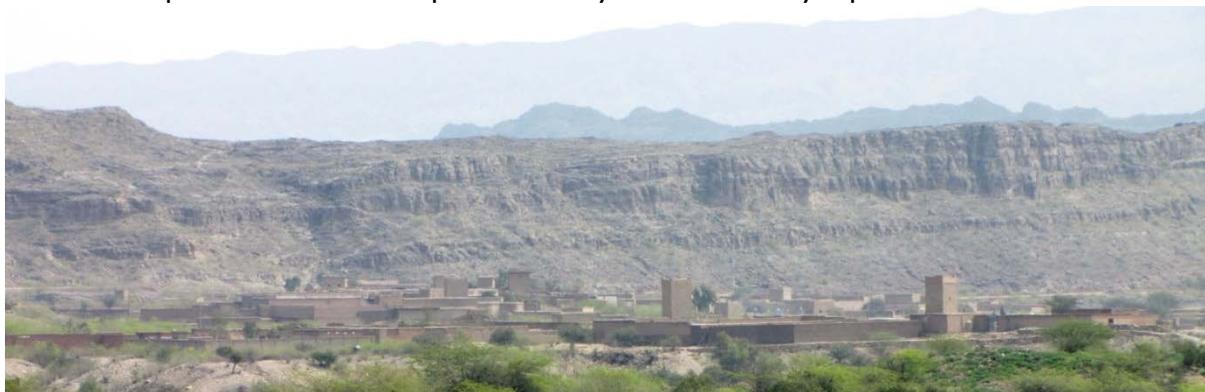
Settlement patterns vary significantly across the region and further underscore the distinctness of the Wazirs. While they live in fortresses with high walls around their compounds and guard towers, the people in the Bannu plains live in agricultural villages along roads and waterways.

**Table 3-3: Settlement Patterns in the KTDP Area**

Category	North Waziristan	F.R. Bannu	Bannu	Lakki Marwat	Karak
Main Ethnic Group	Wazir	Wazir	Bannuchi	Mattizai	Khattak
Population Density (person per square mile)	260	86	1,430	400	330
Urban Population	2 %	0 %	7 %	10 %	7 %
Rural Population	98 %	100 %	93 %	90 %	93 %
Average Household Size	9.1	9.6	9.7	9.2	10
Average number of rooms per housing unit	3.3	3.5	3.3	2.7	3.3
Pacca (Baked Brick) Housing Units	14 %	34 %	26 %	15 %	54 %

Traditionally, the Wazir live in walled compounds inhabited by one or more families, which normally each have a house or cluster of houses. While in the western part of North Waziristan, these houses are within compounds (kot) with walls of mud and/or stones that are often three to five meters high and have often a guard tower in the center that allows defending the kot against all enemies, towards the East the houses look less like fortress and more like clusters despite the fact that each house has a wall around it. Depending on the surroundings, these kots, walled enclosure can cover a surface from 2,500 to 20,000 square feet. Many compounds contain fruit trees or other trees maintained for

shade. A small truck garden may also be found inside the compound. Separate dwellings for the family of the owner and those of grown sons are found inside the walls of the compound. A separate compound may be provided for livestock outside the main compound. Less wealthy families construct their livestock compounds of thorny branches within the main compound. In areas where agricultural land and water is easily available, the compounds are clustered in villages of up to several hundred compounds but in less hospitable areas they are more widely separated.



**Plate 3-2:** A Wazir settlement in the Component 2 area

As shown in Table 3-3 around 14 percent of the houses are made out of baked bricks, blocks or stones (“pacca”), 84 percent are made out of unbaked bricks or bounded earth and the remaining 2 percent out of wood or bamboo. Within the compounds 75 percent of the houses have separate kitchens, 76 percent separate bathrooms and around one-third have separate latrines.

In the larger villages such as Spinwam and Mir Ali, compounds are densely clustered, with narrow walkways or streets separating them. Two compounds frequently share a common wall. The larger villages are provided with primary and secondary schools, mosques and usually a basic medical unit. Mir Ali, for example, a town with 15,000 inhabitants, consists of a nuclear cluster of residential and commercial buildings, among which are markets, pharmacies, vehicle repair facilities and numerous smaller businesses. Every section of a village has a masjid and a common sitting area for the jirga’s. In most settlements, one of the compounds also has a small private guest house that is open to visitors of the clan.



**Plate 3-3:** Inside a Wazir compound

Ninety-four percent of the houses are owned by the people living in them. Three percent are rented, and three percent are provided rent-free. Due to conflict and economic problems, there has been very little new construction in the last 10 years, and around 75 per cent of the houses are at least 10 years old.

### 3.5.4 Health Conditions and Health Infrastructure

According to health officials<sup>3</sup>, the following diseases are common in the areas of North Waziristan and FR Bannu affected by KTDP:

- Heavy prevalence of Cutaneous Leishmaniasis (CL) subsequent to the influx of Afghan refugees to the area in the 1980s. Leishmaniasis is a vector-borne disease caused by a species of sandfly (*Phlebotomus*). NGOs are involved in diagnosis and treatment of Cutaneous Leishmaniasis, but there is currently a shortage of medication. The focus of CL seems to be North Waziristan with 1,760 cases in 2012.
- The prevalence of diphtheria in children has increased in recent years, probably due to the reduced immunization status of children resulting from the predominantly negative attitude towards health campaigns in recent years.
- Significantly high incidence rate of polio resulting from the negative attitude towards polio oral drop campaigns in recent years. Fatalities have been reported from polio teams in various parts of the FATA.
- Malaria is generally not a problem and only occurs in extremely rainy years. Malaria is not a natural disease in the dry arid project area. In 2013 there were heavy rains in all over Pakistan and chances of malaria increased nationally including the project area.
- Low personal hygiene status occurs as a result of the population's poverty and their custom of keeping their cattle in their houses. Typically, there are no indoor toilets, resulting in a high incidence rate of water-borne diseases like diarrhea, dysentery, typhoid and hepatitis A, D, and E.
- There is a high incidence rate of Trachoma in North Waziristan in comparison with other parts of Pakistan that might be attributable to poor hygiene and the custom of keeping cattle in their dwelling areas.
- There is an increase in the number of TB cases. The health professionals interviewed attribute this to stigma and to the restrictive attitude toward female patient diagnosis and treatment that prevails in the local society.
- The prevalence of HIV AIDS is low.

The most prevalent diseases diagnosed in the project area for the years 2011 and 2012 were:

- Diarrhea/dysentery
- Depression
- Acute upper respiratory infections
- Pneumonia
- Enteric/typhoid fever
- Peptic ulcer diseases
- Scabies

The immunity status against common diseases is low as there is a growing resistance against all health and immunization campaigns. Due to that, the following diseases are on the increase:

- Poliomyelitis
- Neonatal Tetanus
- Measles
- Diphtheria
- Pertussis (Whooping Cough)
- Hepatitis-B
- Hib Pneumonia & Meningitis

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<sup>3</sup> FATA Secretariat (Peshawar), District Health Office (Bannu), Directorate of Malaria Control Pakistan (Islamabad), Provincial AIDS Control Program (Lahore), District TB Coordinator (Lahore).

– Childhood Tuberculosis

The key challenge on the preventive side seems to be access to purified drinking water and the chance to see a physician: While the national average is 0.6 physicians per 1,000 people, the figures in North Waziristan and FR Bannu as shown in the table are significant lower, as is the access to purified drinking water.

**Table 3-4: Medical Facilities in the KTDP Areas**

Category	North Waziristan	F.R. Bannu	Bannu	Lakki Marwat	Karak
Housing Units having Piped Water	14 %	25 %	43 %	39 %	22 %
Drinking Water Coverage	64 %	62 %	86 %	77 %	71 %
Number of physicians per 1,000 people	0.3	0.4	0.3	0.3	0.4
Number of hospital beds per 1,000 people	0.7	0.7	0.8	0.3	0.7

In North Waziristan there are nine hospitals with 330 beds, as well as a number of health centers which offer in total coverage just below the national average of 0.8 beds per 1,000 peoples. The key issue here is that these government facilities are understaffed and 22 percent of the positions not filled. The situation for female medical officers is even more serious: only 21 of the 48 positions are filled.

Cultural restrictions discourage women from going out publicly and forbid consulting male doctors, even when female doctors are in short supply and the illness is serious. The same restrictions apply to female children, who are generally subject to the usual childhood ailments but may not even be allowed to be vaccinated. Therefore, preventive measures are of specifically importance: About two-thirds of the families have access to drinking water, which is rather low. Only 14 percent of the compounds have in-house access to water, which is an extremely low rate of coverage. In addition, there are indications that drinking water is insufficiently purified.

### 3.5.5 Education

The literacy level in North Waziristan and FR Bannu is very low, and women are significantly disadvantaged. The government runs four basic levels of education: primary schools, secondary schools, high schools, and elementary colleges. Boys and girls are separated. All of the schools, but those of girls especially, suffer from difficulties of access, shortages of teachers, underpayment of teachers, absenteeism of teachers, and lack of teaching aids. The parents of girls frequently fail to send their daughters to school, for various reasons: There is an attitude that girls do not need education to be wives (and that being educated may reduce their eligibility for marriage). There is also a fear that when girls get older they will be assaulted on the road to and from school. Further, corporal punishment, practiced by most teachers, deters girls from wanting to go to school. For boys, on the other hand, education is valued. A family of limited resources may have to choose between sending a son or a daughter to school and will invariably send a son.

**Table 3-5: Literacy in the KTDP Areas**

Category	North Waziristan	F.R. Bannu	Bannu	Lakki Marwat	Karak
Main Ethnic Group	Wazir	Wazir	Bannuchi	Marwat	Khattak
Literacy Ratio (10 +)	10.6 %	9.7 %	32.1 %	29.7 %	41.9 %
Male	30%	17 %	50.8 %	50.3 %	68.2 %
Female	1.2%	0.6 %	12.2 %	8.6 %	18.1 %

### 3.5.6 Fuel Sources, Access to Water, Sanitation and Waste Management

According to data from 2009, 60 percent of houses possess electricity for lighting, while 40 percent rely on kerosene. Ninety-four percent of households rely on wood for cooking; hardly anybody uses gas. The reliance on open stoves causes severe indoor air pollution and the attendant respiratory problems, as well as increasing fuel wood consumption in largely deforested areas. Most wood in the area is burned without conversion to charcoal and therefore not used very efficiently.

Information on domestic water suggests that 14 percent have indoor pipes, 31 percent indoor wells (dug or drilled) and 11 percent outside wells, while the remaining 44 percent rely on “other” sources, which may be presumed to be local rivers or nullahs. Women and children of the household are responsible for obtaining water.

Thirty-seven percent of the compounds in the project region were reported to have latrines, 7 percent shared latrines with other compounds, and 56 percent reports having no latrines. In those with no latrines, residents defecate and urinate in the vegetation outside the compound.

Waste management is unheard-of and mostly deposited in the riverbeds in the hope that the next rain washes everything away.

**Table 3-6: Fuel Use in the KTDP Areas**

Category	North Waziristan	F.R. Bannu	Bannu	Lakki Marwat	Karak
Housing Units having Electricity	60 %	28 %	94 %	87 %	81 %
Housing Units having Piped Water	14 %	25 %	43 %	39 %	22 %
Housing Units using Gas for Cooking	0.1 %	0.6 %	3.0 %	3.2 %	0.7 %
Drinking Water Coverage	64 %	61 %	86 %	77 %	71 %
No latrine	56 %	55 %	46 %	78 %	80 %

### 3.5.7 Physical Cultural and Historic Resources

The region is rich in cultural heritage. Research suggests that the Bannu plain as well as the Kurram and Kaitu Valleys have been inhabited since the Upper Palaeolithic Period (50'000-10'000 BCE). Due to limited accessibility hardly any serious archaeological work has been conducted in the project region with three exceptions: a) Sir Aurel Stein, who conducted rapid archaeological surveys in 1904 and 1927 and b) some follow up excavation by Hassan Dani in the 1960ties. While “the known antiquarian remains ... are scanty, ... it appears ... highly probable that the route which leads through the Kurram Valley must, owing to the great natural facilities it offers for communication between Kabul and the central part of the Indus Valley, have been one of considerable commercial and political importance in ancient times” (Stein 1905:7).

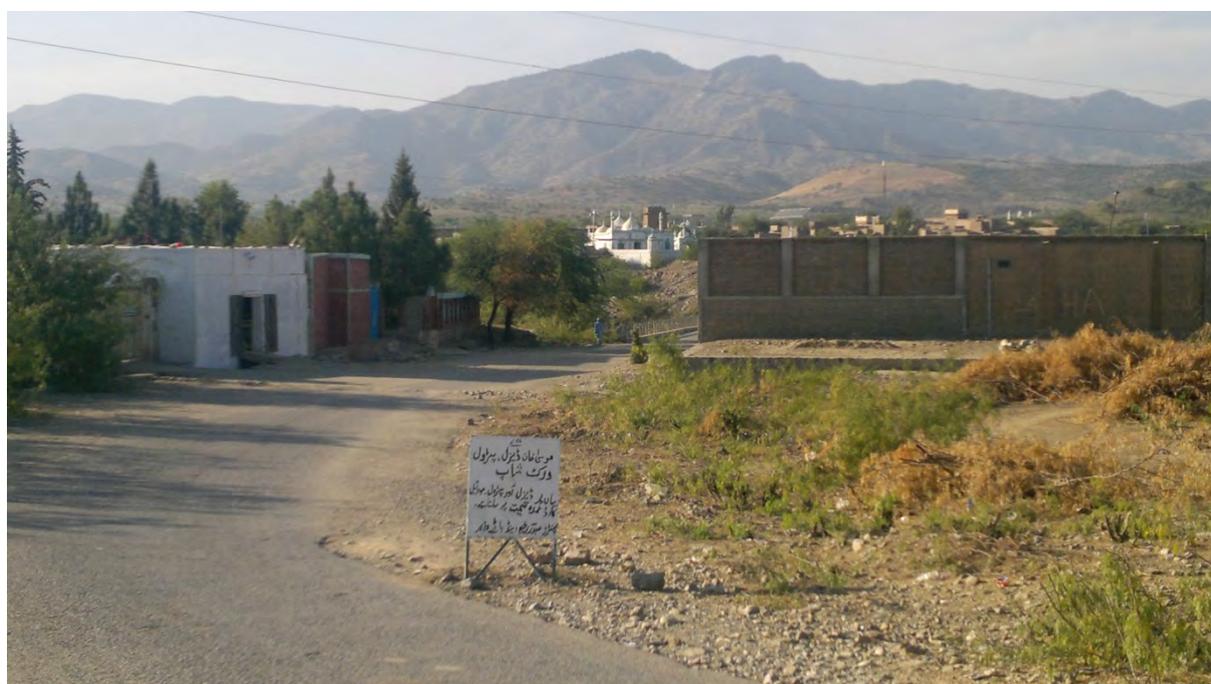
There are strong indications that the area has a high potential for historical remains remains. Three “Tochi inscriptions”, which are presented on display in the Peshawar Museum, have been were found around Spinwam. These stones display a combination of Arabic, Sanskrit and Bactrian texts and have been dated to the mid-9th century CE. This combination of texts can also be observed in findings from the Sheratalla and Spaira Ragha Plains. This type of findings suggests that the area of Component I was once the boundary between the three dominant cultures in the region and therefore might contain important cultural heritage sites.

It is well documented that the Kurram Valley had been since time immemorial one of the easiest connections between the Indus Valley and the Afghan Highlands and therefore exposed to trade and cultural exchange. It is therefore very likely that the land along the Kurram still contains many cultural heritage sites, which might be important if they document how the conflicting cultures in the region interacted without permanent conflicts.

With respect to living culture the most important site is the Shrine of the Fakir of Shewa, who played an important role in the 1936-47 upraise against the British Colonial Rule that was led by the Fakir of Ipi. The Shrine is of major significance for the local people and Kabul Khel sub-tribe of the Wazir tribe justifies its rejection of the Kurram Tangi Dam with the fear that the Shrine might be inundated by the reservoir.



**Plate 3-4:** The shrine of the Fakir of Shewa



**Plate 3-5:** Shewa village with the shrine in Component 2

For more detail on cultural heritage in general please consult the Cultural Heritage Management Plan for the KTDP and for the relocation of living cultural monuments such as the Shrine in Shewa, please consult the Resettlement Policy Framework for the KTDP.

### 3.5.8 Summary

In sum, the baseline data suggests that the Wazir are a distinct cultural group or tribe that has:

- a distinct identity that is recognized by others and even protected under national legislation through the FATA regulations,
- a clear demarcated territory, which they have inhabited since time immemorial and
- customary cultural, economic, social, or political institutions that are separate from those of the dominant society and culture

#### 4 POTENTIAL IMPACTS OF KTDP ON THE VULNERABLE TRIBES

**Table 4-1: Populations, Affected People and Beneficiaries**

Area of Impact	Population (2013)	Project affected people <sup>4</sup>		Potential Beneficiaries <sup>5</sup>
		Loss of housing	Loss of land	
Mir Ali Tehsil North Waziristan	122,123			
Spinwam Tehsil North Waziristan	30,604			
<b>Component 1: North Waziristan</b>	<b>152,727</b>	<b>6,070</b>	<b>95,180</b>	<b>194,226</b>
Shewa Tehsil North Waziristan	29,870			
Component 2 FR Bannu	4,955			
<b>Component 2</b>	<b>34,825</b>	<b>14,865</b>	<b>22,141</b>	<b>0</b>
Component 3 Bannu	312,657			
Component 3 Karak	198,133			
Component 3 Lakki Marwat	5,772			
<b>Component 3</b>	<b>516,562</b>	<b>51,022</b>	<b>494,422</b>	<b>621,459</b>
<b>Total</b>	<b>704,113</b>			

The project is expected to offer significant potentials to enhance livelihoods in North Waziristan through new and enhanced irrigation systems with a total surface area of around 22,000 acres, but these benefits come at a significant price and will only become available three to four years after the adverse impacts. More than 10 percent of the Wazir in the three tehsil will lose their houses and more than 60 percent their present landholding. Beside the normal challenges associated with such massive land acquisition and resettlement, the relocation of entire settlements of tribal people entails specific challenges as:

- the affected clans have indicated that they do not accept to relocate to territories of different, sub-tribes or clans;
- the clans earmarked for relocation have indicated that they do not accept to be grouped into one model village as suggested in the feasibility study;

Further, the resettlement, as well as the land allocation process in the Command Areas, contains high risks of conflicts between the various clans over conflicting claims and outstanding grievances, but also between the Wazirs in the project region and outsiders over benefit sharing, land allocation and decision making:

- Presently there is no commitment or indication that the Sheratalla and Spaira Ragma Command Areas are reserved for Wazirs, or more specifically for Wazirs from the affected areas. In turn, there are examples from other part of Pakistan where influential groups obtained significant landholdings without being affected or from the region.
- In Component 1 there is a large potential for conflict of interest between different resource users, more specifically between a) those clans using the Sheratalla Command Area, those clans using the Spaira Ragma Command Area, the people of Datta Khel, i.e. downstream of the Kaitu weir and WAPDA i.e. hydropower generation. There are presently no plans of how to manage the water in a way that establishes a sound balance between the different interests.
- Component 2 takes away the homes of more than 14,000 people and the productive land of more than 22,000 people, while offering few or no benefits to the people of North Waziristan and/or the FR Bannu. The water will be used to irrigate land in the settled areas that is not inhabited or accessible to the Wazirs, and all electricity will be transmitted to the national grid without any rural electrification or special benefits to the Wazirs. While the Wazir experience all the costs, they receive few if any benefits from Component 2 and the associated Component 3.
- Construction will create employment opportunities and the Wazirs have requested to benefit from that. Realistically, it may be difficult to guarantee one person per household employment during construction (see Annex 3). However, no local content commitments have been made or plans

<sup>4</sup> These figures are established and discussed in detail in the Resettlement Policy Framework of the KTDP.

<sup>5</sup> This estimate is based on the assumption that the entire Command Areas are distributed according to the existing landholdings of households and existing number of people per household in the area.

drafted on how to enhance the capabilities of local people and companies so that they can benefit from employment and procurement of services and materials. While this is said to be part of the negotiation strategy, the timeframe for the training of a Wazir labor force and enhancing the capabilities of Wazir companies is soon running out, as construction of Component 1e is expected to start in the second quarter of 2014.

- Experience has also shown that the transformation of transhumant pastoralists to irrigation farming is extremely challenging for tribal societies as their traditional livelihoods and resource use is inextricably linked to their culture and decision-making. In the traditional setting the consent of the quam is more important than individual considerations, while in the modern system technical rationales stand at the center of decision making.
- The Wazirs will be exposed to the influx of around 600 workers, security guards and military personal from different cultural background in Component 1 and around 1,500 in Component 2. While this could be a chance to offer employment to Wazirs and integrate them in to the workforce to overcome mutual resentments, the present strategy is to deploy the army to protect the workers and camps. While it is mutually agreed that camps, workers and other facilities and personnel need to be protected from jihadists and al-Qaeda operatives, this can be best achieved if the local people support the project as they benefit from it, are involved in it and therefore protect its installations and their co-workers. WAPDA has already made moves in the right direction by employing local guards to protect their survey teams as one can see in the picture below, but presently this is not foreseen as mainstream strategy during construction and operation.



**Plate 4-1:** The local body guards of the WAPDA team

In what follows, impacts on the vulnerable tribes which might result from the KTDP will be discussed to develop a plan that ensures that negative impacts are avoided if feasible or at the very least mitigated and positive impacts as much as possible enhanced.

**Table 4-2: The potential impacts of the KTDP on vulnerable tribes and peoples**

	Project activities	Possible Impacts	Proposed Mitigation Measure
<b>Component One</b>			
<b>Component One</b>	<b>Preconstruction Activities</b>		
	Identification and establishment of construction camps	<ul style="list-style-type: none"> <li>There is a risk that the camps unnecessarily impact on existing infrastructure (local irrigation, tracks used to access grazing grounds, etc.) and areas of cultural importance (graves etc.).</li> <li>There is a risk that the camps are considered to be too close to existing houses, which is perceived as creating the risk that workers and others can look at local women and girls and/or take advantage of them. Also the different cultural practices of external workers, it is feared locally, may have a negative influence on the local youths.</li> </ul>	Establish a camp location identification committee with the clans affected to advise on local preferences and no-go areas Solve land disputes over the preferred location through jirgas Optimize associated facilities (water supply, connection to the electric grid, landfill, waste water treatment) so that nearby settlements can benefit equally from them a) Put in place a local content development program to qualify Wazir job-seekers and companies b) Offer preferential treatment to Wazir job-seekers and companies throughout the supply chain (hire and procure local when equally qualified) to integrate Wazirs into the workforce
	Detailed design for roads, canals and transmission line	<ul style="list-style-type: none"> <li>The present design requires that 44 houses need to be relocated, while it is generally believed that most of these house can be avoided</li> <li>As local people have not been involved in the routing there is a risk that these linear infrastructures unnecessarily impact on existing infrastructure (local irrigation, tracks used to access grazing grounds, etc.) and areas of cultural importance (graves etc.).</li> </ul>	Establish for each affected clan a route refinement committee that advises on local preferences and no go areas
	Detailed design of the Command Areas	<ul style="list-style-type: none"> <li>As there is presently no detailed design, there is the risk that the establishment of the two Command Areas requires the relocation of 623 houses, while it is generally believed that the relocation of most of these house can be avoided</li> <li>As local people have not been involved in the routing, there is the risk that these linear infrastructures unnecessarily impact on existing infrastructure (local irrigation, tracks used to access grazing grounds, etc.) and areas of cultural importance (graves etc.).</li> </ul>	Solve existing land disputes over the two CAs through jirgas Make a public commitment that all land in the two CAs will be provided only to inhabitants of the Mir Ali, Spinwam and Shewa Tehsil and that preference will be given to households and quams that will lose agricultural land due to KTDP Establish a Command Area design committee with the affected clans to avoid unnecessary impacts on settlement, houses and areas of cultural importance (graves etc.) Establish a land allocation committee with all clans in the three Tehsils to define the land allocation process and conversion factor
	Land acquisition	To enable the construction of Component I 23,500 acres of land need to be acquired. This will trigger the need to relocate more than 650 houses and economically displace more than 10,000 households. While most land impacts can be mitigated through the allocation of replacement land in the Command Areas, it will take three to four years before this becomes available for production. The Resettlement Action Plan for Component I presently only outlines final resettlement packages for the establishment of the weir and the reservoir, while other packages need to be finalized in design before detailed	Obtain through free, prior and informed consultations the consent of the affected household, quams, clans and sub-tribes on the amended Resettlement Action Plan and implement it

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	Project activities	Possible Impacts	Proposed Mitigation Measure
		resettlement packages can be discussed with the local people. This entails the risk that the offered resettlement packages do not find the approval of the affected households, quams, clans and sub-tribes as they don't deliver on the mutually agreed objective that all lost items are compensated in kind or in cash and all livelihoods restored. Consequently, this means that they might resist moving or allowing the construction teams to access their lands.	
<b>Component One</b>	<b>Construction</b>		
	Influx of more than 600 workers, security guards, army personal.	The arrival of the army will have the advantage of being more secure from attacks by jihadist & al-Qaida and drone strikes The arrival of the army might also have negative impacts on some livelihoods (e.g. poppy production and trade, transit fees, informal trans-border trade.) and some cultural aspects: a. protection of guests (jihadist & al-Qaida operatives), b) application of local rules and regulations, c) fear that people from outside take advantage of local women and girls etc.	a) Put in place a local content development program to qualify Wazir job-seekers and companies b) Offer preferential treatment to Wazir job-seekers and companies throughout the supply chain (hire and procure local when equally qualified) to integrate Wazirs into the workforce Follow the existing regulation applicable to the FATA (frontier crimes regulation etc.) Establish with local sub-tribes and clans a Code of Conduct and enforce it
	Construction of the Command Areas	There is a significant risk that the land allocation process results in conflicts between the sub-tribes, clans and quams as not everybody can receive the most preferred parcels. While normal procedure is to group people according to subsections that will later form one water user association and do a parcel lottery among these households, the social interaction and bounds in a tribal society are more complex and for example require that quams stay together etc.	Establish, train and assist land allocation committee for all affected clans and sub-tribes to allocate land due to the agreed allocation principles and conversion factor and insure the free, prior and informed consent of every clan, quam and household Give preference to resettled households and households that have lost land due to the implementation of KTDP Provide land titles to all beneficiaries
	Construction of the powerhouses and transmission line	It is presently not foreseen to provide electricity to the people living around the transfer tunnel and canals, the powerhouses and/or the transmission line. As some of the quams and settlements around these infrastructure presently don't have access to electricity, this will undermine their support to the project and might result in informal tapping and/or acts of sabotage	Establish a rural electrification scheme around the transfer tunnel and canals, the powerhouses and/or the transmission line.
	<b>Operation</b>		
Operation of the Kaitu Weir	As WAPDA will be operating the weir, there is the risk that they optimize it's use for hydropower generation to the disadvantage of the two Command Areas as well as downstream populations around Datta Khel	While existing data suggest that there will be at all-time sufficient water available to downstream users, the hydrological data allow room for improvement. Therefore, commission a study to assess in a participatory manner downstream water needs and minimum downstream water flows as well as substantiate the available information about overall water availability. This study might result in the need to enhance existing irrigation channels in Datta Khel Establish a joint Kaitu Weir Management Board consisting of the water user association of the two CAs, the people of Datta Khel and WAPDA to balance the conflicting needs of these four beneficiaries of the Kaitu Weir.	
Operation of the Command Areas	There is the risk that more powerful clans, sub-tribes optimize the water distribution for their own needs to the disadvantage of smaller or less powerful	Enhance and assure the capability of the local water user associations for the two Command Areas in order to manage the water to the mutual	

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Vulnerable Tribes Plan

	Project activities	Possible Impacts	Proposed Mitigation Measure
		clans, sub-tribes and/or resettlers from other clans	benefit of all clans, quams and households
	Hydropower generation and evacuation	As WAPDA is the operator of the powerhouses, there is the risk that they prioritize the evacuation into the national grid over the needs of the rural electrification schemes	Assure that the needs of the rural electrification schemes are prioritized over the evacuation of power into the national grid
<b>Component Two</b>			
<b>Component Two</b>	<b>Preconstruction Activities</b>		
	Identification and establishment of construction camps	<ul style="list-style-type: none"> <li>There is a risk that the camps unnecessarily impact on existing infrastructure (local irrigation, tracks used to access grazing grounds, etc.) and areas of cultural importance (graves etc.).</li> <li>There is a risk that the camps are considered to be too close to existing houses, which is perceived as entailing the risk that works etc. can look at local women and girls and/or take advantage of them and/or that different cultural practices of external workers etc. have negative influences on the local youths.</li> </ul>	<p>Establish a camp location identification committee with the affected clans to advise on local preferences and no go areas</p> <p>Solve land disputes over the preferred location through jirgas</p> <p>Optimize associated facilities (water supply, connection to the electric grid, landfill, waste water treatment) so that nearby settlements can equally benefit from it</p> <p>c) Put in place a local content development program to qualify Wazir job-seekers and companies</p> <p>d) Offer preferential treatment to Wazir job-seekers and companies throughout the supply chain (hire and procure local when equally qualified) to integrate Wazirs into the workforce</p>
	Detailed design for roads incl. new alignment of Spinwam - Thal road	<ul style="list-style-type: none"> <li>As there is presently no detailed design, there is the risk that the establishment of the roads require the relocation of 10 houses, while it is generally believed that these houses can be avoided</li> <li>As local people have not been involved in the routing there is a risk that these linear infrastructures unnecessarily impact on existing infrastructure (local irrigation, tracks used to access grazing grounds, etc.) and areas of cultural importance (graves etc.).</li> </ul>	Establish with each affected clan a route refinement committee that advises on local preferences and no go areas
	Land acquisition	The construction of Component 2o requires around 14,000 acres of land. The acquisition of this land will trigger the need to relocation more than 1,600 houses and economically displace more than 2,400 households. The resettlement site suggested by WAPDA has been rejected by the Kabul Khel sub-tribe and it seems unlikely that they are willing to resettle into the Command Areas of Component One as the sub-tribes and clans have significant conflicts since time immemorial. KTDP has a Resettlement Policy Framework that defines the entitlements and compensation principles. It does not present any resettlement site, but suggests that around 2,500 acres are needed for resettlement houses and replacement land. It can be assumed that as long as no acceptable resettlement site(s) have been identified, that the Wazirs will not leave their houses and land without significant including violent resistance. In short, without the identification of a resettlement site that gains the consent of the affected clans, no project.	<p>Establish in close consultations with the affected households, quams, clans and sub-tribes a Resettlement Action Plan for Component Two that clearly identifies mutually acceptable resettlement site(s) and obtain through free, prior and informed consultations the consent of the affected people.</p> <p>Implement the Resettlement Action Plan.</p>

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Vulnerable Tribes Plan

Project activities	Possible Impacts	Proposed Mitigation Measure
<b>Construction</b>		
Influx of more than 1,500 workers, security guards, army personal.	<p>The arrival of the army will have the advantage of being more secured from attacks by jihadist &amp; al-Qaida and drone strikes</p> <p>The arrival of the army will have negative impacts on some livelihoods (poppy production and trade, transit fees, informal trans-border trade etc.), and some cultural aspects: a. protection of guests (jihadist &amp; al-Qaida operatives), b) application of local rules and regulations, c) fear that people from outside take advantage of local women and girls etc.</p>	<p>a) Put in place a local content development program to qualify Wazir job-seekers and companies</p> <p>b) Offer preferential treatment to Wazir job-seekers and companies throughout the supply chain (hire and procure local when equally qualified) to integrate Wazirs into the workforce</p> <p>Follow the existing regulation applicable to the FATA (frontier crimes regulation etc.)</p> <p>Establish with local sub-tribes and clans a Code of Conduct and enforce it</p>
Construction of the Kurram Tangi dam with three powerhouses	It is presently not foreseen to provide electricity to the people living around the reservoir, along the transfer canals and/or around the powerhouses. As some of the quams and settlements around these infrastructure presently don't have access to electricity, this will undermine their support to the project and might result in informal tapping and/or acts of sabotage	Establish a rural electrification scheme around the transfer tunnel and canals, the powerhouses and/or the transmission line.
<b>Operation</b>		
Hydropower generation and evacuation	As WAPDA will operator the powerhouses, there is the risk that they optimize the use for evacuation into the national grid to the disadvantage of the rural electrification schemes	<p>Assure that the needs of the rural electrification schemes are prioritized to the evacuation of power into the national grid</p> <p>Consider to put in place a benefit sharing system that provides the displaced quams and clans with a production related royalty</p>

In addition there are three crosscutting challenges:

- To date, the Wazir in their majority do not have the technical skills to participate actively in technical discussions and activities. They are, due to that - even in those cases when they are invited to participate in decision making bodies - not able to defend their rights, needs, and interests and remain despite the FATA system at the mercy of the Government of Pakistan.
- As VTP are relatively new instruments in Pakistan, the skills of officials and other stakeholders need to be enhanced to allow them to interact more successfully with the vulnerable tribes.
- The legislative framework of the FATA is significantly outdated and does not, for example, provide any guidance on how to share benefits of projects such as the KTDP and which uses resources belonging traditionally to the Wazir to provide benefits to people in the settled areas.

### **Mitigation Measures**

- WAPDA and the Department of Irrigation will elaborate, together with other relevant national research/training structures, governmental extension services and specialists for the work with vulnerable peoples, based on the documented best practices, training curricula on key topics related to water management and irrigation. Apart from the technical aspects of these training opportunities, special emphasis will be on the facilitation of mutual understandings of all stakeholders involved. This work can open the road to a new, more beneficial relationship.
- WAPDA and the Department of Irrigation will enhance the capacities of relevant project staff and extension workers in North Waziristan and FR Bannu to enable them to respect even further the rights, livelihoods, culture and needs of the affected Wazir and to interact successfully with them in a culturally appropriate manner.
- WAPDA will commission a study to understand how downstream benefits are shared with upstream tribal populations and/or tribes that had to resettle to enable downstream benefits. Based on that, WAPDA will elaborate a suggestion to the Government of Pakistan of how such issues should be handled in the future.

**Summary:** In the positive scenario, the projects will foster the full respect for the dignity, livelihoods, human rights, and culture of the affected Wazir, protect them from suffering adverse effects from the measures, implemented and guarantee that they receive social and economic benefits that are culturally appropriate and gender and inter-generationally inclusive.

To achieve all this requires a specific set of actions in a specific development framework, the Wazir will face several major risks, which have to be mitigated, including

- further physical and economic displacements from their land and territory,
- lost legal access to land and natural resources, which are an important source of livelihood and basis for their cultural and social system,
- greater marginalization in the overall society and exclusion from the nation,
- less assistance from governmental services (if they wish to receive such services),
- less capacities to defend their legal rights, and
- loss of their cultural and social identity.

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## 5 THE VULNERABLE TRIBES PLAN

The VTP develops measures to ensure that the affected Wazirs receive social and economic benefits that are culturally appropriate, including measures to enhance the capacity of all stakeholders to achieve this. It also addresses the risks identified in Chapter 4 and develops, on the basis of the mitigation strategies outlined there, actions to avoid, minimize, mitigate, and/or compensate these adverse effects: The timeline are based on the assumption that Component 1 is implemented starting from 2014 and that Component 2 is developed from 2014 to 2017. The budget is indicative and will need to be tailed by the Project Management Team based on the final design and timelines.

**Table 5-1: Vulnerable Tribes Plan for the Kurram Tangi Dam Project**

Issue	Activity	Responsibility	By When	Cost in Rupees	Indicators
Assure the participation of affected Wazirs in the decision making process	Sensitize all clans about the opportunities of the VTP	Specialist service provider (e.g. NGO)	Q1/2014	2,000,000	Minutes of meetings
	Train and assist the different clans to establish and operate the various committees with	Specialist service provider (e.g., NGO)	Q1/2014ff	5,000,000	Minutes of meetings
	Establish code of conduct for camps, workers .	Specialist service provider (e.g., NGO)	Q2/2014	1,000,000	Code of Conduct available
	Integrate tribes into decision making of design	WAPDA		0	Minutes of commissions and management meetings
	Integrate tribes in Command Area development and management	Dep. of Irrigation	Q2/2014ff	0	
	Train WAPDA and contractor of FCR.	FATA	Q1/2014	1,000,000	
Resolve land disputes	Facilitate process and document results	FATA	Q1-3/2014	0	Minutes of the jirgas
	Support the process through surveys	Specialist service provider (e.g., NGO)	Q1-3/2014	2,000,000	
Local content development program	Commission a demand and supply side analysis to identify local content potentials	Specialist service provider (e.g., NGO)	Q1/2014	1,000,000	Study available
	Development of training curricula		Q1/2014	1,000,000	Study available
	Implementation of training	Vocational training centers.	Q2/2014	5,000,000	Training certificates
Land acquisition	Pay particular attention to the needs of the Wazir		Q1/2014ff	RAP budget	See RAP
	Provide training in irrigated agriculture	Dep. of Agriculture	2015/6	RAP budget	See RAP
Studies	Commission study on optimal water use to balance benefits	Specialist service provider (NGO)	Q3/2014	2,000,000	Study available
	Commission study on production based benefit sharing system for hydropower project	Specialist service provider (NGO)	Q3/2014	5,000,000	Study available
	Commission study on how to enhance FATA regulations to assure benefit sharing schemes	FATA	2015	0	Study available
Rural electrification	Front end engineering design study	Engineering company	2015	5,000,000	Study available
	Implement project	DISCO	2016/7	Tbd	Tbd
VTP Implementation Management	Tailor the VTP around final design and timelines and	Specialist service provider (NGO)	ongoing	2,500,000 Per year	The Wazirs provide their consent
Participatory Impact Monitoring (PIM)	Conduct PIM	Specialist service provider (NGO)	ongoing	500,000 Per year	
<b>Total</b>				<b>40,000,000</b>	

Implementation of the measures will better ensure that KTDP is able to deliver on its objectives and

- reduce poverty for vulnerable tribes in one of the poorest regions of Pakistan,
- promote an effective management and utilization of land and water resources, which offers benefits to the entire population,
- foster the full respect for the dignity, rights and culture of the Wazirs,
- assure that the Wazirs receive culturally appropriate benefits equal to any other groups
- protect the Wazir from suffering adverse effects, thus
- comply with international standards.



**Plate 5-1:** Consultations with the Wazirs

## 6 COMMUNICATION FRAMEWORK

Due to the challenging security situation, the consultations with the affected Wazirs were limited on a number of jirgas organized on specific subjects such as land acquisition, valuation and the gazering of baseline data. During these meetings the contacted Wazirs appreciated the selected approach to invite all quams and households of a given location to participate in a jirga rather than channeling communications through the maliks. It seems therefore advisable to channel at in the early stage of VTP implementation all communications through jirgas at clan or settlement level.

At a later stage this approach might be rather challenging and it is recommended to discuss with each jirga the option to use tribal delegates to participate in more technical meetings that then would then report to their jirgas and vice versa. This communication approach obviously contains the risk to face the same challenges as the malik system. It is therefore recommended to discuss as one of the first activity of VTP implementation on how to establish a communication that meets requirements of schedules etc. as well as assures that all agreements are based on consensus of those affected and established through free, prior and informed consultations.

The following principles are the lessons learned from many VTP in Southern Asia and might help KTDP and the Wazirs in establishing an adequate communication framework:

Before the different levels of the communication framework are outlined, it is useful to review some basic principles of intercultural communication in general and the work with vulnerable tribes in particular. All actors should

- **Aim to share control and responsibility.** One should share control with even if those who, are perceived as not qualified, inexperienced and driven by different objectives. One will have to work with them anyway, so one needs to try to increase their capacities and encourage them to participate actively to facilitate processes.
- **Monitor and evaluate all the time.** Social safeguard instruments such as this VTP are relatively new tools in Pakistan, and the work with vulnerable tribes is a new task for the governmental services dealing with water.., So it is necessary for all actors to assist the implementing structures to achieve the common goal of equal opportunities and sustainable development. It is not only the responsibility of the implementing structures to ask the Wazirs in all processes for their opinion and invite them to participate in the decision making processes, but also the responsibility of the Wazirs to contribute as much as possible to the implementation of the VTP and the KTDP at large.
- **Keep people informed, listen to what they say.** No one was born with a better knowledge than others and everybody has something to say. Since water management affects everybody and is based on the contribution of everybody, everybody needs to be informed so that they can become involved in all kinds of activities.
- **Be prepared to learn new ways of doing things.** Since successful water management is based on the cooperative management of all people in the project area, everybody has a say and is able to contribute something. To observe how other people handle issues is always an advantage, because by learning new ways of doing things, one is better prepared to address new challenges in the future and to understand the actions of others.
- **Be totally professional and committed at all times.**
- **Do not allow people to use the projects for selfish reasons.** There is always the risk that certain people take over a project to personalize the benefits related to it. These problems mostly occur when people are not fully involved in what is going on, don't come to meetings, don't listen to talks and sign documents without reading them. As long as one rests silent or passive, those in charge might do what they want. So it is everybody's responsibility to take part in the decision making process.
- **Be patient, but demand commitment and effort.** The communication between different clans is not an easy task and one might have had bad experiences in the past. One should leave bad memories behind and presume that the others have learned as one has also increased its capacity.

- **Respect beliefs and customs.** The VTP provide guidance on how to achieve a cooperative management of the water resources for the greater good of all. A first step to sustain diversity is the respect for the different beliefs and customs. This is obviously a mutual process and includes that the Wazir accept peoples from other parts of Pakistan and potentially from other countries to peacefully enter and work in the project region.

Based on the experience of other projects, it seems advisable to have a central body that follows up the VTP implementation, and mirroring other VTPs it is suggested to consult the affected Wazir on the option to establish a VTP steering Committee that could consist of

- The Assistant Political Agent for Mir Ali
- The Assistant Political Agent for FR Bannu
- Two representatives from the KTMP Project Management Unit (Coordinator),
- Two representatives from WAPDA,
- Two representatives from the Department of Irrigation,
- One representative of the National Transmission Dispatch company in charge of establishing the transmission line
- One representative of the Department of public works in charge of road construction
- One representative each of these Thuri Khel clans: Mir Ali, Babali, Shogi and Shameeri.
- One representative each of the following Kabul Khel clans: Saif Ali, Pippali, Issa Khel, Misman Khel, Miami and Malik Shai
- One representative of each of the sub-tribes along the transmission line: Ahmadzai, Momand Khel and Asperka.

Normally such steering committees meet twice a year to review the progress made in the implementation of the VTP. Its members are normally informed about all kinds of activities of the projects and communicate relevant information to the various clans. They would also gather information and feedback from the Wazirs to channel them to the relevant structures. Within this work, the representatives should remember that they are representatives of the people and due to that feedback all information they receive and consult their clans and quams as often as possible and prior to any major decisions. The VTP creates a level playing field, the Wazir have to decide themselves how they use this communication framework or another communication framework to voice their needs and interests and as highlighted before the discussion on an adequate communication framework would need to stand at the beginning of VTP implementation (see action plan above).

As the communication is mostly channeled through the projects and government structures, a situation might arise in which certain information is not communicated or adequately addressed. In that line, the provision of accessible procedures to address grievances by the affected Wazir arising from the implementation of the projects is an important element to enhance and sustain the communication and mutual understanding. In selecting a grievance structure, the sub-tribes and clans should take into account their customary dispute settlement mechanisms and the fact that it should be a structure considered by all stakeholders as an independent and qualified actor.

**Table 6-1: Consultations held on the VTP**

Date	Venue	Participants	Issues Discussed
<b>Sessions for Tribal Land Ownership</b>			
September 18, 2013	Office of the Divisional Commissioner, Bannu	25 Maliks and WAPDA and government officials	<ul style="list-style-type: none"> <li>• Identification and demarcation of tribal and individual land ownership</li> <li>• Local community support to project and its related studies</li> <li>• Demands for involvement of locals in construction phase of project</li> </ul>
October 8, 2013	ACE Office, Bannu	20 Maliks from Madee and Mir Ali Sub Tribes as well as WAPDA and government officials	<ul style="list-style-type: none"> <li>• Identification of land ownership</li> <li>• Resolution of land ownership disputes</li> <li>• Tribal rivalries</li> </ul>

**Table 6-1: Consultations held on the VTP**

Date	Venue	Participants	Issues Discussed
<b>Sessions for Land Owners in Kaitu Weir Area</b>			
October 7, 2013	ACE Office, Bannu	8 community representatives from Kaitu Weir Area	<ul style="list-style-type: none"> <li>• Identification of land ownership</li> </ul>
October 8, 2013	ACE Office, Bannu	5 community representatives from Kaitu Weir Area	<ul style="list-style-type: none"> <li>• Identification of farmers and cultivators of the land and formulation of strategy to list all land users</li> </ul>
October 9, 2013	ACE Office, Bannu	7 community representatives from Kaitu Weir Area	<ul style="list-style-type: none"> <li>• Initiating the listing of cultivators and land users of Kaitu Reservoir area</li> </ul>
October 10, 2013	ACE Office, Bannu	21 community representatives from Kaitu Weir Area	<ul style="list-style-type: none"> <li>• Identification and verification of land owners in Kaitu Weir and Reservoir areas</li> </ul>
October 11, 2013	ACE Office, Bannu	14 community representatives from Kaitu Weir Area	<ul style="list-style-type: none"> <li>• Finalization of land users and cultivators in Kaitu area</li> </ul>
October 24, 2013	ACE Office, Bannu	11 community representatives from Kaitu Weir Area	<ul style="list-style-type: none"> <li>• Final sign-off and verification of list of land users and cultivators in Kaitu area</li> </ul>
<b>Sessions for Owners of Structures in Component I</b>			
October 8, 2013	ACE Office, Bannu	5 community representatives from Component I areas	<ul style="list-style-type: none"> <li>• Preliminary identification of household owners</li> </ul>
October 10, 2013	ACE Office, Bannu	9 community representatives from Component I areas	<ul style="list-style-type: none"> <li>• Identification of home and household owners</li> </ul>
October 11, 2013	ACE Office, Bannu	10 community representatives from Component I areas	<ul style="list-style-type: none"> <li>• Finalization of list of home and household owners in Component I areas</li> </ul>
October 24, 2013	ACE Office, Bannu	11 community representatives from Component I areas	<ul style="list-style-type: none"> <li>• Verification and sign-off on list of home and household owners in Component I areas</li> </ul>
<b>Sessions for Land Owners in Component I</b>			
October 24, 2013	ACE Office, Bannu	11 community representatives	<ul style="list-style-type: none"> <li>• Initial identification of farm ownership and cropping patterns</li> </ul>
November 4, 2013	ACE Office, Bannu	5 community representatives	<ul style="list-style-type: none"> <li>• Identification of farms and land users in Component I areas</li> </ul>
November 5, 2013	ACE Office, Bannu	25 community representatives	Finalization of list of farm owners and land users in Component I areas
November 7, 2013	ACE Office, Bannu	8 community representatives	<ul style="list-style-type: none"> <li>• Verification and sign-off on list of farm owners and land users in Component I areas</li> </ul>
<b>Jirgas and Consultation Sessions on the VTP</b>			
October 7, 2013	Mir Ali	Chief Malik of North Waziristan, Qadir Khan, and other important tribal leaders	Overall tribal support to the project and its studies
October 16, 2013	Spinwam	Malik and Representatives of Tori Khel Tribe	<ul style="list-style-type: none"> <li>• Land ownership and identification of household owners in component areas</li> </ul>
October 21, 2013	Shewa	Maliks and representatives of Kabul Khel Tribe	<ul style="list-style-type: none"> <li>• Resolution of tribal land ownership disputes</li> <li>• Identification and verification of land and household ownership</li> </ul>

**Table 6-1: Consultations held on the VTP**

<b>Date</b>	<b>Venue</b>	<b>Participants</b>	<b>Issues Discussed</b>
<b>Validation of VTP</b>			
Nov 22, 2013	Bacha Khan Hall/Auditorium at Bannu	30 Maliks from Shamiri , Abba Khel, Datta Khel and Madi Khel Tribes	<ul style="list-style-type: none"> <li>• Validation of VTP</li> <li>• The Maliks communicated the decision of the local jirgas that they are prepared to support the project if the VTP is implemented</li> </ul>
Nov 23, 2103	Hall/Auditorium at Bannu	26 Maliks from Mir Khoon Khel and Bobali Tribes	<ul style="list-style-type: none"> <li>• Validation of VTP</li> <li>• The Maliks communicated the decision of the local jirgas that they are prepared to support the project if the VTP is implemented</li> </ul>
Dec 03, 2103	Hall/Auditorium at Bannu	30 Maliks from the clans in the Component 2 area	<ul style="list-style-type: none"> <li>• Validation of VTP</li> <li>• The Maliks communicated the decision of the local jirgas that they are prepared to support the project if the VTP is implemented</li> </ul>

## **7 MONITORING AND EVALUATION MECHANISMS**

The monitoring and evaluation of the VTP implementation, as well as the implementation of KTDP in the Mir Ali, Spinwam and Shewa Tehsils of North Waziristan and in the central section of the FR Bannu are important management tools, which should include arrangements for the free, prior, and informed consultations. The implementation of a participatory impact monitoring (PIM) will be an important element to assist the stakeholders to fine-tune their interventions so as to maximize culturally appropriate benefits and provide space for the Wazir to voice their concerns.

A PIM report should be produced each year before September and then be returned to all Wazir clans for feedback etc. before being handed over to WAPDA, the Department of Irrigation and the FATA Secretariat. In January the VTP Steering Committee will meet to discuss among other issues the PIM reports and prepare recommendations on how to fine-tune the VTP further. The VTP evaluation and the recommendation will be communicated to all stakeholders before March as well as published on the FATA webpage. The VTP implementation in view of the performance indicators outlined in the VTP and the outcomes of this process will be further crosschecked once every year by an external VTP evaluation in view to enhance the quality further.

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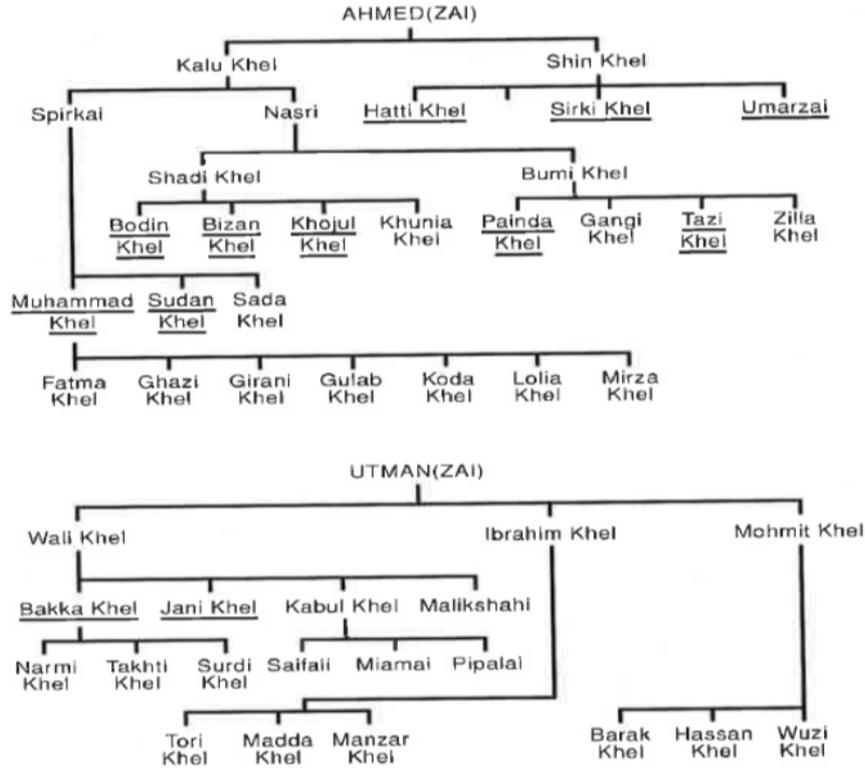
## **ANNEX I: BIBLIOGRAPHY**

- Ahmed, A.S.; 1983; *Resistance and Control in Pakistan*; Cambridge: Cambridge University Press.
- Ahmed, A.S.; 1984; *Religion and Politics in Muslim Societies: Order and Conflict in Pakistan*; Cambridge: Cambridge University Press.
- Ashraf, K; 1963; *Some Land Problems in Tribal Areas of West Pakistan*; University of Peshawar.
- Bailey, F.G.; 1960; *Tribes, caste and nation*; Manchester University Press.
- Barth, F. ; 1959; *Segmentary opposition and the theory of games: a study of Pathan Organization*.  
*Journal of the Royal Anthropological Institute* 89.
- Beattie, H.: 2002; *Imperial Frontier: Tribes and State in Waziristan*; London: Curzon.
- Bruce, C.E.; 1938; *Waziristan 1936–1937*. Gale and Polden, Aldershot.
- Caroe, O.; 1965; *The Pathans*, Macmillan Press, London.
- General Staff; 1921; *Operations in Waziristan 1919–1920*. Compiled by the General Staff, Army Headquarters, India. Superintendent Government Printing, Calcutta, India. Confidential.
- General Staff ;1932; *Summary of events in North-West Frontier tribal territory. 1st January, 1931 to 31st December, 1931*. Government of India Press, Simla, India. Confidential.
- General Staff ;1936; *Military report on Waziristan 1935*. 5th edn. Government of India Press, Calcutta, India. Confidential.
- General Staff; 1937; *Report of the Frontier Watch and Ward Committee 1936*. Printed by the Manager, Government of India Press.
- Rashid, A.; 2012; *Pakistan on the brink*; New York: Viking.
- Richards, D.S.; 1990; *The Savage Frontier: A History of the Anglo-Afghan Wars*. Macmillan. p. 182.
- Roe, A.M.; 2010; *Waging War in Waziristan: The British Struggle in the Land of Bin Laden*; University of Kansas.

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**ANNEX 2: SUBTRIBES AND CLANS OF THE WAZIR**

WAZIRS  
 (DARWESH KHEL)  
 (groups some or all of the members of which wintered in British territory c.1850 underlined)<sup>1</sup>



<sup>1</sup> This table is based primarily on Ahmed 1991: 19, MacGregor 1873 I-3: 251-2, 255-6, and Urmston 1866.

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### ANNEX 3: LOCAL REQUESTS

#### Tribe Wazir Bezan Khel (Translation)

We the elders and representatives of the Tribe Wazir Bezan Khel mutually agree in the written form for the Kurram Tangi Dam and Thal Canal. We as a tribe happily agree to willfully give our land. The government or the national commission whatever compensation they give us for the land we agree and accept it and we have no objection to it. If any person of the tribe or any sub branch of the tribe tried to oppose it or tried to stop the work than we the whole tribe will be responsible for that and whatever penalty or fine the Political Administration of the FR Bannu imposes on us than we will pay it.

Sub-tribe	Share in Tribe	Fertile Land (Kanal)	Undeveloped land (Kanal)	Fertile Land Price (Rupees)	Barren Land Price (Rupees)	Total Price (Rupees)	Name of Tribal Elders	Sign/finger print/CNIC Number
Kundai	1/5	3	186.8	60,000	1,120,800	1,180,800	1.Malik Shaleel 2.Sher Nawaz	
Mukeem Khel	1/5	3	186.8	60,000	1,120,800	1,180,800	1.Malik Rasheed 2.Shameem 3. Malik Feroz	
Indus Khel	1/5	3	186.8	60,000	1,120,800	1,180,800	1.Master SherNawaz 2.Malik Hamidai	
Madi Khel	1/5	3	186.8	60,000	1,120,800	1,180,800	1.Malik Hamzad 2.Saifal	
Darwaish Khel	1/5	3	186.8	60,000	1,120,800	1,180,800	1.Malik Kashmal 2.Noor Muhammad	
Total		15	934	300,000	5,604,000	5,904,000		



قبضہ الہ خیل قوم وزیرین خیل

ہم ذیل مشران مکان قوم وزیرین خیل مشترکہ طور پر یہ اقرار کر کے لکھ دیتے ہیں کہ گرم پٹی ڈیم کے نقل کنال کیلئے ہم قوم بخوشی خود اپنا زمین دے کے کیلئے تیار ہیں۔ اور حکومت ہمیں زمین کی قیمت تقویٰ کمیشن جو بھی دیتا ہے۔ وہ ہمیں قبول و منظور ہے۔ اور اس پر ہمیں کوئی اعتراض نہیں ہے۔ اور اگر قوم کے کسی فرد مشران نے اس میں رکاوٹ ڈالی۔ یا تیسری کام کو بند کیا۔ تو ہم پوری قوم اس کی ذمہ دار ہونگے۔ اور پولیٹیکل انتظامیہ ایف آر بیوں جو بھی جرمانہ ہم پر عائد کرے۔ ہم ادا کریں گے۔

نمبر شمار	نام مشران	قوم میں حصہ	زرعی زمین	نمبر زمین	زرعی زمین کی قیمت	نمبر زمین کی قیمت	کل رقم	نام قوم مکان	دستخط/تاریخ/مقام
(1)	کنڈائی	1/5 حصہ	3 کنال	186.80 کنال	-/60,000 روپیہ	-/11,20,800 روپیہ	-/11,80,800 روپیہ	(1) ملک خلیل (2) معتمد شیر نواز	دستخط/تاریخ/مقام
(2)	مقیم خیل	1/5 حصہ	3 کنال	186.80 کنال	-/60,000 روپیہ	-/11,20,800 روپیہ	-/11,80,800 روپیہ	(1) ملک رشید (2) شیم (3) ملک فیروز	دستخط/تاریخ/مقام
(3)	انڈس خیل	1/5 حصہ	3 کنال	186.80 کنال	-/60,000 روپیہ	-/11,20,800 روپیہ	-/11,80,800 روپیہ	(1) ماسٹر شیر نواز (2) ملک محمد علی	دستخط/تاریخ/مقام
(4)	مدنی خیل	1/5 حصہ	3 کنال	186.80 کنال	-/60,000 روپیہ	-/11,20,800 روپیہ	-/11,80,800 روپیہ	(1) ملک حکمران (2) سیفلی	دستخط/تاریخ/مقام
(5)	درویش خیل	1/5 حصہ	3 کنال	186.80 کنال	-/60,000 روپیہ	-/11,20,800 روپیہ	-/11,80,800 روپیہ	(1) ملک کشمالی (2) نور احمد	دستخط/تاریخ/مقام
	ٹوٹل:		15 کنال	934 کنال	-/3,00,000 روپیہ	-/56,04,000 روپیہ	-/59,04,000 روپیہ		دستخط/تاریخ/مقام

Assistant Political Agent  
Bannu Region Bannu

Approved for land as evident from  
No. 934 Kanul Kanul 15/11/16

**Demands of the following sub branches of Kabul Khel Tribe  
(translation)**

1. Malikshai –Kabul Khel
2. Misman khel, Saifali–Kabul Khel
3. Issa khel, Saifali-Kabul Khel (except for Kotka Sabir Jan)
4. Kotka Samar gul, Abdul Sharif, Sakhi ur Rehman (Saif Ali Kabul khel) etc
5. Miami Kabul khel
6. Kotka khan sahib, Malik Shah Mahmood, Miami Kabul khel

**Demands:**

1. Commercial price of lands in Peshawar, Islamabad and Lahore to be used as compensation price for the irrigated lands of the effected people.
2. Bannu Steel mill area rate to be used as compensation price for the barani (rain fall) land.
3. Residential lands which has bungalows (houses), mosques etc to be compensated at the rate of Bannu steel mill area.
4. Mountainous areas which has trees etc to be compensated after further discussions with the elders of the Kabul Khel tribe.
5. Perks and privileges given to the people of Kabul khel tribe in the form of Levis, class four civil servants, Lungi allowance etc by the Government of Pakistan shall be continued to be compensated by Government of Pakistan and WAPDA if the people are settlement at other location as well.
6. The tribal status of Kabul Khel Tribe to be preserved no matter where the tribe is moved and shall be exempted from paying any unities bills or taxes according to tribal status.
7. Commission over the use of material such as sand, bajri, stone etc will belong to Kabul Khel tribe and license of fishing shall be right of the affected people of dam.
8. All class four jobs in our affected area will be the right of Kabul Khel tribe.

9. The same perks and privileges to be awarded to the people of Kabul Khel that have been awarded in case of Tarbela, Warsak, Mangla, Gahzi Barotha and Gomal Zam Dam.
10. Wapda colony/Rest house to be established in Spira-Rogha.
11. Contracts during the development of Kurram Tangi Dam shall be the right of the people of Kabul Khel or they be given commission for it.
12. According to the tribal norms; all the khasadars that will be appointed with the construction of roads will be the right of the people of Kabul Khel.
13. While resettling to a new location the surface shall be properly flattened by the government for the people and the transportation charges shall be paid by Wapda or Government.
14. People of Kabul Khel shall be employed in all class four and grade II jobs. In jobs above grade II, people of Kabul Khel shall be preferred.
15. Considering the situation 20,000 personal from Kabul khel should be hired as khassadar for protection purposes.
16. The houses of the people affected should be paid three times its market price.
17. As compensation people of Kabul khel shall be given free visas and international passports.
18. All our trees shall be compensated at par with fruit giving trees.
19. Students shall be compensated separately in form of scholarships.
20. 50% of the royalty and irrigation tax will be the right of Kabul khel tribe.
21. Two tehsils should be established for Kabul khel because Kabul khel will get divided in Spaira Rogha and Tehsil Sheza.
22. All the affected people should be allowed tax free cars.
23. Colleges for the students of Kabul khel should be established.
24. The sanctity of graveyards should be kept intact.



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- (1) - واپڈ کا کوئی آرہیٹ ہاؤس علاقہ اسپیراروغہ میں تعمیر کیا جائے۔
- (1) - کزننگلی ڈیم میں جتنے بھی ترقیاتی کام ہو گئے ان کا ٹھیکہ متاثرین کو دیا جائے گا یا کمیشن ادا کیا جائے گا۔ ماسوائے یہ بھی کہ کو دیئے گئے ہیں۔
- (1) - قبائلی روایات کے مطابق جہاں بھی سرٹیکس تعمیر ہوگی ان پر قوم کا بل خیل کیلئے حاصد دار اور لوگتیاں ہماری حق ہوگی۔
- (1) - حکومت پاکستان متاثرین کیلئے جہاں پر وہ دوبارہ آباد ہوتے ہیں وہاں پر ناہوار زمین کی ہمواری حکومت پاکستان پر ہوگی۔ اور ساتھ ساتھ ٹرانسپوزیشن چارجز ایک جگہ سے دوسری جگہ بذمہ داریہ اسرار ہوگی۔
- (14) - ٹھیکہ ڈاڈانے جتنے بھی کلاس فور ملز زمین اور گریڈ گیارہ کے زمین بھرنے کے جائیں گے اس میں قوم کا بل خیل کے لوگ بھرتی کئے جائیں گے۔ اور ساتھ ساتھ گریڈ گیارہ سے اوپر قوم کا بل خیل کے زمین بھرنے کی پوسٹنگ اور ٹرانسفر کو ترجیح دی جائے گی۔
- (15) - کم از کم ہالا ڈیم کیلئے موجودہ حالات کے تناظر میں 20 ہزار نمائندہ دار زمین برائے حفاظت قوم کا بل خیل کی طرف جائیں۔
- (16) - متاثرین کے مکانات کی قیمت حکومت پاکستان میں گنا اور کرنے کا پابند ہوگا۔
- (17) - متاثرین کو برائے حوصلہ افزائی انٹرنیشنل پاسپورٹ اور مفت ویزے جاری کا حکم صادر کریں۔
- (18) - ہماری علاقے میں جہاں بھی درخت ہوں ان کی قیمت میوہ دار درخت کی نسبت سے ادا کرے گی۔ اور ساتھ ساتھ سیلاب نالی پر پونہ ٹیم وغیرہ کی بھی درخت پودوں سے زرانی جتنی بھی ان کی اگر قیمت متعین کی جائے۔
- (19) - متاثرین کے طلبائے کرام کیلئے ملک کے دیگر حصوں میں اپنا کوٹہ مختص کیا جائے۔ اور انکی حوصلہ افزائی کیلئے وظائف اور ہتھیار بندوبست کی جائے۔
- (20) - بجلی کی رابلیٹی اور ایریکیشن ٹیکس میں %50 %50 حصہ قوم کا بل خیل کو دی جائے۔
- (21) - متاثرین کیلئے دو تحصیلوں کا بندوبست کیا جائے کیونکہ کا بل خیل دو حصوں تحصیل اسپیراروغہ اور تحصیل شیراکا میں تقسیم ہوگی۔
- (22) - متاثرین کیلئے نااہل کسٹم بڑھانے کیلئے۔ سکا نڈاس یا دیگر وسادہ برائے کی منظوری دی جائے۔
- (23) - متاثرین کیلئے وی آئی پی کالج کی منظوری کا اعلان کیا جائے۔
- (24) - ڈیم مذکورہ میں جتنے بھی قبرستان اردھائے متاثر ہوتے ہیں انکی تقفوس کا خاص خیال رکھا جائے۔

جملہ متاثرین قوم کا بل خیل تحصیل شیوہ نار تھو وزیرستان ایجنسی