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Kurram Tangi Dam Construction



Resettlement Policy Framework (Final)

December, 2013

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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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KEY SUPPORTING TECHNICAL REPORTS

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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Kurram Tangi Dam Construction Resettlement Policy Framework

USAID Environmental Assessment of Kurram Tangi Dam Construction

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

From MWH Americas, Inc.

To USAID/Pakistan

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List of Acronyms

ACE	Associated Consulting Engineers
AF	Acre feet
BOR	Board of Revenue
CA	Command Areas
CHPP	Cultural Heritage Protection Plan
CGMS	Community Grievance Management System
Cfs	Cubic feet per second
CLO	Community Liaison Officer
DISCO	Distribution Companies
FATA	Federally Administered Tribal Areas
FORT	Frontier Organization for Reforms and Transformation
GIS	Geographic Information System
GoP	Government of Pakistan
GPS	Global Positioning System
IMC	Independent Mediation Committee
KP	Khyber Pakhtunkhwa
kV	Kilo Volt
KTDP	Kurram Tangi Dam Project
LAC	Land Acquisition Collector
LAS	Land Acquisition System
LAU	Land Acquisition Unit
LAIT	Land Acquisition Identification Team
MW	Million Watts
NGO	Non-governmental Organization
NTDC	National Transmission Dispatch Company
OP	Operational Policy (World Bank)
PAP	Project Affected Persons
PAH	Project Affected Household
PEPCO	Pakistan Electric Power Company
PMF	Probable Maximum Flood
PMU	Project Management Unit
RAP	Resettlement Action Plan
PNGO	Project Non-Governmental Organization
RSC	Resettlement Supervision Committee
RAP	Resettlement Policy Framework
RPF	Resettlement Policy Framework
USAID	United States Agency for International Development
USAID/Pak	United States Agency for International Development/Pakistan
VTP	Vulnerable Tribes Plan
WAPDA	Water and Power Development Authority
WEC	WAPDA's Environment Cell

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Definition of Terms

Term	Meaning
Involuntary resettlement	“Involuntary Resettlement” refers to both physical displacement (relocation or loss of shelters) and to economic displacement (loss of assets or access to assets that leads to loss of income sources or means of livelihoods) because of land acquisition undertaken specifically for a project. Resettlement is involuntary when affected individuals or communities do not have the right to refuse land acquisition, which results in their physical and/or economic displacement. This occurs in cases of expropriation and negotiated settlements in which the buyer can resort to expropriation. All resettlement losses are compensated in-kind or in-cash, depending on the context (see World Bank OP 4.12).
Land acquisition	The World Bank Operational Policy 4.12 and other similar international requirements clarify that “land acquisition” covers both full purchases of property as well as the permanent purchase of rights other than full property rights, such as rights-of way, easement and certain usufruct rights. Land acquisition can be permanent or temporary.
Physical displacement	Loss of dwelling or business as a result of project-related land acquisition, which requires the affected person(s) to move to another location. Physical displacement of businesses typically entails economic displacement too (see for more detail World Bank OP 4.12).
Economic displacement	Loss of assets (including land) or access to assets that leads to loss of income sources or means of livelihood as a result of project-related land acquisition or restriction of access to natural resources. People or enterprises may be economically displaced with or without experiencing physical displacement (see for more detail OP 4.12).
FATA	The Federally Administered Tribal Areas (FATA) are a semi-autonomous tribal region in northwestern Pakistan. Of the five districts/agencies affected by KTDP, North Waziristan and the Frontier Region Bannu are located in the FATA. The Constitution of Pakistan governs the FATA through the Frontier Crimes Regulations (FCR, 1901) and some laws and regulation. The laws of Pakistan, in general, do not apply in the FATA.
Settled areas	“Settled areas” is a term used for those districts of the Khyber Pakhtunkhwa Province of Pakistan that are near the FATA. In the project region, these are Bannu, Lakki Marwat and Karak. Here the laws of Pakistan, including the Land Acquisition Act (1894), do apply.
Stakeholder	Persons or groups with interests in the project and who may be able to influence its outcome either positively or negatively (OP 4.12).
Project Affected Person (PAP)	Person or enterprise experiencing either physical or economic displacement or both.
Household	A person or a group of persons who share at least one meal a day. In the KTDP area, a household is generally the group of people that live in a walled compound that can contain one or more houses. A household does not necessarily correspond to a nuclear family: it may consist of one nuclear family, one person living alone, two or more families living together, or any other group of related or unrelated persons who share cooking arrangements. Polygamous families – two or more wives – are considered as one household even if the live in different dwellings. The household is the basic eligibility unit considered in this RPF and entitlements are allocated to households rather than to individuals or quams (extended families).
Land categories in the KTDP project area	Developed land: <ul style="list-style-type: none"> • Residential land: Land used for residential purposes, either fenced or enclosed as compounds. • Gardens: Mostly located in or close to the compound. • Bari: Irrigated, well manured land situated near a village – mostly used for maize; • Sholgara: Land near water sources (springs, rivulet, streams .) where it can receive maximum irrigation – mostly used for rice and maize; • Saadin: un-irrigated rain-fed land; • Ghar: Land situated in the mountains that based on its access to water is classified as Ghar Sholgara or Ghar Saadin; • Developed land minus residential land is called agricultural land Undeveloped land: Worsho: Pasture that cannot be tilled & Zangal: Forested areas.
Cropping seasons and major annual crops	There are two distinct seasons with different crops: Rabi (September till April): Main crops are wheat and barley, but also fodder and oil seeds (rape and mustard) are planted; Kharif (April till September): Main crops are rice and maize, but also sugarcane and pulses are planted.
Orchards: fruit trees and firewood	The most common fruit trees are: Plums, grapes, pomegranates, mulberry, malta, guavas, walnuts, peaches, apricots and lemon. Firewood plantations are rather uncommon and mostly deadwood, scrub and remains of natural forest used.
Land tenure in FATA	In the FATA, traditionally all land is customary owned by the tribe and administered by the clan (see vulnerable peoples plan for KTDP). This situation has been reflected in the FATA legislation established between 1875 and 1901. Nevertheless, over the last 110 years livelihoods have shifted from pastoralism to transhumant to resident agriculture. In turn, households in the tribal area have obtained at some stage from their clans land for agricultural and residential purposes, have improved this land through their own labor and investments, perceive themselves and are perceived by others as the owners of residential and agricultural land even if they have no formal title, are the sole decision

Kurram Tangi Dam Project
Resettlement Policy Framework

Term	Meaning
	maker of this developed land: thus, have what one calls the “permanent user rights”. In line with international standards, developed lands has consequently two owners: the customary owner of the undeveloped land, while the improvement (i.e. Residential land, Gardens, Bari, Sholgara, Saadin, Gar and orchards minus the Worsho) is owned by the holder of the permanent user rights. All undeveloped land, i.e. all land that is not used for agriculture, residential purposes or orchards, is entirely controlled by the clan and customary owned by the tribe. It is the clan that decides to grant parts of it to households to establish new residents or farmland and it is the clan that recovers unused agricultural and residential land when it has been not used for several years.
Land tenure status in settled area	Peasant-owner is a landowner, who cultivates the whole of the major part of his proprietary agricultural land holdings. The peasant-owner is in most cases the household; Tenants do not own land, but cultivate a rented holding. The rent can be paid periodically in cash, annually in kind (sharecropper) or in the form of services to the landlord. The temporary use agreement can be formal, but seems to be in most cases informal; Landlords are non-cultivating owners, who get their proprietary holding tilled by another person and receives rent in cash, in kind or in the form of services; Others: This category of farm population includes landless agricultural laborers, informal occupants, herdsman, shepherds.
Landownership in the settled areas	In the settled area, the landowner is the household or landlord that holds the title deed for the parcel in question or is generally perceived as owner and pays the land revenue for the land. Grazing area as well as barren land is customary owned by the nearby villages and tribes.
Formal or formalisable temporary user rights (tenants)	Non-rent system: The tenant doesn’t pay any rent in cash or in kind but provides free services to the landlord, attend guests at the Hujra, undertake errands, collect fuel wood, serve as bodyguard. Fixed Rent System: Here the payment in cash or in kind is agreed on upfront and commonly found in the “settled” areas of Bannu, Lakki Marwat and Karak, while hardly used in the tribal areas. Share Rent System: Here the rent is defined by many factors notably type of soil, state of irrigation, proximity to the village and might change from one part of a single plot to another and therefore make it impossible to compare costs directly. Nevertheless, as in most cases the rent is defined by a division of the total yield. It seems that the most common rent under a share crop agreement is 50:50 of the yield. Cropper system: Here the system is that the tenant only contributes manual labor i.e. is basically a laborer, who does not receive a fixed wage but between ¼ and 1/5 of the yield as salary.
Informal right holder	Person or group of persons recognized by customary rules, or other socially accepted processes, as having certain ownership or usufruct rights over an asset or resource, although these usufruct rights are neither formalized in a legal document such as a title nor officially registered. Typical situations where informal right holders are encountered include according to the World Bank’s OP 4.12: <ul style="list-style-type: none"> • Slum dwellers in urban settings, where neither landlords nor occupants have formal ownership or occupation rights; • Road side or street side businesses established on a public space (a contradiction typical of such businesses is that while their occupation of the public domain is not recognised, their existence as a business is recognised through registration or payment of taxes); Informal ownership or occupation is not recognized in Pakistan but is by all sides not considered as a “black-and-white” situation and there are many gray areas: informal right holders may be illegal from the standpoint of some authorities, and legal or even encouraged for others.
Land and land-use conflicts	Intertribal conflicts and land disputes in the FATA as well as in the settled areas are very common. In addition, in the FATA landownership and land use agreements are not documented as well as the land-use agreements. Finally, in the settled area the cadaster is not up to date. Experience shows that this will result in a large number of conflicts about conflicting claims of ownership as well as over the exact nature and conditions of the land-use agreements. These issues cannot be solved in the RPF, but the RPF provides for a mechanism of how these issues shall be documented, addressed and solved during the preparation and implementation of subsequent RAPs.
Farm laborer	Farm labor is limited in the RPF to “hired labor”, which is composed of <ol style="list-style-type: none"> a) regular laborers that are engaged for a considerable time (6 months or more), b) casual laborers who are hired for a specific operation on daily wage basis, and c) workers (“husher”) invited to assist on exchange basis during harvest . The RPF does not consider “family labor”, which is provided by members of the same household as farm labor, as the RPF considers in front of the tribal background of all PAPs “households” as basic unit for compensation and not individuals as in other parts of Pakistan.
Vulnerable groups	Vulnerable or “at-risk” groups includes people who, by virtue of gender, ethnicity, age, physical or mental disability, economic disadvantage or social status may be more adversely affected by displacement than others and who may be limited in their ability to claim or take advantage of resettlement assistance and related development benefits. The Resettlement Plan therefore puts in place supplemental assistance to assist each category of vulnerable persons during resettlement.
Patwari	Head of the land revenue department at village level in the settled areas
Cut-Off Date	The date that establishes eligibility for compensation and other benefits related to land acquisition.

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Resettlement Policy Framework

Term	Meaning
	Best practice suggests using the date on which the census and assets inventory is started in a particular community or area. In order for the Cut-Off Date to be valid, PAPs are notified. According to the World Bank's OP 4.12 the census conducted at a declared Cut-Off Date is, as a rule, valid for a period of two years from the start of the census.
Compensation	Payment in cash or in kind for loss of an immoveable asset or a resource that is acquired or affected by the project.
Allowance	Cash paid to defray resettlement related expenses other than losses of immoveable assets. For example, tenants can be provided with a cash <i>allowance</i> to support their effort to secure alternative housing. A moving <i>allowance</i> can be paid to people who have to relocate as a result of Project land acquisition. An <i>allowance</i> is distinguished from compensation, which reimburses the loss of an immoveable asset.
Livelihood	A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stress and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base.
Livelihood restoration	Specific activities intended at supporting displaced peoples' efforts to restore their livelihoods to pre-project levels. Livelihood restoration is distinguished from compensation. Livelihood restoration measures typically include a combination of cash or other allowances and support activities such as training, agricultural assistance or business enhancement. Livelihood restoration is often referred to as economic rehabilitation (see for more detail OP 4.12).
Resettlement Policy Framework (RPF)	Where a project or sub-project is not defined to such a level that a final footprint is available and or detailed data are missing, an RPF defines the principles with which any Resettlement Action Plan will accord and outlines the expected impacts and compensation, physical relocation and livelihood restoration programs (see for more detail the World Bank's OP 4.12).
Replacement value	The current market value of the asset plus transaction costs (e.g. taxes, stamp duties, legal and notarization fees, registration fees, travel costs and any other such costs as may be incurred as a result of the transaction or transfer of property). In applying this method of valuation, depreciation of structures and assets is not taken into account. For losses that cannot easily be valued or compensated for in monetary terms, in-kind compensation may be appropriate. However, this compensation should be made in goods or resources that are of equivalent or greater value and that are culturally appropriate. With regard to land and structures, replacement costs are defined as follows: <i>Agricultural land</i> —the market value of land of equal productive use or potential located in the vicinity of the affected land, plus the cost of preparation to levels similar to or better than those of the affected land, and transaction costs such as registration and transfer taxes. <i>Residential land</i> —the market value of land of equivalent area and use, with similar or improved infrastructure and services preferably located in the vicinity of the affected land, plus transaction costs such as registration and transfer taxes. <i>Houses and other structures</i> —the cost of purchasing or building a new structure, with an area and quality similar to or better than those of the affected structure, or of repairing a partially affected structure, including labor and contractors' fees and transaction costs such as registration and transfer taxes. (see for a more elaborated definition the World Bank's OP 4.12)
Adequate housing	Adequate housing or shelter can be measured by quality, safety, affordability, habitability, cultural appropriateness, accessibility, and locational characteristics. Adequate housing should allow access to employment options, markets, and basic infrastructure and services, such as water, electricity, sanitation, health-care, and education. International standards afford adequate housing and security of tenure to displaced persons at resettlement sites.

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Conversion Table

Length				
3.28	ft	=	1	m
5,280	ft	=	1	mile
1	km	=	0.62	miles
1	yard	=	0.91	m
1	inch	=	25.4	mm

Area				
1	acre	=	43,560	ft ²
1	ft ²	=	0.09	m ²

Area units in Pakistan				
1	acre	=	43,560 square ft	
1	Square mile	=	640 acres	
1	Kanal	=	1/8 acre	

Other Conversions				
100	PKR	=	0.94 USD	(11/2013)

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Resettlement Policy Framework

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EXECUTIVE SUMMARY

The Kurram Tangi Dam Project (KTDP) consists of three components that will be implemented sequentially, over a 10+-year timeframe:

- Component 1: Tribal Areas Development
- Component 2: Kurram Tangi Dam and,
- Component 3: Irrigation Development.

Experience worldwide, including projects in Pakistan, document that land acquisition for large-scale infrastructure projects, such as dams and irrigation projects, if unmitigated, often gives rise to severe economic, social, and environmental impacts. To address and mitigate these risks, in particular the risk of impoverishment, a Resettlement Action Plan (RAP) has been developed for Component 1, while RAPs for Component 2 and 3 can only be established once near final engineering plans are available. To accommodate the different levels of project development and to assure a consistent approach of how KTDP acquires land and resources, this Resettlement Policy Framework (RPF) covers the existing RAP for Component 1 and guides the development of RAPs for Components 2 and 3.

The purpose of an RPF is to set out principles, procedures, entitlements and organizational arrangements that govern the overall land acquisition process, including physical relocation and economic rehabilitation. This RPF complies with the relevant legislation of the Islamic Republic of Pakistan as well as the World Bank's OP 4.12.

KTDP's land acquisition and resettlement process is guided by the following principles:

- Involuntary resettlement and land acquisition shall be avoided where feasible, and, where unavoidable, minimized to the fullest extent possible, exploring all viable alternatives;
- Where physical and economic displacement is unavoidable, resettlement and compensation shall be conceived and executed as sustainable development programs, providing sufficient investment resources and provide the affected people with the opportunity to share project benefits;
- Affected people shall be meaningfully consulted and shall have opportunities to participate in planning and implementing resettlement and compensation programs. Where segments of the population are effectively disenfranchised in one way or another (e.g., women, vulnerable tribes), special efforts will be made to incorporate their views into the planning process;
- In-kind compensation is preferred for residential land and structures and agricultural land,
- Compensation will be provided to the households concerned and affected in a timely fashion; no civil works will commence until resettlement compensation has been independently certified as completed to the fullest extent possible; and
- Project-affected people will be assisted in their efforts to improve their livelihoods and standards of living or at least to restore them, in real terms, to pre-displacement levels or levels prevailing prior to the beginning of the project implementation, whichever is higher.
- Carry out land acquisition, resettlement and compensation in compliance with the laws of Pakistan and the World Bank's OP 4.12 and apply the more rigorous standard, where they differ;
- Establish resettlement sites, new homes, related infrastructure, public services etc. in close consultation with the PAPs, and pay all compensations before the commencement of civil works;
- Seek to improve or at least restore affected livelihoods;
- Monitor, evaluate and report implementation and outcomes; and
- Implement an effective and responsive grievance mechanism.

The following Entitlement Matrix defines the entitlements for each affected asset and/or right and clarifies, who is entitled for what:

Affected asset or right	Entitlements		
	Compensation	Allowances	Livelihood Restoration
LAND			
Recognized as clan holding a specific territory in the FATA or recognized as customary owner of undeveloped land in the settled areas	<u>FATA</u> : In kind compensation in new Command Area or cash compensation for un-developed land paid to clan Jirga <u>In settled areas</u> : Cash compensation for undeveloped land paid to communities	Land Transfer costs	N/A
Owner or having permanent user rights to agricultural land	The preferred option is replacement land of similar size and quality, but at least 1 acre or if not land based livelihood cash compensation.	Land Transfer costs	Replacement land preparation allowance
Owner or having permanent user rights to residential or commercial land	The preferred option is replacement land of similar size and quality as acceptable location or if none-resident or moving out cash compensation	Land Transfer costs	N/A
Land Use			
Peasant owner & Peasant – permanent right holder	N/A	Peasant Transition for time between land take and replacement of land	<ul style="list-style-type: none"> • Training in irrigated agriculture • Equipment; • Seeds, etc. for one year • Access to credit
Tenant of agricultural land	N/A	Land tenancy replacement	
Agricultural Encroacher farmworker	N/A	Self-relocation	
Easement for transmission line	Cash compensation at replacement value for land under towers and 10% of replacement value for all other land within restriction corridor	N/A	N/A
Annual crops	Compensation in cash if they can't be harvested before construction to owner of crops (farm owner or tenant)	N/A	N/A
Perennial crops	Compensation in cash plus seedling	N/A	N/A
Structures, buildings, houses etc.			
Residential House: Titled owner or recognized permanent right holder	Each house is compensated in-kind on a serviced residential plot of similar size, similar area of equal or better materials and at least 4 rooms + compensation in cash for additional infrastructure + salvaging of materials or only cash compensation, if people have other houses etc.	Connection Allowance For houses rented out: Allowance for lost rental income	N/A
Owner residents & Permanent right holder residents	N/A	Moving allowance Transition allowance	N/A
Tenancy or free-of-charge occupation of a residential house	N/A	Rental re-establishment Moving & Transition	N/A
Ownership/permanent rights holder over a commercial (non-residential) building and/or other structures	Replacement structure on a serviced residential plot of similar size, similar area with equal or better construction materials or cash compensation	- Allowance for lost rental income	N/A
Businesses	N/A	Allowance for loss of business income	Livelihood restoration package
Business employees	N/A	Allowance for loss of income	livelihood restoration if employee loses job
Communal building	Either reconstruction or compensation in cash on case-by-case valuation.	Allowances for any ceremonies.	N/A
Vulnerable People	N/A	Case by case	Case by case

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The following table shows the estimated surface area of land to be permanently or temporarily acquired including land needed for the establishment of the Command Areas and the number of people affected by physical and/or economic displacement:

Component	Affected land and land use (acres)					Project affected People	
	Total	Agric	residential	water	Undeveloped	physical	economical
Kaitu Weir, reservoir, camps, quarries	58.7	18.5	0.0	30.3	9.9	0	515
Canals, roads, powerhouses, tunnel etc.	554.9	126.6	3.8	12.0	412.4	436	1,010
Transmission lines	335.6	74.0	3.6	28.0	230.1	109	3,330
Command Areas	22,729	8,651	313	616	13,149	5,669	90,485
Component 1 Tribal area development	23,679	8,870	320	686	13,802	6,214	95,340
Component 2: Kurram Tangi Dam	14,191	2,082	492	1,508	10,109	14,865	22,141
Component 3: Irrigation	144,683	107,866	7,624	22,996	6,198	51,022	494,422
Grand Total	182,553	118,818	8,436	25,190	30,109	72,100	611,903

Based on the available design, to acquire all land required for KTDP including the Command Area through cash compensation would cost around PKR 255 Billion. Through an optimized design that a) puts in place mechanisms to avoid residential houses in road, canal, Command Area and transmission line development and b) assures that each affected household and clans receives land for land compensation in the new or enhanced Command Areas of an equal size but at least one acre at an enhanced quality reduces the required amount for land acquisition and resettlement to PKR 30 Billion.

Cost Item	Unit cost	Comp 1	Comp 2	Comp 3	Total
Compensation, Allowances etc.					
Residential land	1,554,292				0
Agricultural land	1,287,504				0
Easement	10% of land value	9,398,750			9,398,750
Worsho etc.	833,834	166,393,215	8,429,227,906	5,168,103,132	13,763,724,253
Residential structures	800/square feet		1,215,750,000		1,215,750,000
Trees	3,000	105,274,000	51,978,000	325,536,000	482,788,000
Communal infrastructure	20% of residential		243,150,000		243,150,000
Resettlement Site Development	10% of residential		121,575,000		121,575,000
Moving & Connection Allowances	120,000 per HH		243,150,000		243,150,000
Transition Allowance (Livelihood Restoration)	100,000/acre per year	1,054,150,000	724,200,000	5,040,000,000	6,818,350,000
Replacement Land Preparation Allowance	200,000/acre	2,076,400,000	482,800,000		2,559,200,000
Training in irrigation agriculture	10,000 per person	407,440,000	298,000,000		705,440,000
Irrigation start up package	100,000 per HH	1,007,700,000	403,500,000		1,411,200,000
Tenancy replacement allowance	100,000 per HH	1,000,000			1,000,000

Vulnerable people		52,707,500	36,210,000	252,000,000	340,917,500
Overhead Costs		4,880,463,465	12,249,540,906	10,785,639,132	27,915,643,503
Implementation management LAU, RSCs etc. (2014-2022)		9,000,000	9,000,000	9,000,000	27,000,000
RAP development/a mendment		10,000,000	50,000,000	50,000,000	110,000,000
Supervision and monitoring		10,000,000	50,000,000	20,000,000	80,000,000
Capacity enhancement		20,000,000	20,000,000	20,000,000	60,000,000
Contingency (10%)		488,046,347	1,224,954,091	1,078,563,913	2,791,564,350
Total		5,417,509,812	13,285,729,023	11,821,827,249	30,525,066,083

Optimised overall land acquisition budget (when commitments “land for land compensation and optimizing linear infrastructure to avoid structures” is implemented)

The RPF and the subsequent RAPs of KTDP will be implemented under the supervision of:

- **WAPDA’s Land Acquisition and Resettlement Unit** that will supervise all land acquisition and resettlement work and provide high-level guidance. To assist WAPDA to effectively supervise land acquisition and resettlement capacity enhancement will be offered if needed.
- **FATA’s Social Sector Depart & Political Agent North Waziristan & Assistant District Commissioner FR Bannu** that will supervise all land acquisition and resettlement work in FATA and provide high-level guidance on tribal issues. To assist FATA to effectively supervise land acquisition and resettlement, capacity enhancement will be offered if needed.
- **Directorate of Irrigation FATA, Bannu, Karak and Lakki Marwat** that will supervise the land consolidation for the two CA of Component 1 and Component 3 effectively. To assist the Irrigation Directorate to effectively supervise land acquisition and resettlement, capacity enhancement will be offered if needed.
- **A Panel of Experts** that will assure compliance with international standards and this RPF through quality advice and quality control (See also Chapter 2 of EA and Chapter 2 of EMMP).

Implementation: The KTDP will be implemented under the General Manager (Projects) North of WAPDA and overall supervision of Member Water Wing through a Project Management Unit (PMU) that assembles national and international experts including a Department for Land Acquisition Unit (LAU). While formally reporting to the Managing Director of the PMU, the LAU will benefit from a close collaboration and from strategic advice provided by a Steering Committee comprising a) the WAPDA General Manager for Land Acquisition and Resettlement, b) the Assistant Political Agent for North Waziristan, c) the Assistant Deputy Commissioner for FR Bannu, d) Deputy Commissioners for the Bannu, Lakki Marwat and Karak District as well as e) representatives of the funding agencies/MFIs etc.

The RAPs will be established and implemented by the LAU in accordance with the implementation schedule to be established in this RPF and the subsequent RAPs as well as civil works activities. The communication with the affected people will be channeled through regional Resettlement Steering Committees as well as settlement based Resettlement Committees.

Capacity enhancement and backstopping: While the detailed capacity enhancement plan can only be established based on the assessment of the existing capabilities to be performed during RAP

development, it is known that quality land acquisition training is not available in the vicinity of KTDP and/or within Pakistan, and sending all the people who need training to international centers may be impractical. Project-level training is more practical in such cases and therefore recommended.

An effective training program emphasizes policy training for senior management and operational training for land acquisition staff. Sending staff to similar projects can be an inexpensive yet effective way of building resettlement capacity. Such interactions are particularly useful, because practitioners are involved in the exchanges, and the context, problems, and issues are likely to be similar.

NGOs supporting the PAPs: NGOs play today a very important role as “watch dog” for all kind of issues and/or informing affected people about their rights and options and/or assist them in the decision making and relocation process.

Monitoring and evaluation: Good institutional design makes implementation easier, but effective monitoring ensures it stays on track. Even projects with the best RAPs and exceptionally supportive organizations are likely to run into problems and issues during implementation. Timely identification and resolution of these problems are critical to achieving desired resettlement outcomes. Effective monitoring is essential. To be most effective, monitoring will cover both internal monitoring, conducted by the LAU, and external monitoring, conducted by a qualified independent agency.

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I PROJECT DESCRIPTION

I.1 Purpose and Scope of this Resettlement Policy Framework (RPF)

This Resettlement Policy Framework (RPF) sets out principles, procedures, entitlements and organizational arrangements that govern the overall land acquisition process including physical relocation and economic rehabilitation, for the Kurram Tangi Dam Project (KTDP). KTDP will be implemented in three phases/components:

- Component 1: Tribal Areas Development
- Component 2: Kurram Tangi Dam and,
- Component 3: Irrigation Development.

The three components will be implemented sequentially, over at least a 10-year timeframe. Thus, the engineering designs are more detailed for Component 1 than they are for either Components 2 or 3.

The RPF applies to all lands/resources acquired by KTDP during project preparation, construction, operation and decommissioning. The RPF covers all three components, as well as associated facilities such as access roads, transmission lines, storage areas, quarries, regardless of who conducts the land/resource access process. When the detailed engineering designs are available, a detailed Resettlement Action Plan (RAP) will be developed, preferably for each component in its entirety. If, however, all engineering plans for a component's investments are not available, a Component RAP will be developed for those investments that are ready, and an addendum (or addenda) to the RAP will be developed when the other civil works have final engineering designs.

This RPF has been developed in accordance with the relevant legislation of the Islamic Republic of Pakistan as well as the World Bank Policy on Involuntary Resettlement (OP 4.12).

I.2 Project Description

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:

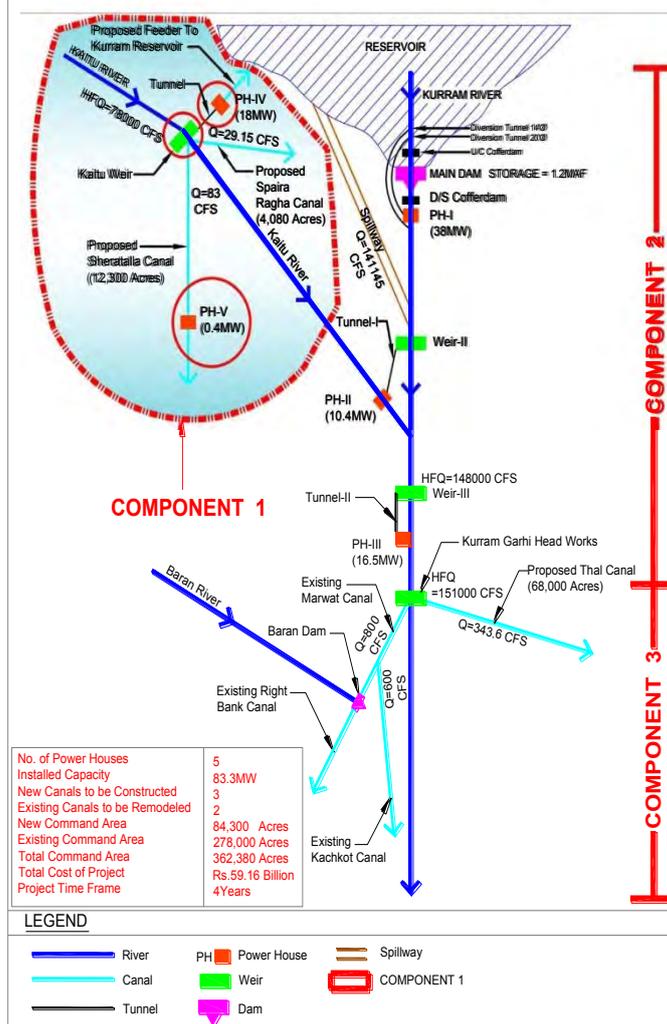
- **Component 1**, Tribal Area Development, will build a weir on the Kaitu River for hydropower and irrigation of two proposed perimeters, Spira Ragma to the north and Sheratala to the south. The Component includes also two powerhouses (IV and V) and a transmission line to the Domail substation near Bannu. These investments are scheduled to commence in 2014.
- **Component 2**, Kurram Tangi Dam, will build a large dam on the Kurram Tangi River for electricity and irrigation purposes..
- **Component 3**, Irrigation Development, will move water from the Kurram Tangi reservoir to irrigated perimeters on the Bannu plains. It cannot start within the foreseeable future due to the lack of detailed engineering plans..

Importantly, 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.

KURRAM TANGI DAM PROJECT

Figure 1 SCHEMATIC Diagram of the Components of KTRDP



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1.2.1 Component I: Tribal Area Development (commencement in 2014)

Component I involves the construction of Kaitu Weir, Sheratalla Canal System, Spaira Ragma 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 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 Ragma Irrigation Canals: From the Kaitu Reservoir, there will be two separate off-takes for the Sheratalla and Spaira Ragma Canals. The proposed Sheratalla Canal will irrigate a Command Area of 12,300 acres, while the proposed Spaira Ragma Canal will irrigate 4,080 acres. The proposed Spaira Ragma 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 Ragma 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 Ragma 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 Ragma Canal Pumping Station via the Kaitu Weir. The 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 1-1: A road in the area of the proposed Sheratalla canal

Construction Phase and Schedule

Figure 1-2: Construction Schedule for Component I

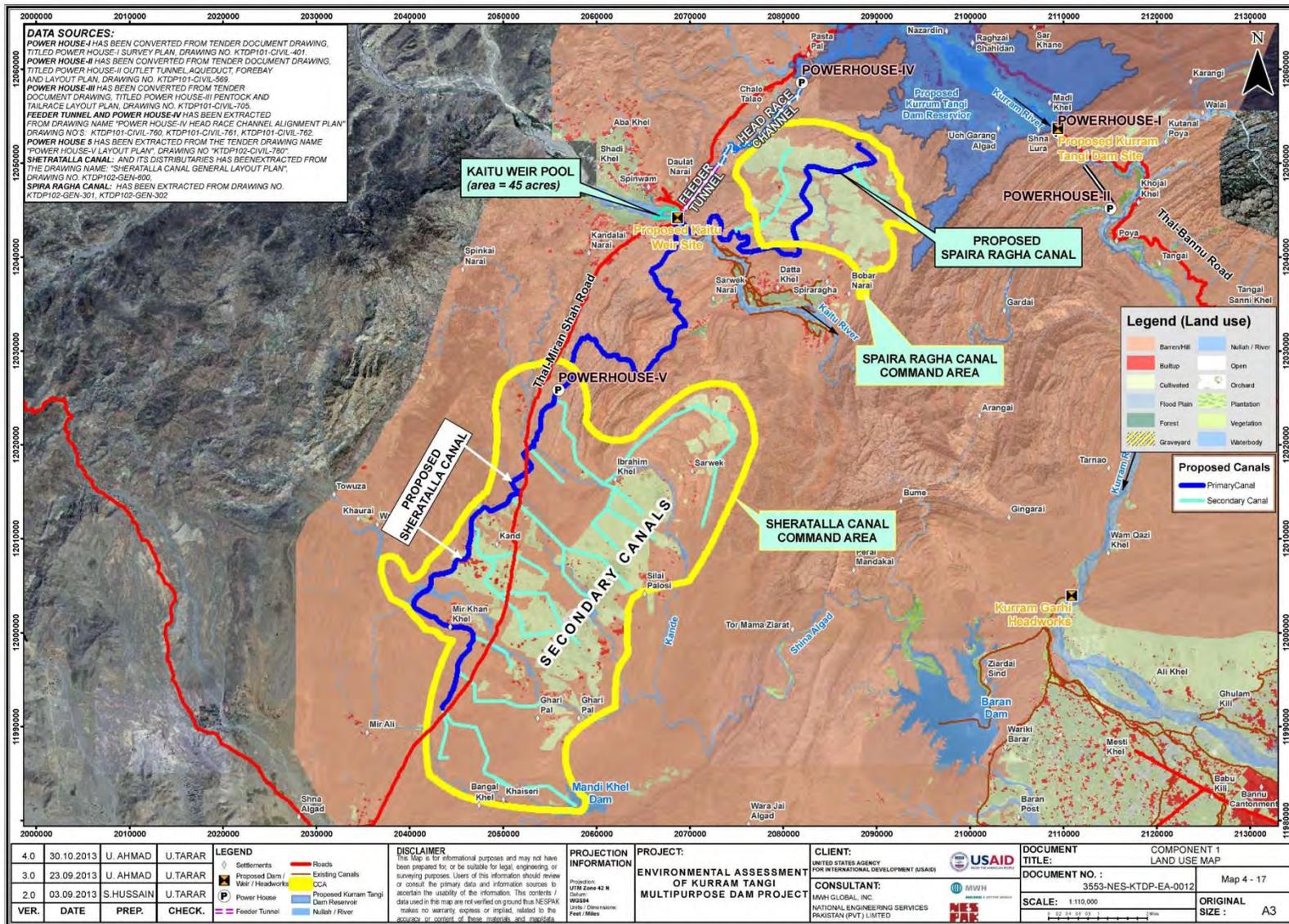
Activities	Period of Construction											
	Year 1				Year 2				Year 3			
Construction and Housing Camps	[Gantt bar spanning Year 1, Quarter 1]											
Roads, Bridges and Culverts	[Gantt bar spanning Year 1, Quarter 1]											
Kaitu Weir	[Gantt bar spanning Year 1, Quarter 1]											
Excavation and preparation of weir foundation	[Gantt bar spanning Year 1, Quarter 1]											
Construction of weir and drainage systems	[Gantt bar spanning Year 1, Quarter 2]											
Construction of undersluices	[Gantt bar spanning Year 1, Quarter 2]											
Construction of head regulators	[Gantt bar spanning Year 1, Quarter 3]											
Construction of silt excluder	[Gantt bar spanning Year 1, Quarter 3]											
Construction of feeder tunnel	[Gantt bar spanning Year 1, Quarter 3]											
Construction of Spaira Ragha Canal	[Gantt bar spanning Year 1, Quarter 3]											
Construction of primary canal	[Gantt bar spanning Year 1, Quarter 3]											
Construction of secondary canals	[Gantt bar spanning Year 2, Quarter 1]											
Construction of tertiary canals	[Gantt bar spanning Year 2, Quarter 1]											
Construction of Sheratalla Canal	[Gantt bar spanning Year 2, Quarter 1]											
Construction of primary canal	[Gantt bar spanning Year 2, Quarter 1]											
Construction of secondary canals	[Gantt bar spanning Year 2, Quarter 1]											
Construction of tertiary canals	[Gantt bar spanning Year 2, Quarter 1]											
Powerhouse IV & V	[Gantt bar spanning Year 2, Quarter 1]											
Construction of powerhouses (civil works)	[Gantt bar spanning Year 2, Quarter 1]											
Installation, testing and commissioning of electromechanical equipment	[Gantt bar spanning Year 2, Quarter 2]											
Transmission lines	[Gantt bar spanning Year 2, Quarter 2]											
Development of Command Areas	[Gantt bar spanning Year 2, Quarter 2]											
Development of Spaira Ragha Command Area	[Gantt bar spanning Year 2, Quarter 2]											
Development of Sheratalla Command Area	[Gantt bar spanning Year 2, Quarter 2]											

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.

For both canals, it is 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.

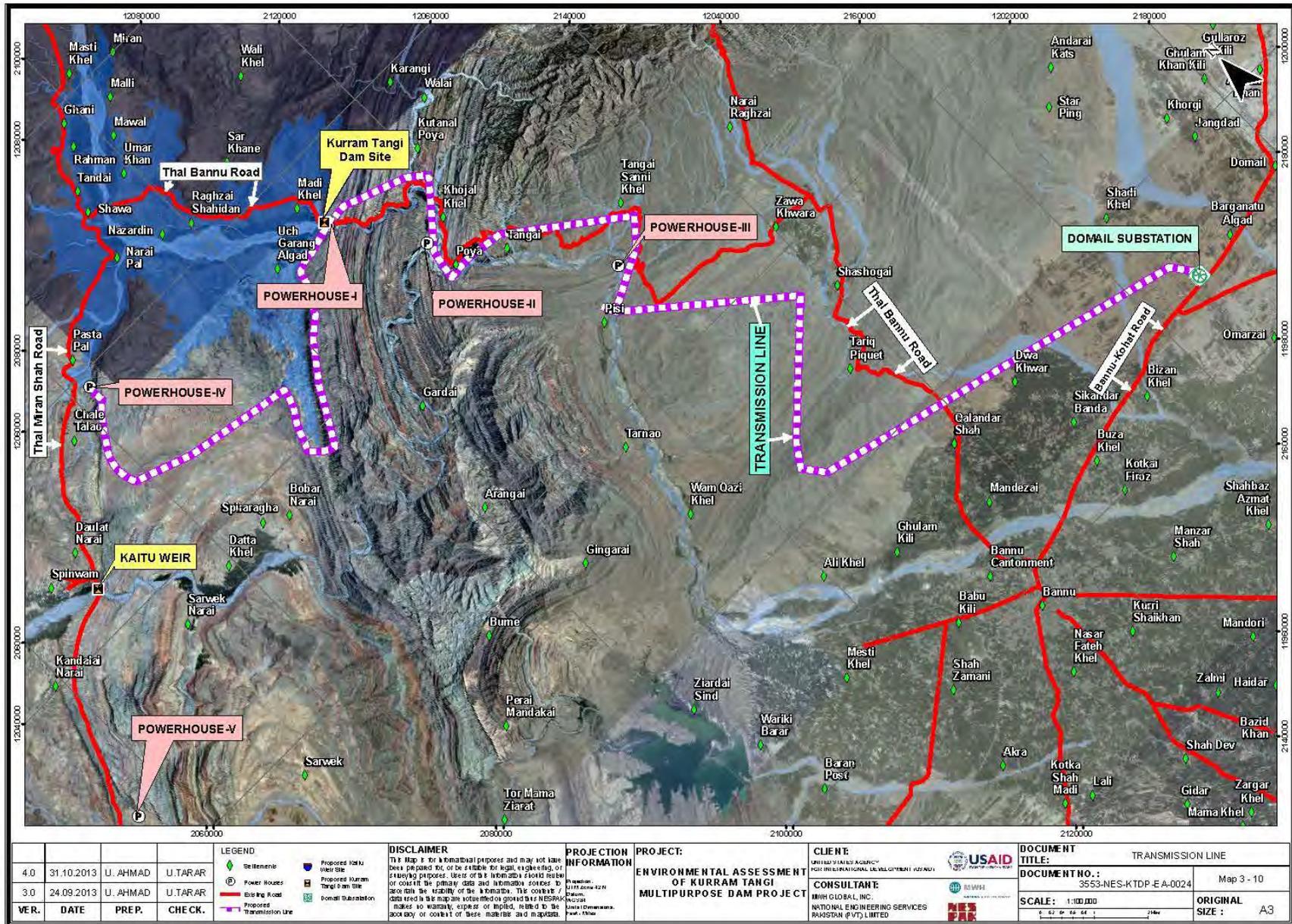
Labor Force. The labor force for the weir construction is expected to be about 400. Among this number about six percent will be management and supervisory staff, 20 percent skilled workers (e.g., electricians, plumbers, machinists, mechanics), 40 percent semi-skilled workers (e.g., drivers, cement layers,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

Kurram Tangi Dam Project Resettlement Policy Framework



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Other Construction Aspects. The energy source for the camp has yet to be determined, but probably will consist of a diesel or petrol generator, since local electricity supplies are insufficient to support the additional demand.

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.

No information is yet available on the operation of the new Sheratalla and Spaira Ragha canals and the organization of Command Areas and the Water Users Associations.

1.2.2 Component 2: Kurram Tangi Dam (commencement in 2017)

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. The maximum gradient will be less than 10%.

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 is 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.

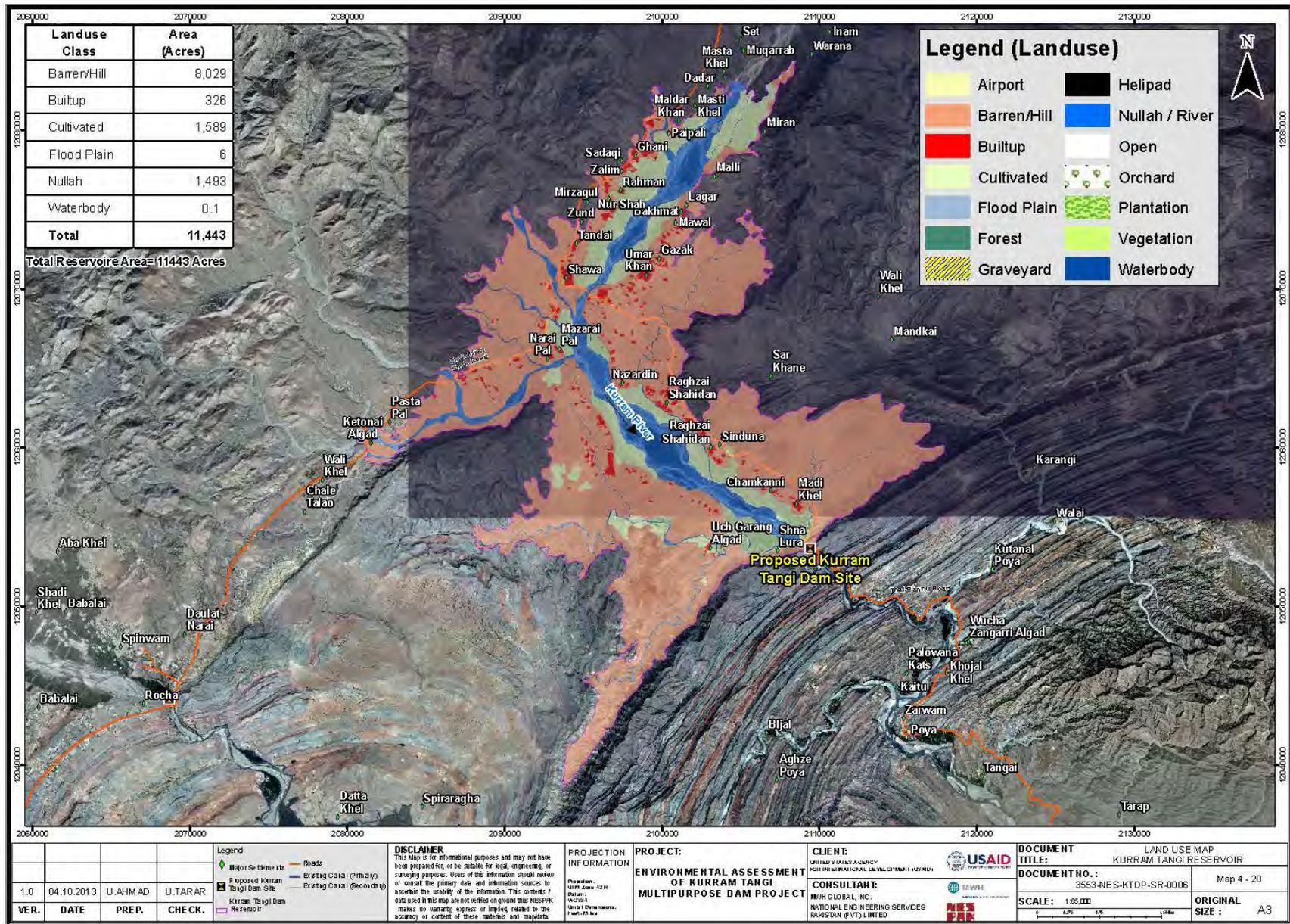
Diversion Tunnels. Two diversion tunnels, one of 20 ft diameter and the other of 14 ft diameter, will be constructed on the right bank of the Kurram River between the dam and the spillway. The 20 ft diameter tunnel will be used later as power tunnel for the main powerhouse, located at the foot of dam. 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:

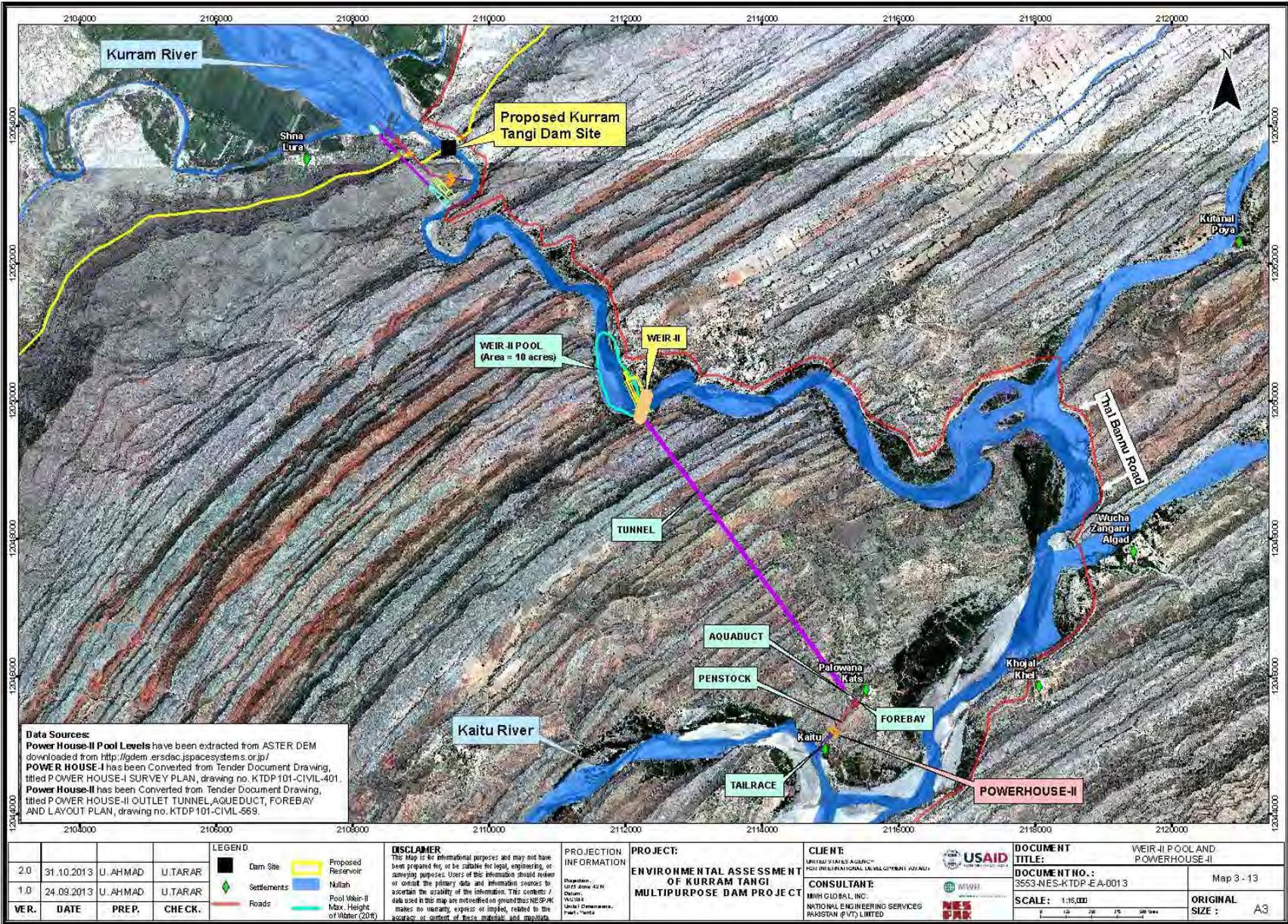
- Powerhouse I, the main powerhouse, will be located at the toe of the dam on the right bank of Kurram River, at River Mile 67, and have an installed capacity of 38.0 MW. The size of the semi-surface powerhouse was determined after dimensioning the spiral case, draft tube and generator dimensions. The 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

Kurram Tangi Dam Project Resettlement Policy Framework



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Kurram Tangi Dam Project Resettlement Policy Framework



VER.	DATE	PREP.	CHECK.
2.0	31.10.2013	U. AHMAD	U. TARAR
1.0	24.09.2013	U. AHMAD	U. TARAR

LEGEND	
	Dam Site
	Proposed Reservoir
	Settlements
	Roads
	Nullah
	Pool Weir-II
	Max. Height of Water (2018)

DISCLAIMER:
 This Map is for informational purposes and may not have been prepared for, or be suitable for, legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the reliability of the information. This contractor / data used in this map are not verified on ground by NES-PAK makes no warranty, express or implied, related to the accuracy or content of these materials and map data.

PROJECTION INFORMATION
 Projection: UTM Zone 42 N
 Datum: WGS84
 Units: Meters
 Contour Interval: 10m

PROJECT:
 ENVIRONMENTAL ASSESSMENT OF KURRAM TANGI MULTIPURPOSE DAM PROJECT

CLIENT:
 UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT (USAID)

CONSULTANT:
 MWH GLOBAL, INC.
 NATIONAL ENGINEERING SERVICES PAKISTAN (PVT) LIMITED

DOCUMENT TITLE: WEIR-II POOL AND POWERHOUSE-II

DOCUMENT NO.: 3553-NES-KTDP-EA-0013

SCALE: 1:15,000

ORIGINAL SIZE: A3

Map 3-13

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- 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.

Construction Phase and Schedule

Figure 1-3: Construction Schedule for Component 2

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

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 Ragma Plain with reasonable amenities and the other at Bannu with all amenities available in the city. The colony proposed in the Spaira Ragma 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.

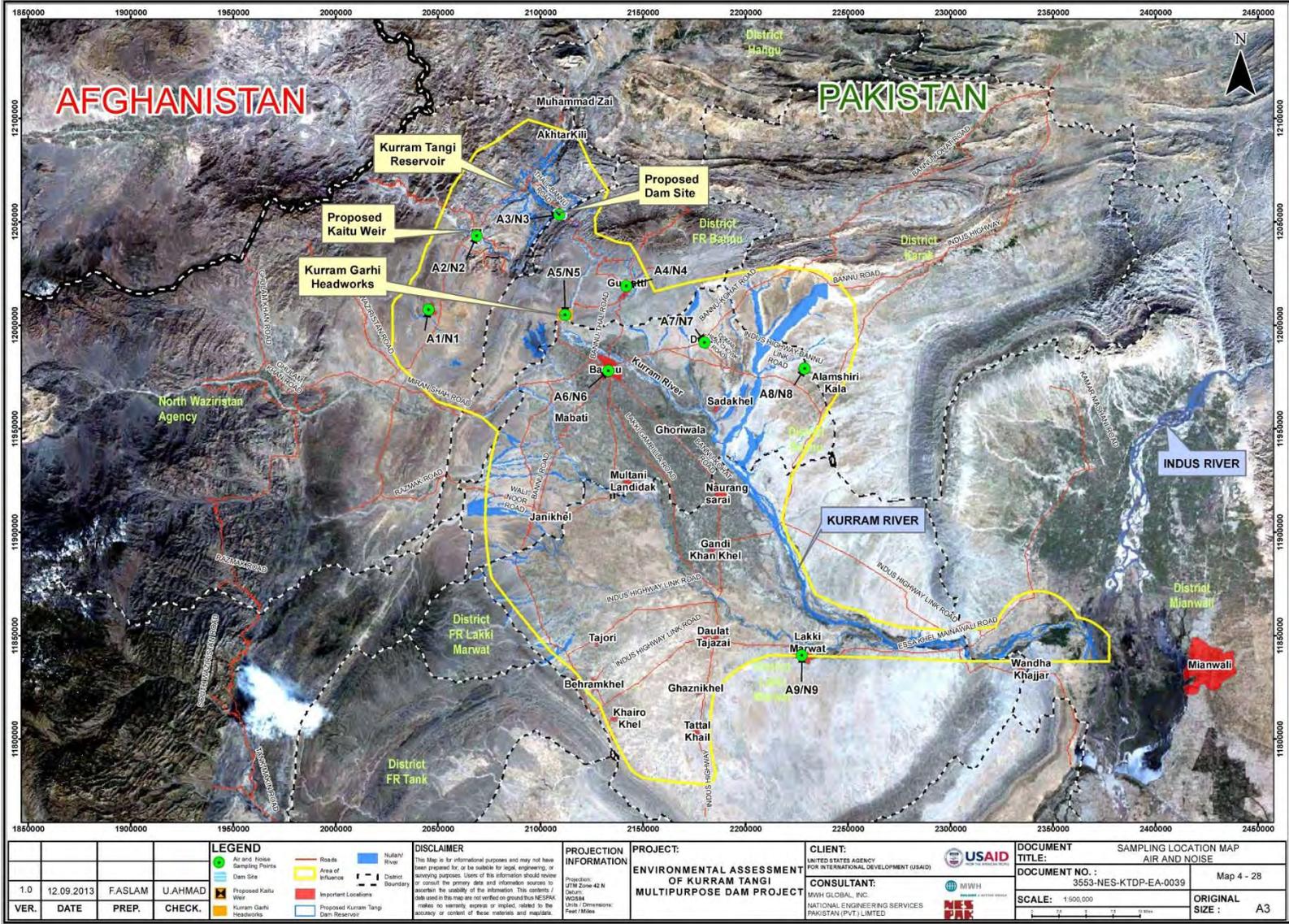
1.2.3 Component 3: Irrigation Development (commencement in 2020)

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 20th 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

Kurram Tangi Dam Project Resettlement Policy Framework



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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.

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 1-4: 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.

1.3 Land and resource needs of KTDP

As detailed in

Table 1-1: Land acquisition need for KTDP

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 1-1: Land acquisition need for KTDP

) is presently unknown, the associated land acquisition will need to be covered in more detail in the RAPs.

Table 1-1: Land acquisition need for KTDP

Package	Affected land and land use (acres)				
	Total	Agric	residential	Water	Worsho

Table 1-1: 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, quarries (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 Ragma 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 Ragma	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
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 the grid near Bannu	302.4	67.8	3.3	28.0	203.3
Transmission line from Kaitu Weir to pumphouse for lift canal	4.8	0.5	0.2	0.0	4.1
Transmission lines from Power house 5 to Kaitu Weir	28.4	5.7	0.0	0.0	22.7
Subtotal Transmission lines	335.6	74.0	3.6	28.0	230.1
Overall area of Command Area in the Spaira Ragma plains	4,302	2,668	4	42	1,588
Overall area of the Command Area in the Sheratalla Plains	18,427	5,983	309	573	11,561
Subtotal Command Area	22,729	8,651	313	616	13,149
Total Component 1	23,679	8,870	321	686	13,801
Kurram Tangi Dam and Reservoir	11,443.5	1,589.0	326.1	1,499.8	8,028.6
Kurram Tangi construction & security camps	10.1	2.6	0.0	0.0	7.5
Powerhouse 1, weir and appurtenant structure	8.3	0.1	0.0	1.0	7.2
Powerhouse 2, weir and appurtenant structure	11.6	2.1	0.0	1.5	8.0
New access road to power house 2 and 3	56.1	1.1	0.0	0.0	55.0
Powerhouse 3, weir and appurtenant structure	7.6	0.0	0.0	3.8	3.8
New alignment of Mirali-Spinwam-Thal road	60.4	0.0	2.5	1.9	56.0
Additional land take for enhancement of Bannu-Shewa road	16.0	4.0	2.0	0.0	10.0
Resettlement sites	2,577.6	483.3	161.1	0.0	1,933.2
Total Component 2	14,191	2,082	492	1,508	10,109
Canal to Thal Command Area Including Distributaries	879.5	589.4	23.8	85.5	180.7
Command Area Thal	143,803	107,276	7,600	22,910	6,017
Total Component 3	144,683	107,866	7,624	22,996	6,198
Overall Total	182,553	118,818	8,436	25,190	30,109

Table 1-2: Resource required for the construction of KTDP

Resources	Component 1	Component 2	Component 3	Total
Excavation	53 million ft ³	250 million ft ³	125 million ft ³	428 million ft ³
Filling	176 million ft ³	4.5 million ft ³	160 million ft ³	340 million ft ³
Concrete	6.5 million ft ³	20 million ft ³	17 million ft ³	33.5 million ft ³
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

The project region is rather arid as one can see in
and Plate 1-3 (below) with a population density between 80 and 400 people per square mile.



Plate 1-2: Kaitu pool area (Component One)



Plate 1-3: Worsho in Component Two area

1.4 Why a Resettlement Policy Framework and not a Resettlement Plan

Experience worldwide, including projects from Pakistan, document that land acquisition of large scale infrastructure projects such as dams and irrigation projects, if unmitigated, often gives rise to severe economic, social, and environmental impacts¹. To address and mitigate these impoverishment risks, international standards and best practice, such as those of the World Bank, require that projects prepare a Resettlement Action Plan (RAP) as a pre-condition for participation in funding. The RAP effectively constitutes a 'blueprint' for the resettlement and livelihood restoration operation, so it must be based on up-to-date and reliable information about the proposed land and resource access as well as precise and up-to-date information on the socio-economic baseline situation within the footprint of the project. The RAP must, therefore, be based on the final (or near final) engineering plans so that the project footprint can be precisely delimited.

In 2013, these information were available for Component 1 (tribal area development) to some extent but not for Component 2 (dam and hydropower development) nor for Component 3 (irrigation development). These different levels of project development are also reflected in the schedule: While construction of Component 1 is scheduled to commence in 2014, the starting date of construction of Component 2 and the subsequent Component 3 is not known but may be somewhat later, due to the lack of detailed engineering design, lack of external financing, as well as to security concerns.

¹ Production systems are dismantled; people face impoverishment when their productive assets or income sources are lost; people are relocated to environments where their productive skills may be less applicable and the competition for resources greater; community institutions and social networks are weakened; kin groups are dispersed; and cultural identity, traditional authority, and the potential for mutual help are diminished or lost.

Consequently, a RAP has been developed for Component 1, while the RAPs for Component 2 and 3 can only be established once near final engineering plans are available and the project area accessible for detailed socio-economic fieldwork, population census and asset inventories. To accommodate the different levels of project development and to assure a consistent approach of how KTDP accesses land and resources, this RPF - in line with international standards - provides a framework that covers the existing RAP for Component 1 and guides the development of RAPs for Components 2 and 3. Put otherwise, all future RAPs and any addenda need to be based on -- and will incorporate the principles and processes developed in -- this RPF. Finally, this RPF may be updated if matters pertinent to the detailed needs of Component 2 and 3 arise in the course of that work.



Plate 1-4: Field survey to identify impacts (here at the Spaira Ragma Pump house)

2 OBJECTIVES GOVERNING KTDP'S LAND ACQUISITION PROCESS

The impoverishment risks associated with land acquisition and resettlement of large infrastructure projects such as KTDP are significant. In order to avoid and mitigate these risks, as well as manage associated operational risks, KTDP's land acquisition and resettlement process is guided by the following principles:

- Involuntary resettlement and land acquisition shall be avoided where feasible, and, where unavoidable, minimized to the fullest extent possible, exploring all viable alternatives;
- Where physical and economic displacement is unavoidable, resettlement and compensation activities shall be conceived and executed as sustainable development programs, providing sufficient investment resources and provide the affected people with the opportunity to share project benefits;
- Affected people shall be meaningfully consulted and shall have opportunities to participate in planning and implementing resettlement and compensation programs. Where segments of the population are effectively disenfranchised in one way or another (e.g., women, vulnerable tribes), special efforts will be made to incorporate their views into the planning process;
- Compensation will be paid to the individual concerned and effected in a timely fashion; no civil works will commence until resettlement compensation has been independently certified as completed to the fullest extent possible; and
- Project affected people will be assisted in their efforts to improve their livelihoods and standards of living or at least to restore them, in real terms, to pre-displacement levels or levels prevailing prior to the beginning of the project implementation, whichever is higher.

For KTDP "Project Affected People" (PAP) refers to people who are affected socially and economically by the involuntary taking of land and other assets resulting in:

- a. Relocation or loss of shelter
- b. Loss of assets or access to assets
- c. Loss of income sources or means of livelihood, whether or not the affected persons must move to another location².

These principles apply to all components of KTDP, whether or not they are funded in whole or in part by any bilateral agency such as USAID or a multilateral financial institution such as the World Bank or the Asian Development Bank. Further, these principles apply to all affected persons regardless of their number, the severity of impacts and whether or not they have legal title to land and assets. Particular attention will be paid to the needs of vulnerable groups especially those below the poverty line, the landless, the elderly, women, children and people living in the FATA.

To ensure compliance with these principles, KTDP will

- carry out land acquisition, resettlement and compensation in compliance with the laws of Pakistan and the World Bank's OP 4.12;
- apply the more rigorous standard, where national requirements in Pakistan differ from international standards and guidelines (OP 4.12);
- prepare and implement individual resettlement plans for each component, with later addenda when the engineering plans for the entire investment are yet to be fully developed;
- provide compensation, allowances, and benefits to all people being found to be affected at the Cut-Off Date (at the time of the census for the RAP of the specific component);
- provide compensation, allowances, and/or livelihood restoration to both permanent as temporary impacts and assure that compensation is disbursed before land is taken;
- engage PAPs and hosts into the planning and implementation process;

² Downstream economic impacts are conventionally covered under the Environmental Management Plan.

- pay particular attention to vulnerable tribes and other vulnerable peoples;
- compensate for residential houses in kind (resettlement house of better standard), or, if in cash, based on the full replacement value;
- establish resettlement sites, new homes, related infrastructure, public services . in close consultation with the PAPs, and pay all compensations before the commencement of civil works;
- seek to improve or at least restore affected livelihoods;
- monitor, evaluate and report implementation and outcomes; and
- implement an effective and responsive grievance mechanism.

3 PROCESS FOR PREPARING AND APPROVING SUBSEQUENT RESETTLEMENT PLANS

This RPF applies as indicated to the entire KTDP and governs of how KTDP will acquire land and other resources. The RPF also addresses the associated displacement risks at a generic level, while the detailed impacts for each component will be identified and addressed through separate RAPs. It is assumed that before the commencement of civil work of Components 2 and 3, there will be a period during which the larger project area is sufficiently secure to allow the finalization of the detailed design. During this phase, individual RAPs for Components 2 and 3, which must be consistent with this RPF, will be prepared, validated by the affected people and implemented before the commencement of civil works.

These phase-specific RAPs will include but not limited to the following items (Table 3-1):

Table 3-1: Required RAP Elements³

	Required RAP Elements
1.	Description of the component and identification of land needs of subcomponents
2.	Potential impacts
3.	Component specific socio-economic study
4.	Specifics regarding eligibility and entitlements if any
5.	Component specific resettlement measures if any, with particular attention to livelihood restoration measures, where income earning capacity is affected
6.	Component specific resettlement site selection, site preparation and relocation
7.	Component specific housing, infrastructure and social services (resettlement site)
8.	Component specific aspects with respect to integration with host populations
9.	Implementation schedule
10.	Cost and budget

Screening and alternative assessment. The first stage in the process of preparing individual RAPs for Components 1-b, 2 and 3 is the screening process, which identifies the subcomponent or activity that causes economic and/or physical displacements and an assessment of alternatives to avoid and/or reduce its magnitude in particular of any physical displacement. The RAP will contain the analysis of alternatives undertaken during the screening process and need to demonstrate why less severe options were not selected. This screening process results in a list identifying the sub-components that require land acquisition as well as a detailed map visualizing the footprint of these subcomponents.

A preliminary screening on the basis of the data available in November 2013 has been performed and is presented in chapter 4. It needs to be stressed that the estimate in chapter 4 is based on an alignment that has not benefited yet from a refinement process with the objective to avoid and/or minimize displacement risks and therefore allows room for improvement.

3.1.1 Organization of LAIT by Component Project Area

To conduct the screening and alternative assessment, the Land Acquisition Unit (LAU, see chapter 8) will establish an ad hoc Land Acquisition Identification Team (LAIT) whose composition will vary by region in the project areas.

³ Any matter that is pertinent in the area covered by the RAP but not included in this RPF will be treated in requisite detail in the RAP.

In North Waziristan (Components 1 & 2), the LAIT will include:

- The Assistant Political Agent for the Mir Ali Subdivision
- Maliks of the Thuri Khel and Kabul Khel sub-tribes, whose territory is affected by the specific component
- Land acquisition and Resettlement Manager of the LAU
- Social Specialist of the LAU
- Project Engineer of the Project Management Unit (PMU)

If the affected clans/tribes of a component have outstanding conflicts among each other, separate LAITs will be established to avoid conflicts.

In Frontier Region Bannu (Component 2), the LAIT will include:

- The Assistant Political Agent for FR Bannu
- Maliks of the Ahmadzai, Momand Khel and Asperka sub-tribes, whose territory is affected
- Land acquisition and Resettlement Manager of the LAU
- Social Specialist of the LAU
- Project Engineer of the PMU

In the Districts of Bannu, Lakki Marwat and Karak, one LAIT will be created in each district (Component 3) and will include:

- The Assistant District Commissioner
- Tehsildar of affected the Tehsils in each District
- Land Acquisition and Resettlement Manager of the LAU
- Social specialist of the LAU
- Project engineer of the PMU

3.1.2 Duties of the LAIT

The LAIT in each area will be responsible for various tasks, including:

- Verification, based on up-to-date satellite images, whether there are buildings, fields and other visible land use patterns such as orchards in the proposed footprint of the subcomponent
- Task the engineering team to identify and design technical alternatives that avoid and/or minimize this impact, including but not limited the potential rerouting of canals, mains, roads, transmission lines , different locations for camps. to avoid residential structures as much as possible.
- Supervise the disclosure process of disseminating the draft alternative assessment to the affected people and the panel of experts and finalized based on their comments and suggestions.
- Ensure that the final results of the screening and alternatives assessment will be documented in a report that is disclosed in its entirety on the project's webpage, as well as discussed in community meetings throughout the area(s) affected.

3.1.3 RAP Development

Subsequently, based on the outcome of the screening and alternative assessment for all subcomponents which have been confirmed to require land acquisition and resettlement, KTDP will conduct

- A socio-economic study (see outline in Annex 1)
- Preparation of individual resettlement plans (see outline in Annex 2)

3.1.4 Socio-economic Studies

The purpose of the socio-economic study is to collect baseline data (census and asset inventory) from the owners and users of all affected field and other land/resource use pattern,s as well as of the

owners and users of all buildings and improvements in the footprint of the project. It also contains assessments of public and communal infrastructure and the social and biological environment of settlements nearby. The socio-economic study will focus on the identification of stakeholders, the participation process, the identification of affected people (including owners and users of land, houses and resources) and baseline information on livelihoods and income streams as well as an assessment of all affected assets and access to assets.

The members of the LAIT will benefit from training and technical assistance to build the required capacities that would enable them to carry out their tasks.

3.1.5 Preparation of Resettlement Plans

Each component-specific RAP will be elaborated by the Land Acquisition Unit (LAU, see chapter 8.4.) following the outline in Annex 2. Each RAP will be developed in close consultation with the PAPs and other stakeholders, and each planning document will be submitted to relevant agencies such as WAPDA, FATA, the panel of experts and potential donors for review and comments. All resettlement planning documents are public information and are to be disclosed to the public after all comments have been addressed satisfactorily.

Subsequent RAPs for Components 2 and 3 need not include policy principles, entitlements, and eligibility criteria, organizational arrangements, arrangements for monitoring and evaluation, the framework for participation, and mechanisms for grievance redress as these are defined in this RPF. Future RAPs will provide census data, socioeconomic survey information, asset inventories, compensation rates and standards, policy entitlements related to any additional impacts identified through the census or survey, description of resettlement sites and programs for improvement or restoration of livelihoods and standards of living, implementation schedule for resettlement activities and detailed cost estimate.

As indicated all Resettlement Plans including new RAPs for Components 2 and 3 or subcomponents of these, updates and amendments of the existing RAP for Component 1 and new RAPs for additional work need to be reviewed and accepted by the panel of experts (see Chapter 8) before being processed and implemented and are at the maximum valid for two years. If more than two years have passed since the cut-off date (i.e. the time of the census and asset inventory) all surveys need to be repeated anew in order to be in compliance with this RPF.



Plate 3-1: Pictures from the field work conducted for the RAP for Component 1

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4 ESTIMATE OF NUMBERS AND CATEGORIES OF PROJECT AFFECTED PEOPLES

In line with international best practice this RPF covers the following groups of affected people:

- Physically Displaced People, those who are only physically displaced (i.e. who will lose their residence), but whose livelihoods are not affected (not economically displaced).
- Economically Displaced People, those whose livelihoods are affected, and include people who lose access to agricultural land, transhumant herders who lose access to traditional seasonal pastures, and people who run a business whose activity is affected by the Project. This category of PAP may also include seasonal agricultural laborers working on land owned by someone else.
- Physically and Economically Displaced People, those experience loss of both shelter and livelihoods as a result of Project land acquisition.

Further, this RPF addresses the following impacts insofar as they are triggered by the KTMP's land acquisition activities⁴:

- Loss of residential houses resulting in physical displacement;
- Loss of other private infrastructure (wells, shades, graves);
- Loss of communal infrastructure (roads, shrines, mosques);
- Loss of land used for agriculture resulting in economic displacement;
- Loss of business income resulting in economic displacement;
- Loss of 'communal land and resource utilization: grazing, gathering, fishing and hunting;
- Loss of 'communal land and resource utilization by transhumant herders
- Restricted land use in easements for transmission line, flooding areas and road reserves;

4.1 Data sources and extrapolation methodology

The following estimates were produced through KTDP's geographic information system. The available design for each subcomponent together with contour lines and/or a digital terrain were superimposed on detailed satellite images from 2012 that show land-use, developments and vegetation. Based on this information the surface area of different land-uses (residential land, agricultural land, non-development land i.e. "worsho") within the footprint were calculated and the number of houses and trees were counted. This information, together with existing statistical data (average number of households per house, average size of agricultural landholdings per household) at the lowest level of administration (tehsil, union council.), were used to estimate the number of physically and economically affected households. Finally, together with existing data at the lowest level on average household sizes, the information was used to estimate the number of people being physically affected i.e. allocated to the houses in the footprint, and/or the affected agricultural land.

Both the quality of data and consequently the reliability of the associated extrapolation depend importantly on the level of advancement of the engineering design. For some subcomponents, the accuracy of engineering design is quite mature (above 70%): an example is the Kaitu Weir and the associated reservoir where the original estimate could be validated and enhanced based on a detailed census performed in the context of the RAP for Component I. However, no detailed design exists, for most linear infrastructure (roads, canals and transmission lines), which means that one knows the size of the footprint through the technical specification (width of road with easement = 30 ft), the area where it will be established. But the actual land affected by these investments is unknown precisely and rather large. Consequently, the exact number of houses and trees affected cannot be determined. To overcome this difficulty, a sample survey was carried out to estimate average household sizes and average land holdings

The estimates are based on the technical data presented in the WAPDA technical documents as well as other data established in the feasibility study.

⁴ As indicated before downstream economic impacts are covered under the Environmental Management Plan.

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Table 4-1: Footprint of the KTDP with surface area of affected land and land use, number of affected assets and project affected people

Package	Accuracy	Affected land and land use (acres)					Affected Assets		Affected Households		Project affected People	
	in %	Total	Agric	residential	water	Worsho	Houses	trees	physical	economic	physical	economical
Kaitu weir with other permanent facilities	~75	3.5	0.0	0.0	3.2	0.3	0	8	0	0	0	0
Kaitu reservoir	~65	45.2	16.5	0.0	27.2	1.6	0	22	0	58	0	494
Kaitu weir construction camp, quarries (temporary facility)	30	10.0	2.0	0.0	0.0	8.0	0	0	0	2	0	21
Kaitu Weir, reservoir, camps, quarries etc.		58.7	18.5	0.0	30.3	9.9	0	30	0	60	0	515
Mains and secondary canals of the Spaira Ragha CA	~75	78.7	33.6	0.1	0.5	44.4	2	43	2	6	30	81
Mains and secondary canals of the Sheratalla CA	~75	319.2	79.5	2.5	8.3	229.0	23	176	19	59	257	797
New 12 mile road from Spinwam to Spaira Ragha	~70	129.0	12.9	1.2	2.7	112.1	11	73	11	7	149	95
Access road to power house 4	30	1.1	0.5	0.0	0.0	0.5	0	1	0	3	0	38
Access road to power house 5	30	2.3	0.0	0.0	0.0	2.3	0	1	0	0	0	0
Powerhouse 4 at the Kurram + Transfer canal and tunnel	~70	24.0	0.0	0.0	0.5	23.3	0	13	0	0	0	0
Pumphouse for lift canal, housing, support/security staff	~75	0.6	0.0	0.0	0.0	0.6	0	0	0	0	0	0
Powerhouse 5	~75	0.1	0.0	0.0	0.0	0.1	0	0	0	0	0	0
Canals, roads, powerhouses, tunnel etc.		554.9	126.5	3.8	12.0	412.4	36	307	32	75	436	1,010
Transmission lines from Powerhouse 4 to grid near Bannu	30	302.4	67.8	3.3	28.0	203.3	12	166	12	361	109	3,289
Transmission line from Kaitu Weir to pump house	30	4.8	0.5	0.2	0.0	4.1	0	3	0	3	0	23
Transmission lines from Powerhouse 5 to Weir	30	28.4	5.7	0.0	0.0	22.7	0	16	0	2	0	18
Transmission lines		335.6	74.0	3.6	28.0	230.1	12	185	12	366	109	3,330
Overall area of Spaira Ragha Command Area	30	4,302	2,668	4	42	1,588	20	2,366	20	3,067	182	27,906
Overall area of the Sheratalla Command Area	30	18,427	5,983	309	573	11,561	603	10,135	603	6,877	5,487	62,579
Command Areas		22,729	8,651	313	616	13,149	623	12,501	623	9,943	5,669	90,485
Component 1 Total		23,679	8,870	320	686	13,802	671	13,023	667	10,444	6,214	95,340
Kurram Tangi Dam and Reservoir	~ 75	11,443.5	1,589.0	326.1	1,499.8	8,028.6	1,611	15,265	1,611	1,826	14,773	16,748
Kurram Tangi construction & security camps	30	10.1	2.6	0.0	0.0	7.5	0	8	0	3	0	27
Powerhouse 1, weir and appurtenant structure	~ 75	8.3	0.1	0.0	1.0	7.2	0	6	0	0	0	1
Powerhouse 2, weir and appurtenant structure	~ 75	11.6	2.1	0.0	1.5	8.0	0	9	0	2	0	22
New access road to power house 2 and 3	30	56.1	1.1	0.0	0.0	55.0	0	42	0	6	0	52
Powerhouse 3, weir and appurtenant structure	~ 75	7.6	0.0	0.0	3.8	3.8	0	6	0	0	0	0
New alignment of Mirali-Spinwam-Thal road	30	60.4	0.0	2.5	1.9	56.0	10	45	10	0	92	0
Additional land take for enhancement of Bannu-Shewa road	10	16.0	4.0	2.0	0.0	10.0	0	12	0	21	0	196
Resettlement sites	10	2,577.6	483.3	161.1	0.0	1,933.2	0	1,933	0	556	0	5,094
Component 2 Total		14,191	2,082	492	1,508	10,109	1,621	17,326	1,621	2,414	14,865	22,141
Canals to Thal Command Area	50	879.5	589.4	23.8	85.5	180.7	243.0	659.6	243	3,142	2,384	30,818
Thal Command Area	30	143,803	107,276	7,600	22,910	6,017	4,958	107,853	4,958	47,258	48,638	463,604
Component 3 Total		144,683	107,866	7,624	22,996	6,198	5,201	108,512	5,201	50,400	51,022	494,422
Grand Total		182,553	118,818	8,436	25,190	30,109	7,493	138,861	7,489	63,259	72,100	611,903

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In Component 1 and 2, the average agricultural land holding per household is 0.87 acres and the average household size is 9.17 people. In Component 3, the average agricultural land holding per household is 2.27 acres and the average household size is 9.81 people (weighted average for the three involved districts). All data 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.khyberpakhtunkhwa.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. As indicated the data of Component 1 benefited from data collection for the Component 1 RAP of the KTDP.



Plate 4-1: Picture of the area to be inundated for Component 2

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5 ELIGIBILITY AND ENTITLEMENTS

5.1 General Structure of Entitlements

The displaced persons can be classified in one of the following three groups:

- those who have formal legal rights (including customary and traditional rights recognized in Pakistan): These are a) in the FATA the clans owning traditionally all lands without improvements (e.g., preparation for agriculture.) and b) in the settled areas the landowners and peasant-owners;
- those who do not have formal legal rights at the time the census begins but have recognizable rights or claims to the land (user rights), improvements (preparation for agricultural .) and/or the assets on the land (buildings, trees). In the KTDP region, this group of people is further subdivided into: (i) those people in the FATA, who have permanent user rights to agricultural and residential land and assets; and, (ii) those in the FATA and settled areas that have temporary user rights to land, improvements and/or assets (e.g., lessee, tenant.);
- those who have no recognizable legal right or claim to the land, improvement or assets they are occupying. In the KTDP region, these are internal and external refugees, “squatters”.

Persons covered under (a) and (b) are entitled to compensation for land and improvements they lose, allowances for associated costs and livelihood restoration assistance if applicable.

Persons covered under (c) are entitled to resettlement assistance rather than compensation for the land they occupy, compensation for improvements and assets, allowances for associated costs and livelihood restoration assistance, if applicable and if they occupy the project area prior to a cut-off date i.e. the time of the census. Persons who encroach on the area after the cut-off date are usually not entitled to compensation for assets they do not own formally or informally.

Entitlements include the following categories:

- Compensation is provided by KTDP in conformance with Pakistani law and international standards to offset loss of recognized or recognizable land, improvements and assets. Compensation may be provided either in cash or in kind (provision of a resettlement house to offset the loss of a house or a similar amount and quantity of land to replace productive land lost).
- Allowances are generally provided in cash to offset disturbances, inconveniences and costs associated with the displacement and resettlement process.
- Livelihood restoration assistance is provided to support PAPs to restore livelihoods affected by Project land acquisition activities to the extent livelihoods are affected. Livelihood restoration is generally delivered in kind and/or in the form of various services, including training and capacity building.
- Supplemental assistance to different categories of vulnerable people so they can restore their pre-project standard of living and livelihood.

5.1.1 Eligibility and Entitlement Matrix

Entitlements for each type of impact are presented in Table 5-1

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Table 5-1: Eligibility and Entitlements Matrix

Affected asset or right	Eligibility Conditions	Entitlements		
		Compensation	Allowances	Livelihood Restoration
LAND				
Tribal ownership of land	In the FATA: At the time of census mutually recognized as clan holding a specific territory in the footprint Settled areas: At the time of census mutually recognized as customary owner of undeveloped land in the footprint	<ul style="list-style-type: none"> FATA: Replacement land in Command Area of Component I or cash compensation for all un-developed land (worsho and Zangal/forest at local replacement value: paid to clan Jirga based on annually updated rates Settled areas: Cash compensation for undeveloped land at replacement value (updated annually) paid into community treasury 	<u>Land Transfer allowance</u> 22 % of market value in cash covering all administrative fees related to the purchase or provision of replacement land	N/A
Agricultural land	In both FATA and Settled Areas At the time of the census (cut-off date), hold formal land title OR be recognized by local community and/or resettlement committee as owner of affected land or having permanent user rights to affected land	Preferred Option where Incomes are Land-based: <ul style="list-style-type: none"> Replacement land of similar size and quality provided to households. If rain-fed land is replaced with irrigated land, the area might be smaller because irrigated land is more productive. If the overall land holding of the affected household is less than 1 acre, the household will receive replacement land of 1 acre. OR <ul style="list-style-type: none"> Cash compensation at replacement value provided to individual PAP, if the PAP for example wants to move out of project area, has a non-land based livelihood, has additional landholdings above 2 acres per household that are not affected and/or loses less than 10% of his productive land, known to the resettlement committee as landlord. 	Regardless of whether compensation is in-kind or in-cash: <u>Land Transfer Allowance</u> 22% of market value in cash <u>Replacement land preparation allowance</u> paid in cash to affected household, based on the cost of preparing the replacement agricultural land based on KTDP survey and updated annually	N/A
Residential land or Commercial land	At the time of the census (cut-off date), hold formal registered title OR be recognized by local community and/or resettlement committee as owner of affected land or having permanent user rights to affected land.	Preferred Option : <ul style="list-style-type: none"> Replacement plot of similar size and characteristics at a location acceptable to PAP. OR <ul style="list-style-type: none"> Cash compensation at replacement value, if the PAP for example wants to move out of project area, has an additional house not affected by the project, loses less than 202% of his house/compound and prefers to shift his property back 	Regardless of whether compensation is in-kind or in-cash: <u>Land Transfer Allowance</u> 22% of market value in cash	N/A

Table 5-1: Eligibility and Entitlements Matrix

Affected asset or right	Eligibility Conditions	Entitlements		
		Compensation	Allowances	Livelihood Restoration
Easement for transmission lines	At the time of the census (cut-off date), hold formal registered title OR be recognized by local community and/or resettlement committee as owner of affected land or having permanent user rights to affected land.	Cash compensation at replacement value for land under towers and 10% of replacement value for all other land within restriction corridor	N/A	N/A
Land Use				
Peasant owner & Peasant – permanent right holder of agricultural land	At the time of the census be recognized by local community and/or resettlement committee as peasant-owner/peasant-permanent right holder	N/A	<u>Peasant Transition Allowance</u> As most replacement agricultural land will only become available 2-3 years after the original agricultural land has been taken, the affected household waiting for replacement land will receive at every harvest season the average yield for the lost plot considering the most valuable crop has been planted and average yields achieved based on survey from KTDP	<ul style="list-style-type: none"> ● Training in irrigated agriculture for each household member between 15 and 45 in household ● Equipment; ● Inputs (seeds) for one year ● Technical assistance ● Access to credit
Tenant of agricultural land	At the time of the census (cut-off date), be recognized by local community and/or resettlement committee as the tenant of an affected agricultural land Tenants from the same households as the peasant-owner/permanent right holder of the land they are renting are not entitled	N/A	<u>Land tenancy replacement allowance</u> The tenant is expected to find himself replacement land. After a new plot has been identified, one year of average rental fee is paid directly to the land owner, with KTDP witnessing the transaction	<ul style="list-style-type: none"> ● Training in irrigated agriculture for each person between 15 and 45 in household ● Equipment; ● Inputs (seeds .) for one year ● Technical assistance ● Access to credit

Table 5-1: Eligibility and Entitlements Matrix

Affected asset or right	Eligibility Conditions	Entitlements		
		Compensation	Allowances	Livelihood Restoration
Agricultural Encroacher/Squatter Landless farmworker	Encroacher, farmworkers from the same households as the peasant-owner/permanent right holder of the land they are encroaching on are not entitled	N/A	<u>Self-relocation allowance</u> covering one year of agricultural income (revised every year based on KTDP study)	• Training in irrigated agriculture for each person between 15 and 45 in household
Annual crops	At the time of the census, be recognized by local community and/or resettlement committee as the owner or permanent right holder of an affected annual crop, regardless of land ownership status	<u>Compensation for annual crops</u> per KTDP rates, revised annually, if crop cannot be harvested before the land is required for development -- For crops in association, percentages of each crop in the mix to be estimated on a case-by-case basis by sampling crop densities in at least three different locations within the affected plot and averaged to establish the overall proportions of the different crops in the mix, which are further applied to the relevant rate to establish an average rate for the mix -- A share of the crop compensation may be allocated to the land owner/landlord/permanent user right holder based on distribution percentages agreed on in the lease agreement	N/A	N/A
Perennial crops	At the time of the census, be recognized by local community and/or resettlement committee as the owner or permanent right holder of an affected perennial crop, regardless of land ownership status	<u>Compensation for perennial crops</u> per KTDP rates, revised annually plus seedlings. Trees are categorized as: - Saplings - Mature productive. - Old	N/A	N/A
Structures, buildings, houses.				
Residential House: Titled owner or recognized permanent right holder	Household that at the time of the census (cut-off date), holds formal title OR be recognized by local community, and/or resettlement committee as owner or permanent right holder of house. - Polygamous families are considered as one household even if they live separated, but as all other households they receive a replacement house for each house they lose. So if they have 3 houses for three wives, they will	Preferred Option - Each house owned by a household is compensated in-kind by a Replacement house on a serviced residential plot of similar size, similar area with equal or better construction materials. - Houses with four rooms or less are replaced by houses with 4 rooms - Houses with more than ten rooms are replaced by a house of ten rooms and the additional rooms are compensated in cash at 10% of the market value of the overall house - Compensation in cash for any additional infrastructure (e.g. separate kitchen, storage rooms, fences, well on property) - Non-moveable special features can be compensated in cash on a case-by-case basis (examples: tile floor, running water in the house) - Salvaging of materials of affected structure	<u>Connection Allowance</u> PKR 20,000 (in 2013) per house for electric and other utility hook-ups, administrative registration fees. For house owners renting out part or all of the house to people outside their household: <u>Allowance for lost rental income</u> equivalent to six months of rent established by KTDP survey and updated	N/A

Table 5-1: Eligibility and Entitlements Matrix

Affected asset or right	Eligibility Conditions	Entitlements		
		Compensation	Allowances	Livelihood Restoration
	receive three houses	<p>OR</p> <p>Cash compensation at replacement value based on KTDP's replacement rates for inhabitable structures, if the household wishes to relocate on his own and after presenting a rent agreement or preliminary ownership title, if the household loses less than 25% of his house/compound and can renovate the not affected part, if the household can demonstrate that he just shifts the house out of the way of linear infrastructure but has sufficient land to stay in-situ</p>	annually	
Owner residents Permanent right holder residents	<p>Resident Household that at the time of the census, holds formal title and reside in the affected house</p> <p>OR</p> <p>be recognized by local community, and/or resettlement committee as permanent right holder and resident.</p>	N/A	<p><u>Moving allowance</u> (PKR 50,000 in 2013) regardless of the compensation option selected</p> <p><u>Transition allowance</u> (PKR 50,000 in 2013) regardless of compensation option selected</p>	N/A
Tenancy or free-of-charge occupation of a residential house	<p>Be found at the time of the census to be renting or occupying free of charge a residential house owned by somebody from a distinct household.</p> <p>Intra-household tenancy or intra-household free-of-charge occupation is not eligible (e.g., somebody declaring their children or other household members as free tenants while such children belong to the same household – refer to definition of household)</p>	N/A	<p><u>Rental re-establishment allowance</u> equal to 6 months of rent of a one room apartment of usual standard in Bannu times the number of rooms occupied in the affected house by the affected household – price based on annual surveys of rental prices in Bannu.</p> <p>AND</p> <p><u>Moving allowance</u> (PKR 50,000 per household in 2013)</p> <p>AND</p> <p><u>Transition allowance</u> (PKR 50,000 in 2013) regardless of compensation option selected</p>	N/A
Ownership/permanent rights holder over a commercial (non-residential) building and/or other infrastructure	At the time of the census, have title or be recognized by local community and/or resettlement committee as owner of a commercial structure or as permanent right holder of this structure	<p>Replacement Structure on a serviced residential plot of similar size, similar area with equal or better construction materials</p> <p>OR</p> <p>Cash compensation at replacement value based on KTDP's replacement rates for non-residential buildings and/or other infrastructure</p>	- For owners/permanent right holders renting out part or all of the non-residential building: <u>Allowance for lost rental income</u> equivalent to 12 months of rent	N/A

Table 5-1: Eligibility and Entitlements Matrix

Affected asset or right	Eligibility Conditions	Entitlements		
		Compensation	Allowances	Livelihood Restoration
Businesses	At the time of the census, be recognized as owner of an affected business, i.e. a business operating, regardless of land ownership status (i.e., the landowner may be a different individual).	N/A	<u>Allowance for loss of business income during the re-establishment period</u> , equal to 3 months of net income, revised annually, or to PKR 50,000, if no reliable estimate of net income can be carried out	<u>Eligibility of each household member between 15 and 45 to one livelihood restoration package</u>
Business employees	At the time of the census, either have a recognized formal full-time employment contract with an affected business owner, or be recognized by the census and validated by the Resettlement Committee as an informal full-time employee of an affected business	N/A	<u>Reimburse salary for period of relocation and reestablishment. Allowance for loss of income during the business re-establishment period or for termination of contract</u> , equal either to three months of net income as evidenced by pay documentation, or to PKR 30,000 per employee if no pay documentation is available	<u>Eligibility of each household member of employee between 15 and 45 to one livelihood restoration package if employee loses job</u>
Communal building (shrines, guest house, school, meeting place, communal distribute network for water or electricity, solar panels, cemetery .)	Be the recognized formal or in-formal owner of communal building If building is considered as cultural heritage see cultural heritage management plan for KTDP	Either reconstruction based on an agreement with the community using the communal building, or compensation in cash based either on the categorization applicable to structures or on case-by-case valuation, plus bonus 50%.	<u>Allowances for any ceremonies needed to relocate of infrastructure with living cultural value (graves .), based on a reasonable request from the community, group or individual associated to building.</u>	N/A
Vulnerable People	Meet at least one of the criteria (gender, age, handicapped)	N/A	<u>Schooling Allowance for households below the poverty line:</u> Payment for each household member between 5 and 15 of PKR 50,000 year against documentation that child is enrolled and visits school regularly Other categories as to be defined in the Resettlement Action Plans	Other categories as to be defined in the Resettlement Action Plans

Notes:

- **Land Transfer allowance** to cover costs associated with registering the new land: 22 % of market value of land in cash to cover the 15% Compulsory Acquisition Charge, the 2% CVT, the 2% Stamp duty, the 2% TMA Tax, the Mutation frees and other associated costs.
- **Replacement house standard:** a) Concrete floor, ceilings, brick partitions, internal doors, metallic entry door, metallic windows with glass panes, b) improved construction materials (fired earth or concrete bricks), c) concrete roof, d) improved finish (inside and outside plaster), e) double ventilated improved pit latrine, concrete slab, brick superstructure, f) electrical pre-cabling, g) access to electricity and water (public tap or hand pump) h) house electricity connections and meters to be paid for by PAPs.
- During the surveys of Components 1 and 2 less than 1% of the house were found to have more than 10 rooms

6 LEGAL FRAMEWORK

6.1 Legal and Regulatory Framework in Pakistan

Private property is protected in Pakistan through the Constitution of 1973, which rules that “every citizen shall have the right to acquire, hold and dispose property No property shall be compulsorily acquired or taken possession of save for a public purpose,⁵ and save by the authority of law which provides for compensation therefore and either fixes the amount of compensation or specifies the principles on and the manner in which compensation is to be determined and given” (Constitution 1973; Article 23-24).

This power to expropriate private properties for public purposes vested on the government through the Constitution is implemented through the Land Acquisition Act 1894 (LAA). While it defines detailed procedures for the expropriation process, it is inevitable that this 120 year old legislation does not fully address the economic, administrative, environmental or social realities of Pakistan in 2013 and for example does not cover the resettlement and rehabilitation of physically and/or economically displaced people, among other issues.

While the LAA guides the land acquisition process in Pakistan, it needs to be noted that the Constitution of Pakistan rules that unless specifically enacted by the President, the laws of Pakistan (including the LAA) do not apply to the FATA, which includes the Frontier Region Bannu and North Waziristan (Constitution 1973; Article 246b). This means that all project land located in the Districts Bannu, Lakki Marwat and Karak (basically Component 3 plus minor parts of the access roads and the transmission line of Components 1 and 2) would be acquired through the process outlined in the LAA and other relevant legislation in Pakistan, while land located in the FATA (Components 1 and 2 with the exception of minor parts of the access roads and transmission line) would be acquired under the national framework in accordance with the land acquisition legislation applicable in the FATA.

6.1.1 Land acquisition in the Districts Bannu, Lakki Marwat and Karak

The acquisition of land and easement for access roads, transmission lines, as well as canals and command area in the three districts Bannu, Lakki Marwat and Karak is governed under the national framework by the LAA and the TA.

The LAA defines “land” as land plus benefits arising from it plus all assets and resources attached to it and “person interested” as those who have rights and interests in this land (i.e. owners, sub-owners, tenants, mortgagees, leaseholders, easement holder). The focus of the LAA is procedural and covers taking of land for public purpose as well as for private investors.

The expropriation process starts by informing the public about the intent to expropriate land for a specific purpose. The public announcement provides also the Land Acquisition Collector (LAC) with the right to access and survey all land of interest without any additional permission, while to access a house and/or enclosure he needs to inform the occupier at least 7 days in advance. Based on these rights the LAC conducts a preliminary land survey in order to identify the “interested persons”. All damages caused by the survey need to be compensated immediately. Based on the survey results, a second public notice is issued, identifying the specific land plots to be expropriated and inviting all “interested persons” to voice objections within 30 days. After reviewing these objections, the LAC

⁵ Projects in the public purpose are according to the Constitution projects that have “the purpose of (i) providing education and medical aid to all ... (e) (ii) providing housing and public facilities and services such as roads, water supply, sewerage, gas and electric power to all ... (iii) providing maintenance to those who, on account of unemployment, sickness, infirmity or old age, are unable of maintain themselves” (Constitution 1973; Article 24).

recommends actions to the Executive Revenue Officer of the Tehsil in question, which then decides to either enhance the documentation or to go ahead with the expropriation process. In the next step, a “Declaration of Intended Acquisition” is published identifying the land plots to be expropriated as well as the reason for the expropriation. Based on this declaration, the LAC then demarcates the land to be expropriated, measures and values it, finalizes the identification of “interested people” and invites them through public notice to voice their claims/interests in the land and establish based on the available information a draft updated cadaster drawing. After that, the LAC organizes a meeting to verify the various claims and finalize the information gathering process on size, nature and value of the plot with all improvements and assets on it as well as the apportionment of the overall compensation to the “interested people” based on their verified claims. The meeting closes the fact finding process and entitles the LAC to update the cadaster with the new information, issue an award note and take possession of the “land”.

After the “land” had been formally taken, the “interested people” are invited to claim their share of the overall compensation. Any grievance against the expropriation process and/or the allocated compensation needs to be voiced through the legal system.

Compensation for “land”, including all improvements (houses) on it, is calculated as the average value declared in private acquisitions of similar lands nearby plus a markup of 15 percent. Informal improvements such as non-permitted houses are not compensated, while physically displaced people are provided with a transport allowance. In addition, damages on standing crops and other such assets are compensated at market value.

It needs to be noted that the LAA is a provincial law with different sets of standards and procedural steps most notable for the calculation and payment of compensations in each province. Besides the normal procedure outlined above, the LAA also contains, in article 17, an urgency provision that allows the immediate taking of land immediately and the taking of houses and other property two days after the first notification has been issued upon payment of an additional disturbance allowance.

For transmission lines, an even older legislation is used: The Telegraph Act (1885) covers, among other activities, the installation and maintenance of telegraph lines and poles and has been used ever since for transmission lines. The Act defines that neither land nor easement is needed for the installation of poles/towers on private property and therefore no compensation is paid. Similarly, while it is not permitted to construct houses underneath transmission lines, no easement is acquired and consequently no compensation paid. In short, those affected by a transmission line are only compensated for damages to standing crops, buildings and other assets during the construction period.

6.1.2 Land Acquisition and Land Use in North Waziristan and FR Bannu

As indicated before, the FR Bannu and North Waziristan are part of the FATA and legislated by a set of specific laws enacted by the President of Pakistan as well as written and unwritten customary laws.⁶ Until recent none of the formal laws applicable to the FATA contained any provision for expropriation of land, with the exception of land in the border region with Afghanistan. Land can therefore only be acquired through the provisions under the customary laws. Under customary law the tribes are the rightful owners of all lands and nobody has the right to take or use any of this land without the consent of the tribe owning this land. In practice this means that administrative developers (road department, department of education, WAPDA) task the political agent to come with the malik(s) of the affected tribe(s) to a negotiated settlement. A committee comprising the relevant tehsildar, malik(s) and village elders is then tasked to negotiate compensation rates for each of these entitlements. After an agreement is reached, under national projects the Political Agent is then tasked to disburse all entitlements in cash to the malik(s), who is then in charge of distributing it to the affected sub-tribes and households. As this general provision commonly created issues,

⁶ http://fata.gov.pk/index.php?option=com_content&view=article&id=192&Itemid=165

projects financed by Multilateral Financial Institutions charge the Political Agent to disburse compensation for farmland and houses and allowance to each of the affected households and only disburse the remaining compensation for grazing and barren land as well as community infrastructure to the malik(s).

The situation changed on 27 August 2011, when the President of Pakistan amended the Frontier Crimes Regulation (1901) through an Executive Order and added clause 56, which rules that now “no person shall be compulsorily deprived of his property unless he is paid adequate compensation with consensus rate or Government assessed value as in vogue in settled areas”. This means that land and easement can be expropriated in the FATA as long as compensation is paid. This means that under the national framework all project land in the FATA (Components 1 and 2 with the exception of minor parts of the access roads and transmission line) could be expropriated as long as compensation is paid.

As the Telegraph Act has been enacted for the FATA, land for the transmission towers as well as easement for roads and the transmission corridor could under the national legislation therefore be obtained through the Telegraph Act.

6.1.3 Land administration

The land administration system in Pakistan is very old. The Arthsastra is supposed to be the first work to mention the village officers known as Gopa that were responsible for preparation of various registers for the village fields, transfers, and due taxes. Attempt to reform the system was first made by Sher Shah Soori (1534-1545) whereby land was categorized, measured and a schedule of crop rates fixed. The system was reformed during the Mughal King Akbar reign (1556-1605) resulting in a regularized land record management system to define agricultural taxes on a rational basis. The subsequent colonial rule by the British then implemented the system on scientific lines whereby large scale cadastral surveys were conducted to demarcate the boundaries and extent of each individual landholding. Soil fertility was also classified to formulate and rationalize the levy and collection of land revenue from landholders of each and every village. The British set up an administrative hierarchy that is still used today: The country is divided into provinces, divisions, districts, Tehsil, Kanungo Circle, Patwar Circle and finally Mauzah/Village.

While there are parts of North Waziristan that have a land administration system, in the project region, the following system only exists in the Bannu, Karak and Lakki Marwat Districts, while for the Mir Ali Tehsil of North Waziristan and FR Bannu no land records exist at all and therefore presently no land tax is collected for these areas. While no plans whatsoever exist for the establishment of Command Areas in Component 1 and 3, it can be assumed that they will result in becoming part of the overall land administration system of Pakistan and therefore required to pay tax. While for the settled districts this is no change, it will be quite a difference for the people in the FATA for they have not had any exposure to tax authorities in the past.

The current land administration system in Pakistan aims at land revenue assessment and tax collection for the fiscal purposes. This system is organized or structured on the traditional land registers and cadastral maps in paper format, and their maintenance is mainly dependent on the hard work of the local land administrator, called the “patwari” at the grass-root level within his jurisdiction. Although, the local administrator reports all changes on land rights and boundaries of land parcels to higher-level government authorities, the maintenance and quality of the land registers and cadastral maps kept at national level are always questionable. Experience shows that limited accessibility to and reliability of these records have restricted the operational and legal usefulness for securing land ownership, as well as for carrying out the reliable planning and development activities.

The Board of Revenue (BOR) at provincial level is mandated with all matters connected with administration of the land, collection of land revenue, preparation of land records and land acquisition. The Chief Land Commissioner is responsible for recovery of government dues/ agricultural income tax,

land revenue, water rate, ushr (religious tax), mutation fees, stamp duty, registration fee, copying fee, and arrears relating to banks, Agricultural Development Bank of Pakistan and cooperatives. He frames the laws/rules/policies relating to the revenue matters and also provides guidelines for maintenance of record-of-rights, periodical record for use of the right-holders and revenue department. He also supervises revenue work of Commissioners, Deputy Commissioners, Assistant Commissioners and other officers/courts in the province. The Chief Settlement Commissioner is responsible for preparation and execution of policies for disposal of state land for different purposes such as agriculture purpose in rural areas, residential purpose in rural/urban areas, commercial, industrial, charitable and religious purposes.

There are several Laws that deal with the land, relationship between landlord and tenants, mortgagor and mortgagee, assessment and collection of land tax, agriculture income tax, local rates and that are to some extent relevant to the land acquisition required under KTDP:

- **Land Consolidation Act 1960:** This Act aims provides the land administration with vast powers to take, consolidate and reshape land with the objective to increase yields and is commonly used for command area development. While formally requiring the consent of the majority of the affected landowners, the act provides vast discretion towards the administration to determine and declare that such consent exists and there are quite some examples where the “beneficiaries” were unsatisfied with the outcomes.
- **Land Revenue Act 1967:** This Act was passed during the social inspired land reform and deals with the issues of record of rights and land revenue.
- **NWFP Tenancy Act 1887:** This Act deals with the relationship of landlord and tenants regarding produce of land and ejection of tenants .
- **Pre-Emption Act:** This law has become operative by revenue department after promulgation of para-25 of the Martial law Regulation (MLR-I 15) in 1972 which has given the first right of pre-emption to a tenant. Normal cases of pre-emption of land are dealt with by the civil courts. The revenue courts entertain only those cases in which a tenant brings a pre-emption suit. Pre-emption laws give certain preferential rights to neighbors in matters of sale of land.
- **Registration Act 1908:** This act deals with the registration of various documents (including those relating to land) with registration authorities. Normally revenue officers (as detailed in Land Revenue Act 1967) are declared as registration authorities. Under this act various documents are executed and registered in the office of Sub-Registrar like sale deeds, mortgage deeds, lease deeds, power of attorneys, partnership deeds, and other deeds. Deeds are entered in the relevant registers after the documents are properly stamped, checked and duly witnessed.
- **Transfer of Property Act 1982:** This act deals with the transfer, sale/mortgages charges, leases exchanges, and actionable claims in respect of property.
- **Land Reforms Act:** The Land Reforms Laws have been introduced at various stages including the MLR-64 on 7.2.1959, MLR-I 15 on 12.3.1972 and Land Reforms Act: II on 5.1.1977. The main aim of these land reforms was to determine the individual holdings to a manageable size for improving the lot of peasantry. This act gives rights to ‘tenant in possession’ of a certain property. It is mostly ignored in the contemporary jurisdiction.

The most common documents and processes related to land administration are:

- **Ownership Document:** The document showing ownership of land is called the "Fard Malkiyat" and is prepared by the Patwari concerned or district office on payment of fee. It is created from the Haqdarar Zamin (Jammabandi) Register and the incorporations made through any mutation (Intiqal). It is essentially a copy of a particular part of the Haqdarar Zamin Register.
- **Haqdarar Zamin Land Registration:** Haqdarar Zamin formerly known as the Jammabandi Register is one of the most important documents of the record-of rights as well as the periodic record in the rural areas. It primarily shows the right holders of land including details on owner, cultivator, land, soil, and rent. It is created every four years for incorporating recent mutations (Intiqal) that have

taken place since the last document was created from the previous Haqdaran Zamin (land owners) register.

- **Fard Badar Error Correction:** Whenever a clerical mistake is detected in current Jammabandi after it has been finally attested and filed, whether that mistake was originally made in that or any previous Jammabandi, the Patwari makes the necessary entries about it in the columns of the Fard Badar. The Fard Badar process is used for the purpose of avoiding the entry of a further mutation of inheritance in cases where in entering the original mutation some of the holdings of the deceased were inadvertently omitted.
 - **Gardawari Binomial Inspection:** Before every harvest season, Patwari makes a survey in his Patwar Circle called Gardawari. The purpose of Gardawari is to collect information about the matured cropped area under different crops sown by farmers in a Patwar Circle. Gardawari provides information about the date on which inspection of each harvest should begin, the kind of soil (Qism Zamin), type of crop (Jins) sown, and the area sown (Raqba Kashta) with reference to the Khasra number (parcel identification number).
 - **Mutation Process:** A mutation is a change in the agricultural land records. There are various types of mutations with different transaction characteristics. The mutation process is a process with many checks and balances. In mutation process, an oral report or application for mutation in writing is made to the Patwari. The key persons involved in mutation process are Patwari, Gardawar / Kanungo, and Teshildar or Naib Tehsildar (Revenue Officer). Changes in the recorded rights and interest are managed at the Patwar level. There are various types of mutations such as sale, gift, mortgaging, lease, and subdivision, and devolution of land.

The land record data is maintained at Tehsil offices whereby record sets are developed at the time of settlement. For maintenance of records, the Patwari has to maintain the following maps and registers:

- **Field Map:** A cadastral map of a village called 'Mussavi' and shows all the fields, duly measured and numbered in a village. This is basically a surveyed paper map at different scales depending upon village area, normally at a scale of 1"=40 Karam (about 1:2500 scale or so according to parcel sizes in the village). The yard-stick of measuring a field is called Karam which is 5.5 feet in length. Land parcels are labeled with their Khasra Number (parcel identification number) and dimension of each side. Each Khasra Number is owned by an owner. Mussavi is developed at the time of settlement. No changes can be made in this record-set till next settlement which is normally carried out after every 30-35 years. Subdivision lines break up an irregular land parcel in different regular geometrical shapes. The subdivision lines are generally represented with dotted line and defined for the area calculation on the map.
- **Field Book:** This contains the details of measurement of each field e.g. its length, breadth, diagonal detail, and worked out total area.
- **Shajra Kishtwar:** All the Mussavis of a village are drawn up conjointly on a cloth (Lattha) for day-to-day use by the Patwari which is called Shajra Kishtwar.
- **Register Haqdaran-e-Zamin (Jammabandi):** This is the most important register containing necessary particulars about ownership, tenancy, khasra number and its classification, source of irrigation, land revenue, and Rent (Lagan).
- **Register of Mutations:** It contains particulars of all transactions which are entered by the Patwari and decided by the Revenue Officer.
- **Register Khasra Girdawari:** This register contains details of the inspection of crop grown in each field in each harvest and all changes of ownership and tenancy. It is a track record of the possession of a particular patch of land which helps to resolve issues relating to ownership of that patch.
- **Lal Kitab (Village Note Book):** This book has details about statistics of a village lands e.g. total area, area sown, assessment of land revenue, number of entered and attested mutations, notes about changes in cultivation, and ownership for the last four years. It also shows the population of a village and the approximate number of livestock. It is a statistical book of a village.
- **Fard Bach:** It contains the details of the demand of land revenue and cesses thereon recoverable from each land owner in a village.

- Roznamcha Waqiyati: All the happenings about land affairs are recorded in this diary. For instance, hailstorm, severe rains, the reports of all transactions of land, encroachments on State Land, tours conducted by various revenue officers, and all other matters connected with land are entered in it.
- In addition, there are another nineteen registers which are maintained by a Patwari.

Ali and Nasir (2010) conducted a comprehensive assessment of the trust people have into the land administration services in KPK and indicate that 93 percent of their informants indicated that there is room for corruption and unofficial changes in the land records and 87 percent of the clients were not satisfied with the processes in the present LAS and in particular the high charges for registration of ownership changes (in total around 22% of the value of the land). This low trust in the system is in particular relevant for processes such as the land consolidation process used to establish COMMAND AREAS that provide a vast discretion to the land administration with limited checks and balances in place.

6.2 Land Acquisition Practice in Pakistan

Under the legal framework of Pakistan, local governments and in particular the local Board of Revenues and the Land Acquisition Collector – both at Tehsil level – are provided through the LAA with a vast discretion with few checks and balances, provisions for public consultations, standardized methods of valuation and/or any form of proactive grievance mechanism in place. In the FATA, the Frontier Crimes Regulation provides the Political Agent with an even larger discretion as clause 56 provides no guidance on when to use negotiated settlements (compensation at consensus rate) or compensate at the rate at least partly described in the LAA.

In turn, the absence of a modern land acquisition law has triggered significant delays, cost increases, protests as well as the desire to address and overcome this challenge. In 2002 a National Resettlement Policy was drafted to ensure an equitable, uniform and modern treatment of land acquisition and resettlement all over Pakistan. The Draft Policy focuses on key shortcomings of the LAA and suggested ways to a) compensate for the loss of (i) communal assets (structures and public infrastructure like mosques, shrines, schools, graveyards .) (ii) communal administered access to assets (pasture, water rights, .), and (iii) incomes from assets and resources; b) assure transparency during the asset inventory and valuation process, c) assure livelihood restoration, d) integrate through consultation processes the affected people into resettlement planning and implementation and e) provide special attention to vulnerable groups . The Draft National Resettlement Policy was never submitted to the cabinet and/or parliament and is therefore not valid although it highlights the well-known shortcomings of the LAA and Telegraph Act, as well as providing suggestions on how to overcome these shortcomings.

6.3 International requirements for land acquisition and resettlement⁷

WAPDA has a rich experience of constructing and operating large dams. Based on lessons learned from early projects that caused significant resistance, WAPDA commonly uses international standards and approaches to access land and easement for large and complex projects such as KTDP and has committed itself in Chapter 2 of this RPF to comply with the requirements of the Involuntary Resettlement Policy of the World Bank (OP 4.12).

The OP 4.12 applies to all components of projects that result in involuntary resettlement, regardless of the source of financing. It also applies to other activities resulting in involuntary resettlement that are (a) directly and significantly related to the project, (b) necessary to achieve its objectives as set forth in the project documents and (c) carried out, or planned to be carried out, contemporaneously with the project.

⁷ For more detail see:

<http://web.worldbank.org/WBSITE/EXTERNAL/PROJECTS/EXTPOLICIES/EXTOPMANUAL/0,-,menuPK:4564185~pagePK:64719906~piPK:64710996~theSitePK:502184,00.html>

It covers direct economic and social impacts caused by the involuntary taking of land resulting in (i) relocation or loss of shelter; (ii) loss of assets or access to assets; or (iii) loss of income sources or means of livelihood, whether or not the affected persons must move to another location. To address these impacts a RPF and subsequent RAPs are prepared to ensure that the displaced persons are (i) informed about their options and rights pertaining to resettlement, (ii) consulted on, offered choices among, and provided with technically and economically feasible resettlement alternatives, and (iii) provided prompt and effective compensation at full replacement cost for losses of assets attributable directly to the project.

If the impacts include physical relocation, the RPF and RAPs include measures to ensure that the displaced persons are (i) provided assistance (such as moving allowances) during relocation; and (ii) provided with residential housing, or housing sites, or, as required, agricultural sites for which a combination of productive potential, locational advantages, and other factors is at least equivalent to the advantages of the old site. Where necessary, the RPF and RAPs shall also include measures to ensure that displaced persons are (i) offered support after displacement, for a transition period, based on a reasonable estimate of the time likely to be needed to restore their livelihood and standards of living and (ii) provided with development assistance in addition to compensation measures outline above (iii) such as land preparation, credit facilities, training, or job opportunities. Particular attention should be paid to the needs of vulnerable groups among those displaced, especially those below the poverty line, the landless, the elderly, women and children, indigenous peoples, ethnic minorities, or other displaced persons who may not be protected through national land compensation legislation.

World Bank experience has shown that resettlement of indigenous peoples with traditional land-based modes of production is particularly complex and may have significant adverse impacts on their identity and cultural survival. For this reason, the Bank satisfies itself that the borrower has explored all viable alternative project designs to avoid physical displacement of these groups. When it is not feasible to avoid such displacement, preference is given to land-based resettlement strategies for these groups that are compatible with their cultural preferences and are prepared in consultation with them (see Vulnerable Tribes Plan of the KTDP).

The implementation of resettlement activities shall be linked to the implementation of the investment component of the project to ensure that displacement does not occur before necessary measures for resettlement are in place. These measures include provision of compensation and of other assistance required for relocation, prior to displacement, and preparation and provision of resettlement sites with adequate facilities, where required. In particular, taking of land and related assets shall take place only after compensation has been paid and, where applicable, resettlement sites and moving allowances have been provided to the displaced persons.

As indicated for displaced people whose livelihoods are land-based, preference should be given to land-based resettlement strategies and resettlers provided with land for which a combination of productive potential, locational advantages, and other factors is at least equivalent to the advantages of the land taken. If land is not the preferred option of the displaced persons or sufficient land is not available at a reasonable price, non-land-based options built around opportunities for employment or self-employment should be provided in addition to cash compensation for land and other assets lost. The lack of adequate land must be demonstrated and documented to the satisfaction of the Bank.

Payment of cash compensation for lost assets may be appropriate where (a) livelihoods are land-based but the land taken for the project is a small fraction of the affected asset and the residual is economically viable; (b) active markets for land, housing, and labor exist, displaced persons use such markets, and there is sufficient supply of land and housing; or (c) livelihoods are not land-based. Cash compensation levels should be sufficient to replace the lost land and other assets at full replacement cost in local markets.

Displaced persons may be classified in one of the following three groups:

- those who have formal legal rights to land (including customary and traditional rights recognized under the laws of the country);
- those who do not have formal legal rights to land at the time the census begins but have a claim to such land or assets--provided that such claims are recognized under the laws of the country or become recognized through a process identified in the RAP; and
- those who have no recognizable legal right or claim to the land they are occupying.

Persons covered under para. (a) and (b) are provided compensation for the land they lose, and other assistance. Persons covered under para. (c) are provided resettlement assistance in lieu of compensation for the land they occupy, and other assistance, as necessary, to achieve the objectives set out in this policy, if they occupy the project area prior to a cut-off. Persons who encroach on the area after the cut-off date are not entitled to compensation or any other form of resettlement assistance. All persons are provided compensation for loss of assets other than land.

6.4 GAP analysis between national and international standards and gap filling measures

The Draft Resettlement Law (2002) provides a comprehensive and well balanced analysis of the LAA and other national legislation against international best practice. As KTDP is seeking to obtain financing from international source, the higher of the two standards (international and national) shall prevail.

7 METHODS OF VALUATING AFFECTED ASSETS

As highlighted before this RPF distinguishes between compensation for expropriated assets and rehabilitation measures to help improve, or at least restore, incomes or standards of living. To compensate project affected people (PAPs) for expropriated assets, the RPF requires actual replacement of expropriated assets, or, if requested with good reason, compensation at replacement cost and alternative rehabilitation measures acceptable to the PAPs.

For households with land-based livelihoods who lose a significant portion of their holdings, this RPF gives preference to land-based strategies in line with the World Bank's OP 4.12 that states that "these strategies may include resettlement on public land, or on private land acquired or purchased for resettlement. Whenever replacement land is offered, resettlers are provided with land for which a combination of productive potential, locational advantages, and other factors is at least equivalent to the advantages of the land taken" (OP 4.12 para. 11). Payment of cash compensation may be appropriate "where (a) livelihoods are land based but the land taken for the project is a small fraction of the affected asset and the residual is economically viable; (b) active markets for land, housing, and labor exist, displaced persons use such markets, and there is sufficient supply of land and housing; or (c) livelihoods are not land-based. Cash compensation levels should be sufficient to replace the lost land and other assets at full replacement cost in local markets" (OP 4.12 para. 12).⁸

Key principles of replacement costs include:

- Replacement cost addresses tangible assets only;
- Replacement cost includes all administrative fees (here the 22% land transfer allowance);
- Replacement cost includes a provision for inflation if payments are delayed (KTDP will update all replacement costs on a yearly basis); and,
- Potential project benefits are not counted toward replacement cost (i.e. the potential to benefit from irrigation cannot be deducted from the replacement cost of the land acquired).

7.1 Land

Determining replacement cost of affected land is fairly easy where active land markets exist as one can engage private and independent real estate agencies, banks, or mortgage firms to determine market prices or evaluate the adequacy of administratively set compensation. The Frontier Organization for Reforms & Transformation (FORT) that was tasked to establish replacement costs obtained a comprehensive and consistent set of data from the settled areas (Bannu, Lakki Marwat and Karak), while data from North Waziristan and FR Bannu were less consistent due to the fact that the land market is not very active, people do not have land titles, and therefore do not document transactions. The following methods were used to provide substantiated results:

- Sales comparison: Sales of similar, vacant parcels are analyzed, compared, and adjusted to provide a value indication for the land being appraised.
- Proportional Relationship: Relating a site to a known standard site here transactions in the settled areas
- Land Residual Technique: It is assumed that the land is improved to its highest and best use. All operating expenses and the return attributable to other agents of production are deducted, and the net income imputed to the land is capitalized to derive an estimate of land value.
- Allocation: Sales of improved properties are analyzed, and the prices paid are allocated between the land and the improvements.

⁸ "Replacement cost' is the method of valuation of assets that helps determine the amount sufficient to replace lost assets and cover transaction costs. In applying this method of valuation, depreciation of structures and assets should not be taken into account. Where domestic law does not meet the standard of compensation at full replacement cost, compensation under domestic law is supplemented by additional measures necessary to meet the replacement cost standard" (OP 4.12 endnote 11).

- Extraction: Land value is estimated by subtracting the estimated value of the depreciated improvements from the known sale price of the property.

The data in the following table represent the overall average for the project region and will need to be updated and adjusted on an annual basis upon consultation with the Compensation Rate Review Committee.

Table 7-1: Average Market and Replacement Costs of Land in PKR (2013) per acre

Land categories	Market Value 2013 (PKR per acre)	Replacement Costs (PKR per acre)
Residential Land	1,274,009	1,554,292
Gardens .	1,260,908	1,538,308
Bari: irrigated, well manured land situated near a village	1,241,994	1,515,232
Sholgara: Land near water sources (springs, rivulet, streams .)	1,182,114	1,442,179
Saadin: un-irrigated rain-fed land;	888,594	1,084,084
Ghar: Land situated in the mountains	908,622	1,108,518
Worsho: Unproductive land	683,471	833,834

The average market value for land have been established by FORT based on the methodology outlined above and using the approach outlined in Annex 3 based on interviews with the land revenue officials at the three lowest administrative levels for the area affected by the project as well as 25 documented land transactions. The Replacement Costs factor than the Land Transfer Costs of 22 % as discussed in the entitlement matrix comprising the 15% Compulsory Acquisition Charge, the 2% CVT, the 2% Stamp duty, the 2% TMA Tax, the Mutation frees and other associated costs.

The entire project area is rural, with only one major center, the town of Bannu, with around 50,000 inhabitants, and Mir Ali with around 15,000 inhabitants. The main sources of income in the region are agriculture and remittances. But the amount of agricultural land available per person/household in the five Districts is only one-third of what is available in other parts of Pakistan. In consequence, according to Multi-Donor "Pakistan Poverty Alleviation Fund", North Waziristan, FR Bannu and Lakki Marwat are among the 22 of 145 districts in Pakistan with the lowest Human Development and Food Security Index, with Bannu being only slightly better.

Table 7-2: Economic Activities in the KTDP Areas

Category	North Waziristan	F.R. Bannu	Bannu	Lakki Marwat	Karak
Population (2013 estimate based on 1998 census)	470,000	25,000	675,000	490,000	430,000
Urban Population	2%	0%	7%	10%	6%
Rural Population	98%	100%	93%	90%	94%
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%

7.1.1 Component I

Within the overall project region, the Component I area offers the fewest economic opportunities. 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%) hardly any employment is available. In turn, significant numbers of people temporarily migrate as seasonal laborers to other parts of Pakistan and/or abroad. One of the areas many Wazirs are involved in is working as truck drivers or other jobs in transportation-related businesses.

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 less than 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.

7.1.2 Component 2

The economic situation in the North Waziristan section of Component 2 is very similar to Component 1 and is only slightly better in the FR Bannu, where the average agricultural landholding per household is just slightly above one acre.

7.1.3 Component 3

The economic situation in the footprint of Component 3 is slightly better than in either Component 1 or Component 2, but it is still significantly below the national average.

Nowadays, around 45 percent of the agricultural land in the Bannu District is irrigated and wheat the main Rabi and maize the main Kharif crops. Other crops grown are sugarcane, barley, jawar and bajra. In addition bananas, guavas, dates, plums, figs, loquats, apples and lemons are produced. There seems to be an arable reserve of some 40,000 acres, some of which is earmarked to be irrigated in the context of Component 3.

In Karak District around 42 percent of the people indicated that their main economic activity is agriculture, while around 25 percent claimed to be employed. Landholdings average two acres per household quite small, but significantly larger than in other parts of the project area. Nevertheless, as only 19 percent of the agricultural land is irrigated, the yields are not very high. The main kharif crops are groundnuts, bajra, jowar and maize, while for the rabi season, mostly wheat and gram are planted, with smaller quantities of barley, rape and mustard. Due to the shortage of water, there are hardly any orchards in the district. Also due to the absence of water, nearly half of the potential agricultural land is presently uncultivated.

In the Lakki Marwat District the most common crops during kharif are maize, sugarcane and jowar, while during rabi mostly wheat and gram are planted. In addition there is a significant production of musk and watermelons. In the 1998 census around 50 percent of the people in the Lakki Marwat District indicated that their main economic activity is agriculture, while 30 percent claimed to be employed.

7.2 Crops

7.2.1 Annual Crops

Regardless of land ownership, farmers owning an affected crop receive compensation in cash for:

- The market value of crops that cannot be harvested prior to impacts to land. Losses of non-perennial crops are surveyed and compensation rates calculated shortly before land acquisition takes place (not at the time of the original household census and asset survey). The compensation is calculated as the amount of production lost (area taken times yield of crop planted) times the market value at the mid-point between harvests. Changes in land use after the Cut-Off Date are generally not considered.
- In instances where the farmer will not be able to plant his fields because of planned project land acquisition and replacement land is not yet available, the farmer will be paid the value of his or her crop, as defined above, for the entire period that land has been taken and not replaced.
- In cases where the timing of land acquisition is such that the farmer will not have time to prepare the replacement agricultural land for the following agricultural season, two seasons of crops (Rabi/Kharif) may be taken into consideration in the compensation calculation.

Compensation rates are based on selling prices between Rabi and Kharif observed in the Bannu markets (market surveys carried out by KTDP) and data collected from interviews with local farmers. They are updated on an annual basis and consulted upon with the Compensation Rate Review Committee. The table only presents the main crops.

Table 7-3: Annual profits from agricultural land in PKR (2013) per acre

Annual crops	Annual profit in PKR per acre
Rabi (Sept-April)	
Wheat	36,084
Oilseeds	23,450
Kharif (April-Sept)	
Rice	73,710
Maize	19,584
Sugarcane	18,000
Fodders	17,500



Plate 7-1: Market Surveys

7.2.2 Perennial Crops

The calculation of the full replacement value for perennial crops (e.g., fruit trees) requires consideration not only of the production of the crop over the period from when the asset is taken to when a replacement sapling comes into production, but also the cost of re-establishing the crop (seedlings, soil preparation, fertilizer, .). Replacement saplings are usually provided. The calculation of the full replacement value for perennial crops (e.g., fruit trees) requires consideration not only of the production of the crop over one year, but also the cost of re-establishing the crop (seedlings, soil preparation, fertilizer), as well as the lost income during the period needed to re-establish the crop.

Perennial crops are inventoried at the time of the household census and asset inventory. Market values of the produce for each of the most common fruit trees in the area are collected and rates are updated annually. Rates are calculated for the following stages of tree development:

- Seedling
- Mature
- Old

The following table provides an example of compensation rates for common trees.

Table 7-4: Replacement value of perennial crops in PKR (2013) per tree

Type of perennial crop	Replacement value Seedling in PKR	Replacement value of Mature tree in PKR	Replacement value of old tree in PKR
Grapes	100	1,000	1,000
Guava	300	4,000	4,000
Dates	200	3,000	3,000
Firewood	500	5,000	5,000

7.2.3 Landowner/Tenant Crop Compensation Breakdown

Tenants will be paid the compensation value for the crop they have grown, whether a non-perennial or a perennial crop. However, as the land is held under rights by another person – who may or may not have been involved in the preparation of the land – the compensation may need to be shared with the land owner/permanent right holder. Amongst others, this is intended to provide an incentive for land owners/permanent right holders to accept to rent their land out, thereby facilitating tenant access to land. Previous practice has been to allocate two thirds of the crop compensation to the tenant (crop owner) and one third to the land owner/permanent. The percentage share between landowner and tenant varies across the project regions, so that the percentages will be specified in each applicable RAP.

7.3 Structures

7.3.1 Compensation for Residential Structures

As indicated in the entitlement matrix preference is given to in-kind compensation for residential structures. The resettlement house option is generally much more advantageous to PAPs but the cash option may be suitable for non-residential owner and to some who, for example, wish to move to an urban center. These options apply to owners of residential houses, regardless of their residence status (whether they live in the affected house or not). For purpose of cash compensation calculation, residential houses will be categorized as follows, regardless of their current condition.

Table 7-5: Replacement values of residential structures in PKR per square feet (2013)

Type	PKR	Annual Rent in Bannu
Kacha: Walls of unfired bricks or clay, roof of logs with clay cover, earth floor and any residential structure of lower standard	200	2.6
Between Kacha and Pacca: Walls of fired bricks or stones, roof of logs with clay cover, earth floor.	400	3.7
Pacca: Walls of stone, concrete roof and concrete floors	800	6.2
Compound: Enclosure	130	1.8

KTDP will update and specify the square-foot replacement values for each class of housing to each settlement. The replacement value of the house is established by multiplying its measured surface area by the replacement rate (PKR/ft²). Any interior finishing is an additional compensation. The rate, as with other compensation rates, is adjusted annually to reflect inflation.

Settlement patterns vary significantly across the region. The general situation may be characterized as follows: the Wazir live in fortresses with high walls around their compounds and guard towers, while the people in the Bannu plains live in agricultural villages along the roads and waterways.

7.3.1.1 Component I

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 7-6: 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 hospital areas they are more widely separated.

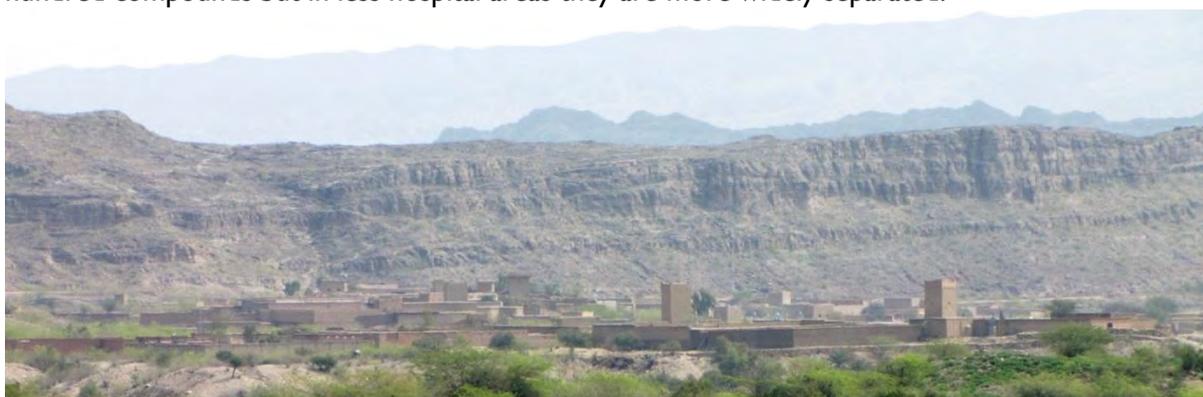


Plate 7-2: Shewa with kots

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 7-3 Kacca house in Sherani Component I

Ninety-four percent of the houses are owned by the people living in them. Three percent are rented, and three per cent 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. The average size of houses is said to be between 5,000 and 10,000 square feet.

7.3.1.2 Component 2

The 1998 census suggests the same settlement patterns for the Shewa Tehsil in North Waziristan and the FR Bannu. The main difference is that in the FR Bannu the houses are generally of higher quality (34 % Pacca instead of 14 %) and less fortress-like. The average size of houses is said to be between 5,000 and 10,000 square feet in North Waziristan and 3,000 - 5,000 square feet in the FR Bannu.

7.3.1.3 Component 3

In the Bannu District houses are usually rectangular in shape with one or more courtyards ("kothas") and an enclosed wall. Traditionally houses are made of hard clay with mud roofs, but these days around 26 percent are built of stone (pacca style). Nearly all houses are connected to the electric grid and around half of the houses are connected to the water system. Around 20 percent of the houses only have one room, 65 percent between two and four rooms and 15 percent more than five rooms. 30 percent of the rural houses have a separate kitchen, while 40 percent have a shared one. Thirty-three percent of the rural houses have a separate bathroom, while 43 percent of them have a common one. Seventeen percent of the houses have a separate latrine and 34 percent a shared one. While in the rural areas 4 percent of the people rent houses, 45 percent of the houses are rented in Bannu. In both areas around 10 percent of the people are staying in the houses rent free, i.e., are not the owners, but do not pay rent.

Between the houses there are small roads and in each quarter there is a chowk where the men meet in the evenings to smoke a chillum pipe. Quite some of the better off households also have a private guest house ("hujra").

In Karak District houses consist generally of two or three rooms with a verandah and host extended families of several generations. While around 10 percent of the houses have one room, 65 percent have between two and four rooms and 25 percent more than five rooms. The houses generally belong to those that live in them with rent and rent-free arrangements of less than 2 percent each. Proper houses are considered an important achievement and more than 50 percent of the houses are built out of baked bricks/blocks or stones, while the roof is mostly made out of wood or bamboo. Around 20 percent of the houses have indoor water pipes, nearly all houses are connected to the electric grid and around 44 percent have a separate kitchen. Bathrooms are not very common. Only 29 percent of the houses have a separate bathroom while 34 percent have a common bathroom. More than 80 percent of the houses have neither separate nor shared latrines. But every cluster has a hujra and chowk that is used as meeting place for the men but also used as guesthouse.

In the Lakki Marwat District, the houses are commonly grouped in larger villages. The houses are 75 percent made out of unbaked bricks/earth with roofs out of kanna grass or bulrushes, while only 18 percent of the houses are made out of baked bricks, blocks or stones. Around 80 percent of the houses are connected to the electric grid and around half of the houses are connected to the water system. 65 percent of the rural houses have a separate kitchen, while 10 percent have a shared one. Sixty-five percent of the rural houses have a separate bathroom, while 5 percent of them have a common one. Twenty percent of the houses have a separate latrine, 2 percent a shared one while the rest apparently use their fields for this purpose. Very few people (1%) rent. Ninety-five percent of the families own their house, and five percent of the people are staying in the houses rent free, i.e., are not the owners, but do not pay rent.

Between the houses there are small roads and in each quarter there is a chowk where the men meet in the evenings to smoke a chilam. Quite some of the better off households also have a private guest house ("hujra").

7.3.2 Other residential structures

Non-residential structures including latrines, sheds of various kinds, dish racks, kitchens, fences, wells, . are compensated in cash at full replacement value. Standard rates are prepared by KTDP and updated annually. The available data suggest a significant difference in prices that presently does not permit to establish robust averages and will need to be addressed in the RAPs. This should cover but not limited to:

- Compound Walls. Available data suggests that PKR 150 per square feet.
- Animal pens (of various types)
- Wells in compound area
- Latrines
- Kitchens
- Bath rooms

7.3.3 Business structures

From the available information the limited numbers of commercial structures use the same structures as used for residential purposes. The RAPs will need to pay particular to assure that each business structure is properly assessed to establish sound replacement values.

7.3.4 Communal infrastructure

At the present level of project development no replacement costs had been established for communal infrastructure. This will need to be done in the context of the RAP on a case by case assessment based on established valuation principles, although values will be similar to those for houses depending on the type(s) of construction materials. This assessment will need to cover

- Schools
- Clinics
- Meeting place

- Police office
- Community Meeting Halls/Town Hall
- Community Guest House
- Agricultural Depots
- Markets
- Communal Electric Lines
- Communal Water supply
- Communal roads
- Communal structures with living cultural use. If the structure is older than 1913 it will need to be addressed in accordance with the Cultural Heritage Management Plan for the KTDP. In particular shrines/graveyards have been observed to be quite elaborated structures. Shrines established after 1900 are compensated in cash at replacement cost based on a case-by-case valuation, while shrines established before 1900 are addressed in the Cultural Heritage Management Plan. The relocation of a shrine may, however, entail other costs than that of the structure itself. Ceremonies may need to be held to allow for the relocation of the structure and the spiritual powers it serves. For shrines KTDP covers the cost of these ceremonies as agreed with the Resettlement Committee or relevant traditional authorities with whom KTDP has engaged to agree to the relocation of a culturally significant site. The cost of ceremonies is assessed on a case-by-case basis, based on reasonable requests by the community using the shrine.

The fieldwork identified a number of living cultural heritage resources in the Kurram Tangi reservoir area that are of high value to the local populations. The Sharia suggests that shrines, graves cultural communal buildings are endowments (waqf) and therefore can be relocated to another location, if this is in the interest of the public and requested by those using the mosque/shrine to worship and/or are relatives of the deceased.

The literature survey and the fieldwork suggest that masjid that will be inundated have a cultural value beyond its use as common and established place of public worship and that there are no cultural heritage objections against demolishing these buildings, provided that congregation agrees to this and is compensated at replacement value in cash or kind. Based on the available data, it seems reasonable to consider masjid as community buildings and manage their relocation in line with the provisions to be elaborated in the Resettlement Action Plan: i.e. that the congregation of each structure to be inundated is entitled to compensation in cash or kind at replacement value (i.e. the present value of the building without depreciation) as well as all transaction costs (movement of artefacts and other movable objects, rituals).

Much more complex is the task to address the request of the local population to relocate some graves and shrines (“graves of saints”). Relocation seems to be possible under the Sharia, as it is believed that the Companions of the Prophet moved the graves of the martyrs of Uhud (i.e. exhuming and reburying their bodies) in order to facilitate the Madinah’ waterworks. While under the Sharia graves normally remain an endowment connected with the deceased until the body of the deceased is fully decomposed, the Companions moved those graves due to considerations of public welfare. Therefore, the Sharia seems to support that if requested by the congregation, shrines can be moved. Similarly, graves that are likely to contain the remains of a deceased (<50 years) can be moved as requested by family. In turn, from a cultural point they can also be inundated if this is the preference of the congregation/family.

Common practice is to treat shrines above ground as buildings and below ground as graves i.e. involve the congregation/family in where to establish the new shrine, how it should look like, how to transport the movable objects. Also here the principle of compensation at replacement costs applies and consequently the congregation/family associated with a shrine is entitled to compensation in cash or kind at replacement value (i.e. the present value of the shrine without depreciation) as well as all transaction costs (movement of artifacts and other movable objects, rituals).

With a view on underground elements of shrines and graves that require relocation, best practice is to excavate a larger block of earth surrounding the grave, stabilize it and move the entire block to the new location after the necessary rituals have been performed.

As presently none of the communal buildings with cultural value to be relocated is fully accessible, KTDP will soon after such access is secured reengage with the relevant congregations and families to elaborate a detailed action plan. These plans will include a) establishment of replacement values by a qualified valuator that has experience in valuations in line with international standards, b) the participatory identification of a new location, c) the elaboration of a design for the new above ground facilities, d) outline of the required rituals, e) identification of movable above ground objects, e) schedule for implementation and a participatory monitoring and evaluation process.

8 ORGANIZATIONAL AND INSTITUTIONAL SETTING AND DELIVERY MECHANISM

All RAPs to be prepared under this RPF need to include an analysis of the institutional framework for the operation and the definition of organizational responsibilities. This analysis of the institutional framework will cover the following areas:

- the identification of agencies responsible for resettlement activities and NGOs that may have a role in project implementation;
- an assessment of the institutional capacity of such agencies and NGOs; and
- any steps that are proposed to enhance the institutional capacity of agencies and NGOs responsible for resettlement implementation (see OP 4.12 Annex A, para. 8).

The organizational framework established from this and which forms the core of every RAP identifies the agencies responsible for delivery of resettlement measures and provision of services; arrangements to ensure appropriate coordination between agencies and jurisdictions involved in implementation; and any measures (including technical assistance) needed to strengthen the implementing agencies' capacity to design and carry out resettlement activities; provisions for the transfer to local authorities or resettlers themselves of responsibility for managing facilities and services provided under the project and for transferring other such responsibilities from the resettlement implementing agencies, when appropriate.

The RPF and the subsequent RAPs of KTDP will be implemented by a number of actors:

8.1 WAPDA

The Water and Power Development Authority (WAPDA) was established as an autonomous body in 1959 with a purpose to lay focus on investigation, planning and execution of irrigation, drainage, prevention of water logging and reclamation for saline land. The organization worked on development of water sources, management of river water and irrigation systems. WAPDA over the years went through a mammoth growth in size as well as development of various wings and departments to deal with water resource development. Led by WAPDA Authority, it is comprised of the power wing and the water wing. In 2007 local power distribution was outsourced by establishing the Pakistan Electric Power Company (PEPCO) which runs nine regional distribution companies called DISCOs, while the National Transmission Dispatch Company (NTDC) deals with national level distribution (how much power to which region). Environmental and social issues are mostly addressed through the Water Wing as the Power Wing focuses on production and has consequently limited interaction with people and the environment and the various distribution companies have similarly limited interaction as the access land and resources through the Telegraph Act i.e. without the need to engage with affected people and/or offer compensation.

Within the Water Wing, Member Water, assisted by General Managers, Chief Engineers and senior and junior staff is responsible for the planning and implementation of all hydropower development projects. Projects located in Khyber Pakhtunkhawa – including but not limited to the KTDP - are overseen by the General Manager (Projects) North. He is assisted by the General Manager (Technical Services), General Manager (Land Acquisition and Resettlement), and WAPDA's Environment Cell (WEC). The last two are significantly under-resourced and therefore generally not able to engage actively in the implementation of projects and have focused their attention in the past mostly on supervision and high-level guidance. The RPF suggests using the same approach. To assist WAPDA to effectively supervise land acquisition and resettlement the capacity enhancement activities outlined in section 8.5 will be conducted.

8.2 FATA

The FATA Secretariat, established in 2002, consists of the Secretary FATA and, since 2006, an Additional Chief Secretary, four Secretaries and seven Departments headed by Directors. Among them, the Social Sector Department is tasked with land acquisition and resettlement as well as interaction with vulnerable groups and peoples.

Each of the tribal agencies (in the KTDP Area North Waziristan) is administered by a political agent, assisted by number of assistant political agents (each in charge of a Subdivision), Tehsildars (administrative heads of tehsil) and Niab Tehsildar (deputy Tehsildar), members from local police (khassadars) and security forces (levies, scouts). In the Frontier Regions (in the KTDP Area FR Bannu) the Deputy Commissioner of the nearest settled District (here Bannu) administers the FR instead of a political agent. The other functions are the same. Political agents in the Tribal Agencies and the Deputy Commissioners in the Frontier Regions oversee the working of line departments and service providers. Their focus is on handling inter-tribal disputes and political issues. They also have a supervising role in development projects and chair the development subcommittee. Nevertheless, their focus is on political issues and therefore their experience, and capability, in dealing with land issues and resettlement issues is often limited. They will therefore benefit from capacity enhancement and backstopping in order to supervise the land acquisition process in North Waziristan and FR Bannu effectively.

8.3 Directorate of Irrigation FATA, Bannu, Karak and Lakki Marwat

The Directorate of Irrigation of the FATA has been involved in developing and managing surface and ground water resources as well as undertaking flood mitigation measures. It is headed by a Director, who has a representative in each agency. The main functions of the department are to utilize available water in an efficient use for irrigation to achieve high intensity of irrigation, construct storage reservoir at flood Nullahs for utilization of barren land for agriculture, tap small to medium hydro power potential, explore ground water potential, and make best use through dug wells/tube wells for land beyond the command of perennial source. In addition to this work, the department manages the flood flows in rivers by designing of flood protection work to protect land. The department has been striving to introduce new technologies through promotion of high efficiency system of irrigation like Drip and Sprinkle. Nevertheless, they have little experience in creating large scale Command Areas in line with international land acquisition standards and therefore will require capacity enhancement and backstopping (see chapter 8.5.) to supervise the establishment of the two Command Area in Component I effectively.

The Irrigation Departments KPK in Bannu, Karak and Lakki Marwat are more experienced in dealing with land issues and have extensive knowledge of the land administration process. Nevertheless, it has been 50 years that any of them established any large scale new Command Areas and, according to the available information, they have not yet benefited from international funding apart from one smaller project that was financed by ADB in the 1990s. This program caused concern as the land allocation process was found non-compliant with ADB's policy on land acquisition. Therefore it is assumed that additional training in Command Areas development, in line with international land acquisition standards, and some backstopping is needed to assure that the Department is able to supervise the implementation of the RPF and subsequent RAPs efficiently.

8.4 Intuitional Arrangements for RAP Implementation

8.4.1 Project Management Unit (PMU)

The KTDP will be implemented under the General Manager (Projects) North of WAPDA and overall supervision of Member Water Wing through a Project Management Unit (PMU) that assembles national and international experts including a Department for Land Acquisition and Resettlement (LAR). While formally reporting to the Managing Director of the PMU, the LAR will benefit from a close collaboration and from strategic advice provided by a Steering Committee comprising a) the WAPDA General Manager for Land Acquisition and Resettlement, b) the Assistant Political Agent for

North Waziristan, c) the Assistant Deputy Commissioner for FR Bannu, d) Deputy Commissioners for the Bannu, Lakki Marwat and Karak District as well as e) representatives of the funding agencies/MFIs .

8.4.2 Land Acquisition Unit (LAU)

The RAPs will be implemented by the Land Acquisition Unit (LAU) established by hiring at least five national land acquisition and resettlement experts under the supervision of PMU. The RAP will be implemented through LAU in accordance with the implementation schedule to be established in the RAPs as well as civil works activities.

8.4.3 Resettlement Supervision Committee (RSC)

The objective of the Resettlement Committee (RSC) is to assure the smooth communication between the LAU and the PAPs:

For Component 1 there will be three RSCs:

- The first RSC focuses on the territory south of Spinwam, which is mostly inhabited by four clans of the Thuri Khel sub-tribe: Mir Ali, Babali, Shogi and Shameeri and will be comprised of
 - The Assistant Political Agent for the Mir Ali Subdivision
 - Land acquisition and Resettlement Manager of the LAU
 - Social Specialist of the LAU
 - Project Engineer of the Project Management Unit (PMU)
 - Malik for the Thuri Khel Sub-tribe and
 - four lungi holders communicating with the four clans.

- The second RSC focuses on the territory north of Spinwam, which is mostly inhabited by three clans of the Kabul Khel sub-tribe: Saif Ali, Issa Khel and Misman Khel and will be comprised of
 - The Assistant Political Agent for the Mir Ali Subdivision
 - Land acquisition and Resettlement Manager of the LAU
 - Social Specialist of the LAU
 - Project Engineer of the Project Management Unit (PMU)
 - Malik for the Kabul Khel Sub-tribe and
 - three lungi holders communicating with the three clans.

- The third RSC focuses on the transmission line, which is mostly inhabited by the Ahmadzai, Momand Khel and Asperka sub-tribes and will be comprised of
 - The Assistant Political Agent for FR Bannu
 - Land acquisition and Resettlement Manager of the LAU
 - Social Specialist of the LAU
 - Project Engineer of the Project Management Unit (PMU) and
 - three Malik for the three sub-tribes

For Component 2 there will be two RSCs:

- The first RSC focuses on the dam and reservoir, which is mostly inhabited by five clans of the Kabul Khel sub-tribe Saif Ali, Pippali, Issa Khel, Misman Khel and Miami and will be comprised of
 - The Assistant Political Agent for the Mir Ali Subdivision
 - Land acquisition and Resettlement Manager of the LAU
 - Social Specialist of the LAU
 - Project Engineer of the Project Management Unit (PMU)
 - Malik for the Kabul Khel Sub-tribe and

- five lungi holders communicating with the three clans.
- The second RSC focuses on the area downstream of the Kurram Tangi dam, which is mostly inhabited by the Ahmadzai, Momand Khel and Asperka sub-tribes and will be comprised of
 - The Assistant Political Agent for FR Bannu
 - Land acquisition and Resettlement Manager of the LAU
 - Social Specialist of the LAU
 - Project Engineer of the Project Management Unit (PMU) and
 - three Malik for the three sub-tribes

For Component 3 there will be three RSCs (one for each district) and will include:

- The relevant Assistant District Commissioner
- Tehsildars of affected Tehsils in each District
- Land Acquisition and Resettlement Manager of the LAU
- Social specialist of the LAU
- Project engineer of the PMU

The Committee and/or its members are requested to assist LAU and/or its consultants in the following tasks:

- Supervising household census and asset inventory, particularly identifying and verifying ownership, particularly customary land owners/users;
- Helping in discussing key issues in preparation the RAPs;
- Discussing potential resettlement site locations and visiting them during the RAP preparation period to advise on selection;
- In the FATA: facilitate the free, prior and informed consultations with the PAPs through jirgas in order to obtain the consent of the affected people for the RAP;
- Participating in the allocation of land at resettlement sites;
- Advise on resettlement site planning and resettlement housing design;
- Witnessing compensation payments;
- Identifying vulnerable households in the community; and
- Receiving and conveying grievances.

The Resettlement Committee may form sub-committees to address the needs of specific groups such as women, vulnerable people, seasonal farmers, transhumant if any. KTDP pays a modest per diem to compensate lost time for transport, communication and effort.

8.4.4 Panel of Experts

To assure alignment with international standards, the LAU shall be supported by a panel of three experts (one international land acquisition experts, one environmental specialist and one engineer) that at least four times every year visits the PMU, LAU and the project region to review the progress made against this RPF and the subsequent RAPs. See for more details the Environmental Management and Monitoring Plan (EMMP).

8.5 Capacity enhancement and backstopping

The World Bank and other multilateral financial institutions acknowledge that acquiring land in line with international standards requires technical support and they are therefore always open to provide

- assistance to assess and strengthen resettlement policies, strategies, legal frameworks, and specific plans at a country, regional, or sectoral level;
- financing of technical assistance to strengthen the capacities of agencies responsible for resettlement, or of affected people to participate more effectively in resettlement operations;

- financing of technical assistance for developing resettlement policies, strategies, and specific plans, and for implementation, monitoring, and evaluation of resettlement activities” (see OP 4.12 para. 32).

While the detailed capacity enhancement plan can only be established based on the assessment of the existing capabilities to be performed during RAP development, it is known that quality land acquisition training is not available in the vicinity of KTDP and/or within Pakistan, and sending all the people who need training to international centers may be impractical. Project-level training is more practical in such cases. Some or all of this training can be provided by personnel from international centers such as the Resettlement Centre at the Hohai University in Nanjing, by personnel from qualified NGOs, or by international land acquisition specialists as part of project preparation. Similarly, local or regional specialists or NGOs involved in specific aspects of resettlement, such as microenterprise development or community irrigation management, can be called on to familiarize resettlement staff with key issues and methods. These topics can also be included in the project launch workshop. The project resettlement specialist or consultants can provide training for resettlement staff, including field personnel.

Another possibility is a carefully structured study tour of projects in neighboring provinces or countries. Study tours give agency staff an opportunity to not only see field conditions in another project, but also speak with colleagues elsewhere about implementation issues. Training makes an important contribution to institutional capacity. Training activities should complement and support each other. The training should be appropriate for the intended audience. Senior managers are concerned with policy issues and have little interest in field problems, whereas resettlement staff are consumed by implementation issues but believe they have little influence on policy concerns. One recurring mistake is to provide policy training to field staff, but no operational training. Another is to provide policy orientation to senior managers, while giving no training to staff tasked with actual implementation.

An effective training program emphasizes policy training for senior management and operational training for resettlement staff. In many instances, project preparation grants or technical assistance funds can be used to pay for training abroad, in international centers, or in the project. Sending resettlement staff to similar projects in the country can be an inexpensive yet effective way of building resettlement capacity. Such interactions are particularly useful, because practitioners are involved in the exchanges, and the context, problems, and issues are likely to be similar.

8.6 NGOs supporting the PAPs

The role and responsibility of Nongovernmental Organizations (NGOs) and Civil Society Organizations (CSO) in the Hydropower and infrastructure Sector have changed significantly. While originally often vocal opponents of such large infrastructure projects, play some of them today a very important role as “watch dog” for all kind of issues and/or informing affected people about their rights and options and/or assist them in the decision making and relocation process. In Pakistan the Project Non-Governmental Organization (PNGO), which was formed for the Ghazi Brotha Hydropower Project demonstrated that NGOs can play a vital role in during land acquisition and resettlement planning and implementation.

8.7 Monitoring and evaluation

Good institutional design makes implementation easier, but effective monitoring ensures it stays on track. Even projects with the best RAPs and exceptionally supportive organizations are likely to run into problems and issues during implementation. Timely identification and resolution of these problems are critical to achieving desired resettlement outcomes. Effective monitoring is essential. To be most effective, monitoring needs to cover both internal monitoring, conducted by the project agency, and external monitoring, conducted by a qualified independent agency. While internal monitoring would primarily consist of a follow-up on the quantitative aspects of resettlement implementation and focus more on processes and delivery of inputs, external monitoring focuses more broadly on outputs,

outcomes, and the qualitative aspects of implementation. Both internal monitoring and external monitoring cover the to be agreed benchmark indicators in the RAP. This requirement prevents reporting against some local guidelines or other vague standards, a practice that sometimes reduces the validity and applicability of the findings of the monitoring program. A good-practice checklist of issues for internal and external monitoring would include the following:

Internal Monitoring

- An internal monitoring unit is explicitly designated within the LAU and may include representatives from the government agencies, NGOs, and other agencies. Good communication with field offices, as well as coordination with other implementation agencies, is factored into the design. Internal monitoring is carried out in accordance with detailed, specific terms of reference.
- The staff of the internal monitoring unit is familiar with the design of the resettlement program.
- Staff from the internal monitoring unit receives adequate training in the framework and methodology of internal monitoring.
- The internal monitoring unit regularly receives information and data updates from field offices.
- The unit staff participate in the project launch workshop, where the key monitoring benchmarks and the reporting process are discussed and agreed to.
- Resettlement data are collected under both household and impact categories and entered into a computer to make processing easier.
- Senior decision makers have explicitly agreed on a process for factoring monitoring reports into decisionmaking.

External Monitoring

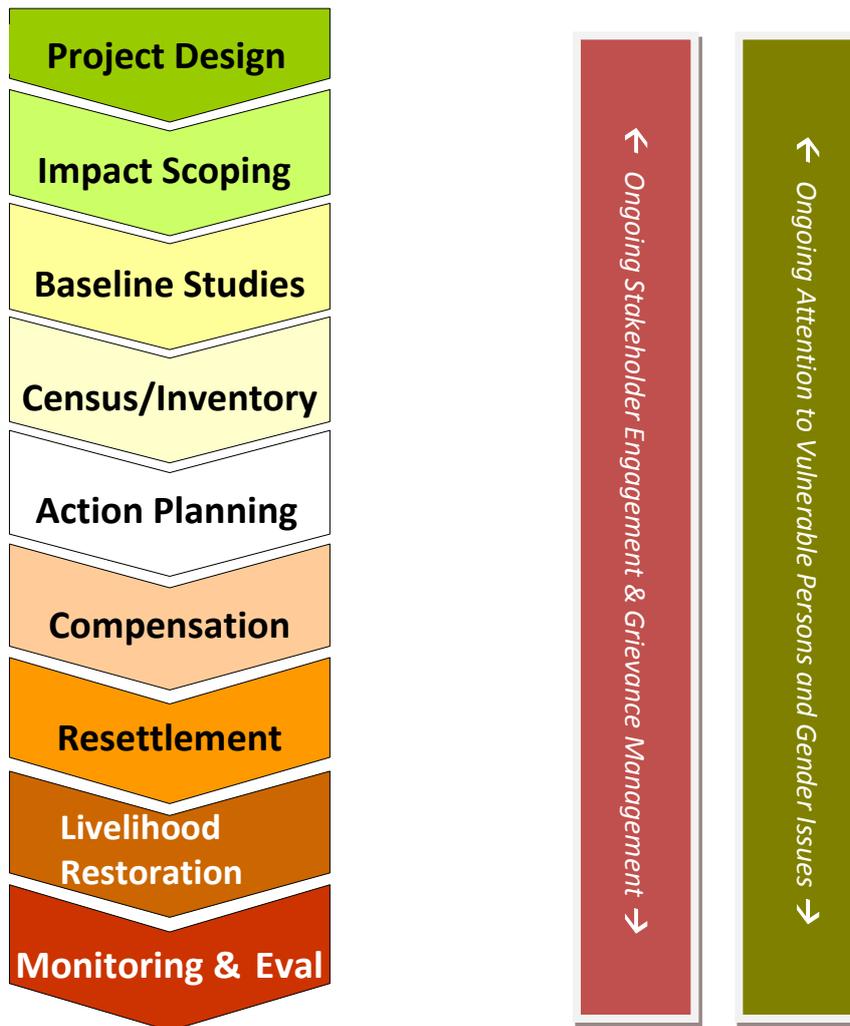
- The external monitoring agency is identified during RAP development. Having the same agency conduct socioeconomic surveys and external monitoring is acceptable. However, the consultants involved in resettlement planning are preferably not hired for external monitoring, as they have a vested interest in reporting smooth implementation.
- The external monitor — for example, a university, research institute, or NGO — verifies, in the field, some of the quantitative information submitted by the internal monitoring agency. This aspect is sometimes overlooked because of the qualitative focus of external monitoring.
- The LAU, the panel of experts and the monitoring agency discuss the proposed methodology for external monitoring. A good practice is to describe the methodology in the RAP. An outline format for the external monitoring report is agreed to. Such agreement helps ensure that external monitoring reports cover all elements of resettlement implementation.
- The process of reviewing external monitoring reports and factoring them into resettlement decisionmaking is agreed to and described in the RA

9 LAND ACQUISITION IMPLEMENTATION PROCESS

This section provides an overview of land acquisition, compensation, resettlement, and livelihood restoration steps and processes. Figure 9-1 depicts the nine steps of preparing and carrying out land acquisition, compensation, resettlement and livelihood restoration, as well as stakeholder engagement/grievance management and vulnerable person/gender issues, shown as ongoing commitments:

- *Project Design* refers to an assessment of alternatives with the objective to avoid or at the very least minimize the impacts on land or land use that might result in economic and/or physical displacement. During project preparation efforts are made to minimize impacts, including assessment of different project designs.
- *Impact Scoping*: Preliminary impact scoping for Components 2 and 3 should take place prior to, during and after detailed project design. By identifying potential impacts early, efforts can be made to alter project design, such as adjusting the proposed routings for canals, powerlines . in order to avoid sites of cultural significance, reducing economic displacement, avoiding or minimizing physical displacement, . Impact scoping includes preliminary consultation with PAPs. Impact scoping and alterations to project design are conducted in an iterative manner. Impact scoping is typically conducted internally by the LAU.
- *Community Social Baseline Studies*. In addition to the data collected via the individual household census and asset inventory (see next step), a Community Social Baseline Study is conducted on the basis of multiple tools, including a household questionnaire with a sample of affected households. These studies also provide the basis for defining compensation and for monitoring restoration of livelihoods *after* resettlement. Baseline studies can be started before impact scoping is fully complete and address an area slightly larger than the final impact area will be. Individual
- *Household Census and Asset Inventory*: Once the footprint of the outstanding subcomponents of Component 1 as well as Component 2 and 3 are known with reasonable accuracy (under each new phase), the LAU will commission a household census and an inventory of affected assets. The purpose of both is to create an accurate baseline of affected households living or working in the area and of the existing assets (houses, infrastructure, improvements to land, .). During this step, a household questionnaire is administered to every affected household and data on livelihoods are collected. Each household signs off on the inventory of its assets in the presence of local officials and community witnesses. The census is the basis for eligibility for compensation and/or resettlement and livelihood restoration support. The start of the census and asset inventory is the Cut-Off Date. Unauthorized activities taking place after the Cut-Off date are ineligible for compensation or resettlement/livelihood restoration. The resulting analyses provide the information for the component-specific Resettlement Action Plan and serve as the basis for evaluating the restoration of post-resettlement livelihood restoration. During this step, vulnerable households are also identified
- *Resettlement Action Plan*: A component-specific RAP in accordance with the principles and guidance outlined in this RAP will be developed for Component 2 and 3 and all households that experience physical or economic displacement are covered in the RAPs.

Figure 9-1: Land acquisition, Compensation and Resettlement Process



- *Compensation and allowances:* This RPF defines the principles and protocols to follow to provide appropriate compensation and allowances to individuals, households and communities affected by KTDP’s land acquisition activities. Component-specific RAPs define compensation rates to be paid and describe PAP eligibility and entitlement categories. The provision of compensation and allowances occurs prior to impacts actually taking place.
- *Replace Land/Resettle PAPs:* During this step – which may be prior to or concurrent with Step 6 – replacement land is identified and secured, resettlement housing is constructed, PAPs are moved into new housing, and the other commitments of the RAP are implemented. Or PAPs find their own housing.
- *Construction can only start once resettlement is completed.*
- *Livelihood Restoration:* Livelihood restoration continues for several years to ensure that it is sustainable over the long-term. Each RAP defines specific livelihood restoration commitments within the general framework outlined in this RPF.
- *Monitoring and Evaluation:* The social baseline study provides the basis for assessing the impact that land acquisition has had on individuals, households and communities as well as the relative success of livelihood restoration measures carried out by KTDP *after* resettlement. KTDP provides ongoing monitoring of people affected by physical and/or economic displacement. In addition, KTDP hires a third-party resettlement expert to conduct regular independent audits of KTDP implementation of their RPF and RAPs.

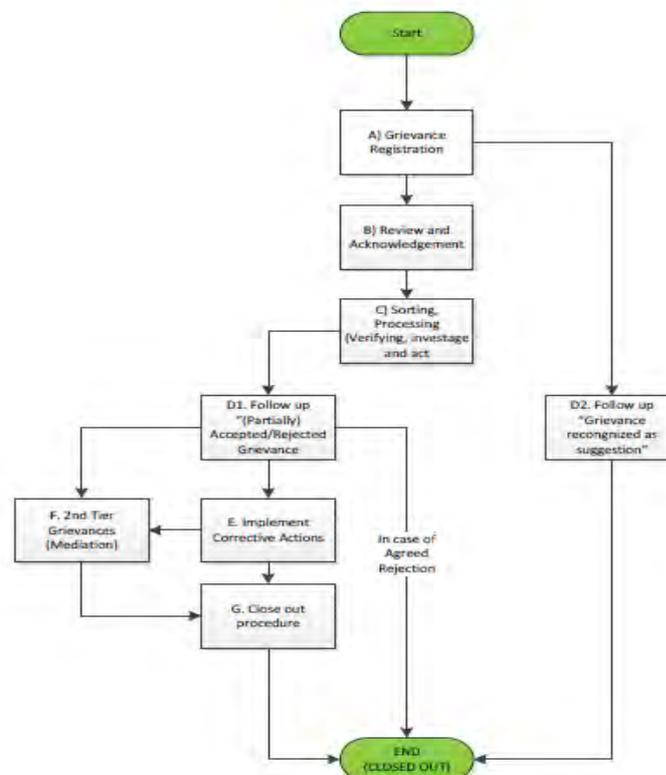
10 GRIEVANCE MECHANISM

10.1 Community Grievance Management System

As part of its ongoing operations, KTMPD will establish through the LAU a community grievance management system (CGMS) as a formal and documented process to receive, assess, record and resolve grievances concerning any aspect of the performance or behavior of KTDP, its contractors or its employees. In addition, KTDP through the LAU will establish an Independent Mediation Committee (IMC) to try to resolve grievances that could not be resolved at the local level.

The objectives of the Community Grievance Management System are to:

- Establish a consistent, transparent, accessible and credible grievance management process for individuals, households, and communities affected by the KTDP.
- Create outcomes that are considered by all parties as realistic, fair, effective, and sustainable.
- Promote and establish open and clear lines of community engagement around grievances.
- Manage and reduce community and company risks by effectively addressing grievances so that they can be resolved before they escalate into larger conflicts.
- In instances where solutions cannot be reached through direct dialogue with KTDP, by using the amicable grievance/dispute resolution process or through the functioning of the Independent Mediation Committee, either party (the complainant or KTDP) may apply to the competent Judicial Court to resolve disputes in line with applicable legislation. In disputes with community members⁹, KTDP restrains from applying to Court first unless all amicable complaint resolution mechanisms (including IMC) are exhausted. Complainants are in any event free to resort to judicial proceedings to raise or resolve a grievance, regardless of whether or how KTDP's grievance management system or the Independent Mediation Committee might be engaged. KTDP complies with all verdicts and outcomes of judicial proceedings. The following figure presents a visual overview of this process.



⁹ This commitment does not apply to labor disputes and contractual disputes with contractors, amongst others.

10.2 Stages in the CGMS

Upon receiving a complaint in verbal or written form, LAU logs it in its internal management system, and provides the complainant with a written acknowledgement of receipt within seven calendar days. This acknowledgement of receipt includes a brief summary text explaining the complaint resolution process. Unless impractical, LAU seeks to arrive at an initial proposal for the resolution of complaint within 30 calendar days of its reception. If this time limit cannot be met, KTDP advises the complainant in writing that KTDP requires additional time.

If the proposed solution is not accepted by the complainant, he or she (or a group of people, if it involves more than one person) can take their grievance to the Independent Mediation Committee, which seeks to analyze the case and propose its solution within a further 60 days. For an outline of steps in the grievance management process, see table below.

Table 10-1: Principal Steps of the Grievance Management Process

Step	Description	Timeline
1	Receipt of the grievance	
2	Completion of the grievance form	
3	Entry of the complaint into the grievance database	
4	Preliminary assessment of grievance: internal evaluation of the severity of the complaint (or "Community Impact Ranking,"	
5	Written acknowledgement of the receipt of the grievance within 7 calendar days. If key information is missing from the grievance, request for further information	
6	Investigation and resolution of grievance	
7	Response letter and registration in database. If the solution is accepted, resolution (including any payments) and closure of the case	
8	If the proposal is not accepted by the complainant, referral to the Independent Mediation Committee	
9	At any stage in the process, the complainant can resort to judicial measures	

10.3 Independent Mediation Committee

The Independent Mediation Committee (or IMC) is a structure that is being established by the Project to independently and impartially resolve grievances through mediation and dispute resolution. Mediation by the IMC is only to take place in case the complainant is not satisfied with the initial resolution proposed by the Project through the CGMS. The Committee uses mediation to resolve disputes or complaints submitted to it.

The Mediation Committee operates independently from the Project but has access to any information that the Project has regarding the complaint. The determinations of the Mediation Committee are non-binding on either party. The IMC meets as needed, depending on registered complaints and disputes, and its members receive a stipend from KTDP to cover costs of attending meetings. If a solution that is acceptable to all parties emerges out of the meeting with the IMC, the grievance may be considered resolved and closed out; all parties are then notified. If no acceptable solution is agreed upon, either party has the option of taking legal action

II BUDGET AND FUNDING PROCEDURES

International best practice requires project budgets to reflect resettlement costs as accurately and as transparently as possible: “The full costs of resettlement activities necessary to achieve the objectives of the project are included in the total costs of the project. The costs of resettlement, like the costs of other project activities, are treated as a charge against the economic benefits of the project; and any net benefits to resettlers (as compared to the ‘without-project’ circumstances) are added to the benefits stream of the project. Resettlement components or free-standing resettlement projects need not be economically viable on their own, but they should be cost-effective” (OP 4.12, para. 20).

OP 4.12 further specifies that the resettlement plan will present the detail on costs and financing sources: “Tables showing itemized cost estimates for all resettlement activities, including allowances for inflation, population growth, and other contingencies; timetables for expenditures; sources of funds; and arrangements for timely flow of funds, and funding for resettlement, if any, in areas outside the jurisdiction of the implementing agencies”.

Because land acquisition involves complex and contingent processes, developing cost estimates and budgets is not always easy. Further, at the level of the RPF most of these data are obviously not available. The key question for KTDP is the uncertainty of how much people opt for replacement land and therefore don’t require cash compensation. In addition, the security situation did not allow conducting a valuation of communal structures.

Nonetheless, adequate estimates and budgets need to be prepared based on the best information available at the time of resettlement preparation. In essence, adequate budgets require (a) estimates that, on balance, fall within a reasonable margin of error; and (b) reasonable contingency arrangements. Resettlement budgets for specific projects will vary according to the scope and complexity of the resettlement measures needed. Nonetheless, for the purposes of preliminary planning, average resettlement expenses for other projects may be useful. On average World Bank-supported hydropower project teams estimated at appraisal that resettlement costs would amount to 8–9 percent of overall project costs, whereas their project completion reports indicate an average of roughly 11 percent.

Cost Item	Unit cost	Comp 1	Comp 2	Comp 3	Total
Compensation, Allowances etc.					
Residential land	1,554,292	498,461,445	764,711,664	11,849,922,208	13,113,095,317
Agricultural land	1,287,504	14,758,658,352	2,680,583,328	138,877,906,464	156,317,148,144
Easement	10% of land value	29,252,242			29,252,242
Worsho etc.	833,834	13,182,715,035	8,429,227,906	5,168,103,132	26,780,046,073
Residential structures	800/square feet	531,250,000	1,215,750,000	3,900,750,000	5,647,750,000
Trees	3,000	105,274,000	51,978,000	325,536,000	482,788,000
Communal infrastructure	20% of residential	106,250,000	243,150,000	780,150,000	1,129,550,000
Resettlement Site Development	10% of residential	53,125,000	121,575,000	390,075,000	564,775,000
Moving and Connection Allowances	120,000 per HH	83,400,000	243,150,000	780,150,000	1,106,700,000
Transition Allowance (Livelihood Restoration)	100,000/acre per year	1,054,150,000	724,200,000	5,040,000,000	6,818,350,000
Replacement Land	200,000/acre	2,076,400,000	482,800,000	10,080,000,000	12,639,200,000

Kurram Tangi Dam Project
Resettlement Policy Framework

Preparation Allowance					
Training in irrigation agriculture	10,000 per person	407,440,000	298,000,000	2,967,060,000	3,672,500,000
Irrigation start up package	100,000 per HH	1,007,700,000	403,500,000	5,560,100,000	6,971,300,000
Tenancy replacement allowance	100,000 per HH	1,000,000			1,000,000
Vulnerable people (5% of transition allowance)		52,707,500	36,210,000	252,000,000	340,917,500
Subtotal		33,943,187,871	15,694,835,898	185,971,752,804	235,609,776,573
Implementation management		9,000,000	9,000,000	9,000,000	27,000,000
RAP development			50,000,000	50,000,000	100,000,000
Supervision and monitoring		10,000,000	50,000,000	20,000,000	80,000,000
Capacity enhancement		20,000,000	20,000,000	20,000,000	60,000,000
Contingency (10%)		3,394,318,787	1,569,483,590	18,597,175,280	23,560,977,657
Total		37,376,506,658	23,654,161,784	193,931,078,690	254,961,747,132

Table 2-1 Overall budget for land acquisition (non optimized)

Based on the available design, to acquire all land required for KTDP including the Command Area through cash compensation would cost around PKR 255 Billion. Through an optimized design that a) puts in place mechanisms to avoid residential houses in road, canal, Command Area and transmission line development and b) assures that each affected household receives land for land compensation in the new or enhanced Command Areas of an equal size but at least one acre at an enhanced quality reduces the required amount for land acquisition and resettlement to PKR 50 Billion.

Cost Item	Unit cost	Comp 1	Comp 2	Comp 3	Total
Compensation, Allowances etc.					
Residential land	1,554,292				0
Agricultural land	1,287,504				0
Easement	10% of land value	9,398,750			9,398,750
Worsho etc.	833,834	166,393,215	8,429,227,906	5,168,103,132	13,763,724,253
Residential structures	800/square feet		1,215,750,000		1,215,750,000
Trees	3,000	105,274,000	51,978,000	325,536,000	482,788,000
Communal infrastructure	20% of residential		243,150,000		243,150,000
Resettlement Site Development	10% of residential		121,575,000		121,575,000
Moving & Connection Allowances	120,000 per HH		243,150,000		243,150,000
Transition	100,000/acre per year	1,054,150,000	724,200,000	5,040,000,000	6,818,350,000

Kurram Tangi Dam Project
Resettlement Policy Framework

Allowance (Livelihood Restoration)		0			
Replacement Land Preparation Allowance	200,000/acre	2,076,400,000	482,800,000		2,559,200,000
Training in irrigation agriculture	10,000 per person	407,440,000	298,000,000		705,440,000
Irrigation start up package	100,000 per HH	1,007,700,000	403,500,000		1,411,200,000
Tenancy replacement allowance	100,000 per HH	1,000,000			1,000,000
Vulnerable people (5% of transition allowance)		52,707,500	36,210,000	252,000,000	340,917,500
Overhead Costs		4,880,463,465	12,249,540,906	10,785,639,132	27,915,643,503
Implementation management LAU, RSCs etc. (2014-2022)		9,000,000	9,000,000	9,000,000	27,000,000
RAP development/a mendment		10,000,000	50,000,000	50,000,000	110,000,000
Supervision and monitoring		10,000,000	50,000,000	20,000,000	80,000,000
Capacity enhancement		20,000,000	20,000,000	20,000,000	60,000,000
Contingency (10%)		488,046,347	1,224,954,091	1,078,563,913	2,791,564,350
Total		5,417,509,812	13,285,729,023	11,821,827,249	30,525,066,083

Table 3 Optimised overall land acquisition budget (when commitments “land for land compensation and optimizing linear infrastructure to avoid structures” is implemented)

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12 CONSULTATIONS AND STAKEHOLDER ENGAGEMENT

12.1 KTDP's Stakeholder Engagement Principles

In conformance with international best practice, KTDP implements through the LAU a consultation process that is free of intimidation or coercion and provides timely disclosure of information that is relevant, understandable and accessible. KTDP endeavors to undertake consultation in ways that give affected communities, households and individuals opportunities to express their views, and to consider and respond to these views, to the extent possible.

12.2 Stakeholder Identification

The Public Consultation and Disclosure Plan (October 2013), produced by KTDP, presents an overarching identification of KTDP's stakeholders in each of the three components as well as all associated facilities. The RAPs for Components 1, 2 and 3 will require additional stakeholder identification.

12.3 Key Consultation Avenues

12.3.1 Resettlement Committees

A Resettlement Committee shall be established in each community that is affected by physical and/or economic displacement. It is constituted through preliminary discussions with the *Jirga* in FATA communities and the village headmen in settled communities at the time of preparing the phase specific RAP. The Resettlement Committee shall be comprised of representatives from different segments of the community. While the ultimate decision on selection and appointment of committee members will lie with the affected community, KTDP seeks to obtain that the Committee should include:

- Maliks and Lungi holders
- Mullahs
- Elders or designated spoke people appointed by the *jirga* in the FATA and community meetings in the settled areas

The Committee and/or its members are requested to assist LAU and the RSC and/or its consultants in the following tasks:

- Conducting household census and asset inventory, particularly identifying and verifying ownership, particularly customary land owners/users;
- Helping in publicizing the existence of restrictions once the Cut-Off Date has been established;
- Discussing potential resettlement site locations and visiting them during the RAP preparation period to advise on selection;
- Participating in the allocation of land at resettlement sites;
- Advise on resettlement site planning and resettlement housing design;
- Witnessing compensation payments;
- Identifying vulnerable households in the community; and
- Receiving and conveying grievances.

The Resettlement Committee may form sub-committees to address the needs of specific groups such as women, vulnerable people or seasonal farmers. KTDP pays a modest per diem to compensate lost time for transport, communication and effort.

12.3.2 Host Community Committees

Where residents of a displaced village or neighborhood are relocated to or close by an area where others are already living, a Host Community Committee will be established to discuss, take into account and help resolve issues that might arise from the additional demands on infrastructure and other public goods that would result from resettlement. A Host Community Committee shall be established in each community that receives physical and/or economic displaced people. It is constituted through preliminary discussions with the *Jirga* in FATA communities and the village headmen in settled communities at the time of preparing the phase specific RAP. The Host

Community Committee shall be comprised of representatives from different segments of the community. While the ultimate decision on selection and appointment of committee members will lie with the affected community, KTDP seeks to obtain that the Committee should include:

- Maliks and Lungi holders
- Mullahs
- Elders or designated spoke people appointed by the jirga in the FATA and community meetings in the settled areas
- Representatives of the resettlers or resettlers to be

12.3.3 Compensation Rate Review Committee

The Compensation Rate Review Committee is a consultative organ, which provides advice to KTDP on the adequacy of compensation and allowance rates. It is formed by selecting members of Resettlement Committees from within one administrative unit (tehsils). The Compensation Rate Review Committee reviews proposed compensation and allowance eligibility criteria, rates, and annual updates thereof (further to annual inflation surveys and updates described below. The Compensation Rate Review Committee meets at least once a year, at the time when annual updates are available (towards the end of the year).

12.3.4 Procedures for Establishing Consultation Committees

For all consultation committees described above, a similar procedure is followed, per the table below, to set up and work with a consultation committee.

Table 12-1: Steps to establish Consultation Committees

Task	
1.	a) Define scope of the committee to include: <ul style="list-style-type: none"> • Frequency of meetings, topics covered, level of authority and decision-making • Desired profile of members • Income or stipend to be paid and by whom b) Consult on and agree to the scope with affected community members
2.	a) Identify members of the committee b) Community to select committee members, based on recommended criteria/make-up
3.	Establish meeting frequency and ground rules
4.	a) Meet regularly during design, planning, compensation, resettlement and monitoring phases – in general once a month during active phases of resettlement and compensation, and more when required b) Every meeting to be preceded by the communication of an agenda by KTDP to the Committee
5.	Organize tasks in which the Committee's contribution is needed, such as: <ul style="list-style-type: none"> • Witnessing household census/asset inventory and asset sign-off • Publicizing an Interdiction Zone • Witnessing compensation payments and resettlement/livelihood processes
6.	Provide feedback to committee during monitoring
7.	Respond to Committee requests and grievances

12.4 Documentation and Reporting for Stakeholder Engagement

Project personnel (LAU within KTDP) are the primary interlocutors of the committees, coordinate meeting schedules, and ensure that information is transmitted to the committees and vice versa. KTDP seeks to have the committees or community members sign an attendance sheet, and records signed and witnessed minutes of all formal consultation proceedings, such as the meetings of a Resettlement Committee.

For each RAP, KTDP's LAU, maintains consolidated records of all consultations in the form of a matrix that includes, at a minimum: dates of key meetings, categories (and if available, names) of attendees, KTDPs responsible parties, key issues and concerns, outcomes, commitments or follow-up. For each ongoing RAP process, the LAU will report regularly on the following:

- Types and numbers of consultation meetings held.
- Key commitments made and accomplished.

- Notable changes or additions to stakeholders, particularly changes in the composition of resettlement committees or attendance at community/public meetings.
- Key issues that need to be brought to the attention of KTDP management.

12.5 Community Participation

Participation is conventionally divided into two dimensions information exchange and decision making, each of which in turn has two component activities. Information exchange conventionally comprises dissemination and consultation. Decision making comprises collaboration and direct extension of choice to affected individuals, households, or communities. Participation includes, on this view, four levels or types of activities:

- “Dissemination” refers to the one-way transfer of information, in this case, from the consultants to the affected population. Providing early and accurate information to PAPs allays fears, dispels misconceptions, and builds trust, providing a foundation for collaboration between PAPs and KTDP.
- “Consultation” refers to two-way transfer of information or joint discussions. Systematic consultation implies a sharing of ideas. Experience shows that consultation often yields the best resettlement alternatives, fruitful procedures for continued participation, and independent information on actual conditions or implementation.
- “Collaboration” refers to joint decision making through membership in committees, tribunals, or other formal or informal bodies. The PAPs and their representatives not only are consulted but also have a voice in decision making.
- “Extension of choice” refers to the transfer of decision making power to the people affected (for example, providing PAPs with options for their relocation and livelihood rehabilitation, among which they choose).

Participation, in this sense, involves empowerment and represents a step by which PAPs resume responsibility for their lives. Since resettlement is one of the most delicate and potentially volatile segments of any development project an in-depth and participatory process of public and community consultations were put in place to develop this RPF. The baseline condition for this were not good, as the ongoing insurgency made it impossible to conduct larger consultation sessions in the settlements and required that they be conducted off-site in the nearest city, Bannu. The result was that not all community members were involved in the consultation process.

The approach that was used followed the traditional setting of sending delegates to meetings without any decision power beyond acting as messengers. These representatives from the clans, sub-tribes and villages were voluntarily nominated along with the administration appointed Maliks (a kind of liaison officer between the Political Agents and the jirgas of the clans, sub-tribes etc.). Most consultations were conducted by MWH’s sub-consultants, ACE and FORT, and supported by representatives from FATA, WAPDA as well as the local administration. A total of 24 large and small sessions were held:

List of RPF Consultations

Date	Venue	Participants	Issues Discussed
Sessions for Tribal Land Ownership in Component I			
September 18, 2013	Office of the Divisional Commissioner, Bannu	25 Maliks and Tribal Representatives besides other WAPDA and government officials	<ul style="list-style-type: none"> • Identification and demarcation of tribal and individual land ownership in Component I • Local community support to project and its related studies • Demands for involvement of locals in construction phase of project
October 8, 2013	ACE Office, Bannu	20 Maliks and Tribal Representatives from	<ul style="list-style-type: none"> • Identification of land ownership • Resolution of land ownership

Table 12-2: RPF Consultations

Date	Venue	Participants	Issues Discussed
		Madee and Mir Ali Sub Tribes as well as other WAPDA and government officials	<ul style="list-style-type: none"> disputes Tribal rivalries
Sessions for Land Owners in Kaitu Weir Area (Component I)			
October 7, 2013	ACE Office, Bannu	8 community representatives from Kaitu Weir Area	<ul style="list-style-type: none"> Identification of land ownership
October 8, 2013	ACE Office, Bannu	5 community representatives from Kaitu Weir Area	<ul style="list-style-type: none"> Identification of farmers and cultivators of the land and formulation of strategy to list all land users
October 9, 2013	ACE Office, Bannu	7 community representatives from Kaitu Weir Area	<ul style="list-style-type: none"> Initiating the listing of cultivators and land users of Kaitu Reservoir area
October 10, 2013	ACE Office, Bannu	21 community representatives from Kaitu Weir Area	<ul style="list-style-type: none"> Identification and verification of land owners in Kaitu Weir and Reservoir areas
October 11, 2013	ACE Office, Bannu	14 community representatives from Kaitu Weir Area	<ul style="list-style-type: none"> Finalization of land users and cultivators in Kaitu area
October 24, 2013	ACE Office, Bannu	11 community representatives from Kaitu Weir Area	<ul style="list-style-type: none"> Final sign-off and verification of list of land users and cultivators in Kaitu area
Sessions for Owners of Structures in Component I			
October 8, 2013	ACE Office, Bannu	5 community representatives from Component I areas	<ul style="list-style-type: none"> Preliminary identification of household owners
October 10, 2013	ACE Office, Bannu	9 community representatives from Component I areas	<ul style="list-style-type: none"> Identification of home and household owners
October 11, 2013	ACE Office, Bannu	10 community representatives from Component I areas	<ul style="list-style-type: none"> Finalization of list of home and household owners in Component I areas
October 24, 2013	ACE Office, Bannu	11 community representatives from Component I areas	<ul style="list-style-type: none"> Verification and sign-off on list of home and household owners in Component I areas
Sessions for Land Owners in Component I			
October 24, 2013	ACE Office, Bannu	11 community representatives	<ul style="list-style-type: none"> Initial identification of farm ownership and cropping patterns
November 4, 2013	ACE Office, Bannu	5 community representatives	<ul style="list-style-type: none"> Identification of farms and land users in Component I areas
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"> Verification and sign-off on list of farm owners and land users in Component I areas
Jirgas and Consultation Sessions on valuation issues			
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

Table 12-2: RPF Consultations

Date	Venue	Participants	Issues Discussed
October 16, 2013	Spinwam	Malik and Representatives of Tori Khel Tribe	<ul style="list-style-type: none"> Land ownership and identification of household owners in component areas
Validation of RPF			
Nov 22, 2013	Bacha Khan Hall/Auditorium at Bannu	30 Tribal leaders representing Shamiri , Abba Khel, Datta Khel and Madi Khel Tribes and their Maliks	<ul style="list-style-type: none"> Validation of PAP and RPF
Nov 23, 2103	Hall/Auditorium at Bannu	26 Tribal leaders representing Mir Khoon Khel and Bobali Tribes and Maliks of the same groups	<ul style="list-style-type: none"> Validation of RAP and RPF
Component 2 Consultations			
October 21, 2013	Shewa	Maliks and representatives of Kabul Khel Tribe	<ul style="list-style-type: none"> Resolution of tribal land ownership disputes Identification and verification of land and household ownership
Dec 03, 2103	Hall/Auditorium at Bannu	40 Maliks and representatives of Kabul Khel Tribe	<ul style="list-style-type: none"> Validation of RPF
Component 3 Consultations			
29-Oct	Bacha Khan Hall Bannu	51 Representatives from Bannu District	<ul style="list-style-type: none"> Validation of RPF
30-Oct	Zila Council Hall Lakki Marwat	32 Representatives from Lakki Marwat District	<ul style="list-style-type: none"> Validation of RPF
2-Nov	Zila Council Hall Karak	23 Representatives from Karak District	<ul style="list-style-type: none"> Validation of RPF
5-Nov	Bacha Khan Hall Bannu	15 Representatives from Domail Tehsil (all Wazirs)	<ul style="list-style-type: none"> Validation of RPF

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13 RESETTLEMENT SITES DEVELOPMENT

13.1 General

KTDP develops through contractors resettlement sites in line with applicable standards and international good practice. Sufficient space is allocated to streets, public squares, buildings and other public infrastructure (about 20% of the total residential and commercial space). Infrastructure such as roads, water, electricity, waste management and telephone systems that might exist prior to resettlement in the project-affected communities are appraised as part of the compensation process and will be re-established by the relevant entities (department of education, department of public works) based on compensation payments by KTDP.

13.2 Roads and Streets

Transportation infrastructure on resettlement sites are subject to national regulations and are expected to have the following characteristics:

- Access roads: laterite roads passable in all seasons, at least 30 ft wide.
- Internal streets: laterite roads passable in all seasons, at least 20 ft wide.
- Run-off water collection and erosion control to be accorded high attention, particularly during the first years after resettlement.

13.3 Utilities and Waste Management

An adequate potable water supply is established in resettlement communities, based on either a piped scheme with stand taps, or drilled boreholes with hand pumps. The design for water supply is based on an average consumption per individual of 20 liters per day. Water access points are located no farther than 0.5 miles to the houses they serve, to the extent practical. The best-suited option is outlined in the site-specific RAP that is developed for each project-affected community. Consideration is given to the following in designing water supply systems:

- Outcomes of community consultation processes.
- Service at original site.
- Population and consumption requirements of the community.
- Ground water availability at resettlement site.

KTDP reestablishes waterworks infrastructure but resettled PAPs have to cover the cost of operating and maintaining these facilities. This message is disseminated clearly from the very beginning of the resettlement process so that communities can organize themselves in this regard. This organization is usually best done through the establishment of a Water Users' Committee, which is the formal custodian of the facility on behalf of its owner, the community as a whole.

Sanitation facilities at resettlement sites include:

- Ventilated Improved Pit latrines
- A run-off water collection system, with erosion control devices and sediment traps if needed.

In respect of solid waste, residents are encouraged to set up a committee to manage the cleaning of public spaces in the resettlement site, the establishment (supported by KTDP) of a designated dump, the establishment of intermediary collection points if necessary, and the management of the whole system. The committee should be encouraged to collect a small fee to be able to perform its duties. There is no waste management in most communities of the FATA and this is a challenging task, which will require long lasting community awareness efforts.

13.4 Public Structures

Schools, health facilities markets, communal buildings with cultural connotation are built in resettlement communities in compliance with applicable national service standards and if existing neighboring schools or health centers cannot absorb the additional population moving into the

neighborhood as a result of the resettlement. KTDP can also enhance the capacity of existing facilities rather than creating new ones, if this is possible. Any new facilities are planned through consultations with community members, local government, and KTDP community development staff and consultants, to meet the needs and development objectives of the community. KTDP ensures that resettled people have equal or improved access to public services, and that relevant service standards are met. KTDP builds a new facility only subject to the relevant authorities committing to provision of staffing and operations of such facility.

14 LIVELIHOOD RESTORATION

14.1 Overview

Livelihood restoration programs are implemented for people and households who are economically displaced by project activities to ensure that their livelihoods are improved or at least restored. The main livelihood restoration program is obviously the provision of replacement land in the new Command Areas as well as training in irrigation agriculture.

KTDP monitors livelihood restoration programs and makes changes as necessary in order to ensure that the programs provide the expected benefits. Livelihood restoration packages are available to each economically displaced household, including:

- Irrigated agricultural enhancement package,
- Income generation package to be selected from four different options.

Income generation packages are the following:

- Animal production
- Vegetable production
- Income generating activities (more intended for women):
 - Food processing and catering
 - Sewing/Tailoring
- Vocational training/scholarships.

14.2 Eligibility

Each economically displaced household¹⁰ is eligible to income generation packages for each household member between 15 and 60, retirement allowance for people above 60 years and scholarships for household members below 15 years.

For all programs, eligibility is subject to formal voluntary enrollment. Households who neglect to enroll are not eligible. Eligibility is subject to additional conditions, as follows:

- Sustained attendance to courses;
- Use of allocated benefits (such as equipment or fertilizers) for the intended purpose;
- Participation in a group, particularly for the income generation, where some benefits (training) will be delivered only to groups.

KTDP may therefore exclude households who do not meet these conditions from eligibility, subject to adequate notice and consultation with the household themselves and the relevant Resettlement Committee.

14.3 Irrigated Agricultural Enhancement Package

The irrigated agricultural enhancement package is intended at restoring or improving those household income streams that are based on subsistence agriculture and to provide the affected people with access to benefits from enhanced land productivity due to irrigation. The livelihoods of the overwhelming majority of economically displaced households are dependent upon agriculture and transhumant in varying proportions. Therefore, all economically displaced households are eligible for this package. The agricultural enhancement package includes the following:

- Support to land replacement per provisions in the Entitlement Matrix (see Section 5.1.1).
- A practical training course on irrigated agricultural techniques, which includes the use of water management, improved seed varieties, fertilization, small-scale irrigation, animal traction, other equipment, and post-harvest grain storage and conservation.

¹⁰ Including households that are both physically and economically displaced.

- Eligibility for micro-finance funds to invest in farm equipment, with final selection based on fulfillment of selection criteria established by a participating bank or NGO.
- Facilitation of access to farming inputs, including fertilizers and improved seeds.
- Provision of a small equipment package.
- Extension services and related monitoring for three years, or until an external auditor (see below Section 17.3) determines that livelihoods have been sustainably restored (whichever comes later).

14.4 Income Generation Packages

14.4.1 Small Animal Breeding

Eligibility is subject to voluntary enrollment and participation in a group of beneficiaries, whether formal or informal. Other conditions include:

- Sustained attendance to training courses;
- Use of the allocated benefits for the intended purpose;
- Construction of an adequate shelter for the animals based on KTDP extension staff guidance.

Benefits are allocated to individuals meeting eligibility conditions, as follows:

- Five young female goats per individual plus one male per group;
- Animal feed for the first three months;
- Periodic vaccinations of all animals for the first year;
- Training course and periodic refreshers over three years, including both technical (sanitary, nutrition, reproduction) and business aspects (business planning, keeping records, marketing);
- Veterinary monitoring for three years;
- Small equipment, including, for example, mesh fence in reasonable quantity.

14.4.2 Vegetable Production

Eligibility is subject to voluntary enrollment and participation in a group of beneficiaries, whether formal or informal. Other conditions include:

- Sustained attendance to training courses;
- Use of the allocated benefits for the intended purpose;
- Preparation of a garden including identification of a suitable piece of land, soil preparation, construction of a basic water supply and storage facility, and of a fence, with KTDP's agronomist's guidance.

Benefits are allocated to individuals meeting eligibility conditions, as follows:

- Fence (based on one hectare per household);
- One irrigation motor pump per group;
- Treatment equipment (sprayer);
- Improved seeds of selected crops for the first year;
- Facilitation of access to farming inputs, including fertilizers, improved seeds and treatment products.
- Training course and periodic refreshers over three years, including both technical (use of improved techniques, spacing, plant protection, water needs and irrigation, processing and marketing) and business aspects (business planning, keeping records, marketing);
- Small equipment, including for example mesh fence in reasonable quantity, hoes, spades and similar small equipment.

14.4.3 Food Processing / Catering and Sewing/Tailoring

Eligibility is subject to voluntary enrollment and participation in a group of beneficiaries, whether formal or informal. Other conditions include:

- Sustained attendance to training courses;
- Use of the allocated benefits for the intended purpose.

Benefits are allocated to individuals meeting eligibility conditions, as follows:

- Food processing:
 - Grinding, milling, or drying equipment (at group level), to be determined according to the type of production intended by the group;
 - Cooking equipment (at individual level);
 - Consumables for three months;
 - Training courses, including hygiene, food processing techniques, business planning, marketing;
 - Periodic technical assistance and assistance to marketing for three years;
 - Monitoring of livelihood restoration.
- Sewing/Tailoring:
 - One sewing machine per beneficiary;
 - Consumables (fabric) for three months;
 - Training courses, including technical aspects, business planning, marketing;
 - Periodic technical assistance and assistance to marketing for three years;
 - Monitoring of livelihood restoration.

14.4.4 Vocational Training/Scholarships

Eligibility is subject to voluntary enrollment and sustained attendance to the selected curriculum for its whole duration. Scholarships are intended to cover the cost of training (tuition fees and any equipment to be provided by the trainee) and part of the cost of accommodation during the training if the training is held in a location different from the usual residence of the trainee.

Eligible curricula are determined by KTDP in liaison with training institutions. Five to eight curricula are available, between 6 and 12 months in duration, at reputable training institutions in the region. Formal agreements are passed between KTDP and the eligible training institution for every trainee. Tuition fees are paid directly by KTDP to the training institution, according to a mutually agreeable schedule of payment. The accommodation allowance is preferably paid directly by KTDP to the person or business providing accommodation, or directly to the trainee in instances where the latter proves impractical. Irregular attendance or disciplinary issues may result in the discontinuation of the KTDP support.

Eligible curricula will vary, but may include (tentative list):

- Construction related training: carpentry, masonry, electricity, plumbing;
- Welding;
- Catering and hospitality;
- Sewing and tailoring;
- Agricultural training.

14.5 Linkage with Broader Social Development Activities

KTDP implements a comprehensive social development program in the areas of health, education and economic development. Restoration of livelihoods per activities described above is a commitment to all PAPs and to PAPs only, PAPs will in addition be able to participate in KTDP social and economic development programs, particularly the following:

- Micro-credit and small enterprise development.
- Income-generating activities, including agriculture improvement programs.
- Health services, outreach and education.
- Capacity-building and education.

15 IDENTIFICATION OF, AND SUPPORT TO VULNERABLE HOUSEHOLDS

15.1 Identification of Vulnerable Households

Studies suggest that the following vulnerable groups can be found in the project region:

Women: Waziristan is male dominated and women enjoy almost no rights and for example do not inherit property (Ahmed 1983:27). At the age of 10, girls are prepared for marriage (Roe 2010: 38) and fetch around PKR 10-40,000 in bride-price, which is handed over from the family of her husband to her father and parts of it need to be refunded if the wife “does not perform according to tradition” i.e. does not obey the rules of her husband and his family, does not give birth to sons, does not conduct more or less all domestic works including collecting firewood, farming (Ahmed 1983:27). In 2011 the human rights organisation “Khwendo Kor” released a report that suggests that women in the FATA are more susceptible to violence and abuse, that there is an increase in honour killings in which women were first raped and since the rape was considered a disgrace to the family later murdered and that the role of women in society has further decreased in the context of the “Talibanisation” of the FATA. While traditionally Wazir women “enjoy superior freedom to other frontier tribes and that adulterous affairs were not uncommon”, it needs to be noted that “any women found to be unfaithful was likely to be put to death or have her nose amputated” (Roe 2010: 37/38). A group commonly exposed to severe marginalization are female-headed households (widows, wives of migrant workers .) that are formally considered as part of the households of their relatives (mostly the brothers of their husbands) and that have no formal or culturally acceptable access to land and property and/or participation in decision making processes. In short, women are significantly marginalised in the societies of the project region, need to be considered vulnerable and should benefit from specific measures to not be specifically harmed by the project and/or have access to the project benefits.

Households with low income: Low income households have fewer resources to cope with change, they are less likely to have savings and access to credit and more likely to have lower education levels. This category also includes orphans, who on the basis of their circumstances lack financial and moral support of their parent(s).

Physical /mental health and disability: Disabled people are vulnerable in terms of participation in decision-making and access to employment opportunities. Disabled people may also experience varying levels of social exclusion and community marginalisation. Commonly rural societies have found a way to integrate them into their daily routines, but tend to neglect the specific needs of people with special challenges in situations of stress such as physical and economical displacement.

People with no legal land titles: In the project area those could include households who are affected by the project but whose ownership or usufruct rights are not registered or otherwise supported by documentation and/or recognised under the dominant customary system, thereby putting them at risk of not receiving compensation (this may include informal tenants and sharecroppers, and other bona fide occupiers with no legal recognition/squatters).

Ex-combatant: It is known that Mir Ali in North Waziristan is used as refuge for combatants from the conflicts in the region include some that don't have papers to allow them to live in Pakistan and/or that have been in conflict with laws and might for various reasons face severe problems (fines, arrests .) if entering non-FATA areas.

Eldery: Experience show that elderly people have commonly problems to cope with involuntary changes and/or adapt to new situations and often require special care and support in adapting to new environments and livelihood patterns.

15.2 Potential Assistance Activities to Vulnerable Households

KTDP's assistance to vulnerable households affected by land acquisition and resettlement includes the following measures:

- Identification of vulnerable households and identification of the cause and impacts of their vulnerability, either through direct interviews by a Project social worker and/or relevant Community Liaison Officer' (CLO) together with the Resettlement Committee.
- Identification of required additional assistance at the various stages of the process: negotiation, compensation, moving, .
- Monitoring and continuation of assistance after resettlement and/or additional compensation, if required.
- Other specialized assistance, depending upon vulnerable households' requests and needs.

Specifically KTDP assists identified vulnerable people in the moving process by providing them with transport services (their personal belongings are transported in KTDP vehicles to the resettlement site). Vulnerable people are also specifically assisted through the impact identification (census) and compensation processes. Experience has shown that cooperation with Resettlement Committees was key.

15.3 Monitoring of Vulnerable Households

KTDP will establish a special monitoring program to assess the progress of assistance to vulnerable households during the resettlement process. This program seeks to augment other monitoring processes implemented during resettlement (see Chapter 17 on Monitoring) and led by the Resettlement Committee and key community members.

KTDP will monitor the status of households who were identified as vulnerable before relocation for at least three years after they have been resettled or until all PAPs have restored their incomes to at least pre-project levels.. In Project Year 1 (PY) 1, monitoring takes place on a quarterly basis and includes semi-annual interviews with all vulnerable persons. After PY 1, annual interviews will be conducted for the following two years. Key information that is to be gathered and reported internally includes the following:

- Total number of identified vulnerable households per RAP
- Case-by-case census of vulnerable households
- Type(s) of vulnerability
- Type(s) of assistance provided
- Efforts to restore livelihoods, social networks and standards of living
- Vulnerable households who have been unable to restore livelihoods, social networks and/or standard of living

All data on vulnerable households are to be kept up to date in the Project's database.

15.4 Summary of Procedures for Addressing the Needs of Vulnerable Households

Resettlement Committees will assist in the identification of vulnerable households and the definition of assistance activities. The following process will take place, as outlined in the following table:

Table 15-1: Procedures for Identifying and Supporting Vulnerable Households

	Tasks
1	Staffing: Designate and train responsible LAU staff in charge of assistance to vulnerable households
2	Refine vulnerable people criteria for each LAU (if necessary)
3	Inform Resettlement Committee on their tasks with respect to vulnerable households and structure and guide the Committee's role
4	Define and finalize assistance entitlement for all households, including vulnerable ones
5	Identify eligible vulnerable households: <ul style="list-style-type: none"> • Pre-screening: Develop initial list with Resettlement Committee and other parties as relevant • Screening: Assess in an interview with household at their home whether pre-screened households qualify as "vulnerable" and devise individualized assistance measures • Obtain approval in KTDP for recommended measures • Finalize list and assistance measures with Resettlement Committee
6	Communicate proposed measures to identified vulnerable people and amend if needed
7	Provide assistance as appropriate at each stage of land acquisition or resettlement
8	Monitor and evaluate to ensure that vulnerable households are restoring or improving livelihoods and standards of living, and if monitoring indicates that assistance is not achieving restoration of livelihoods and standard of living, reassess/retarget assistance
9	Reporting: Provide information internally – and report externally as appropriate

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16 GENDER ISSUES

16.1 Principles

KTDP is committed to ensure gender equity in entitlements and project benefits throughout the resettlement process, in line with international standards. The RAPs must incorporate measures to ensure that women and men receive equitable compensation for assets and share equitably in the related livelihood support programs. The issue is addressed in full detail in the KTDP's Gender Plan. Key principles that guide KTDP's gender equity strategy comprise the following:

- Including women in the planning, decision-making, and compensation process during the resettlement of communities.
- Promoting women's and girls' economic rights and opportunities through programs that build their capabilities and help them to build their livelihoods.
- Ensuring that essential public services like health and education benefit women, men, girls and boys equitably.
- Supporting vulnerable households, particularly female-headed households and widows, throughout the resettlement process.
- Collecting and analyzing gender-disaggregated data in the Project-Affected Area.
- Ensuring that women's rights are protected in particular with regard to compensation for assets and ownership of property.

16.2 Gender Equity Procedures

Steps that KTDP will follow to ensure gender equity in compensation and resettlement processes include the following:

- Consult separately with women when making decisions about where resettlement communities will be located, how houses will be designed (especially kitchens) and how the location meets needs like access to resources (such as water or fuel), which might be particularly important for women.
- Ensure that women are represented on all decision-making committees if acceptable.
- Ascertain ownership of affected assets in a manner that is sensitive to the rights of women if this is acceptable.
- In situations where the inventoried head of household would decrease between the census and the actual compensation, restrict eligibility to those household members that were identified at the Cut-Off Date, review the situation following traditional succession rules, involve the relevant resettlement committees, and ensure that the outcome is not disproportionately detrimental to females members of the household
- Take account of gender in livelihood restoration packages.
- Categorize female-headed households as vulnerable.

16.3 Key actions outlined in the gender plan that are relevant for land acquisition

It is hoped that the dedicated awareness and capacity building, together with information dissemination and community health and education programs, will gradually allow for community acceptance to engage women in further interventions for livelihoods and income-generating activities. The WAPDA Gender Team, with the help of local village committees, will assist the PRO in designing new programs for skills development and livelihoods opportunities which could involve women in the project area.

Feasible livelihood training may include: agriculture, livestock, water and sanitation, small businesses, and other "home-based" income-generating activities. Further, training and microcredit for livelihood packages such as kitchen gardening, bee-keeping, poultry-rearing and other livelihood sources would be arranged for women within the Capacity and Livelihood Development Programs prepared by the PRO, possibly in collaboration with Khawenda Kor or another organization with such experience.

The following targeted activities are included in the Income Restoration and Livelihood Development Programs outlined in chapter 14:

- Agriculture appears to a very viable option for livelihood restoration as most agricultural activities regarding kitchen gardening are managed by women in the project area. They grow vegetables on available land around their houses. Training on enhancing agricultural yields will be imparted to women by local officials. The project will assist in developing terrace agriculture at new resettlement sites, as well as in the Component I area. Good quality seeds and fertilizers would be introduced and provided to women. Vegetable, nursery, and other measures of enhancing crop production, and new types of fodder can be initiated from the onset.
- Livestock has a traditional, social and cultural significance in the project area. It also constitutes one of the major sources of income. The project will provide for a Livestock Centre to assist people in vaccinating, de-worming, and other necessary treatments. The project will organize training for men, who will in turn train women in the households. Further, poor/vulnerable and female-headed households will be provided with livestock, including poultry, to secure an income.
- Community/village-based workshops or informal gatherings focused on skills development of interest to women in the project area (as expressed in the gender survey) will be arranged for women when the environment is supportive enough to conduct such workshops.
- A common and typically found skill among women in the project area is stitching. Sewing is an accepted type of livelihoods support for women and is in demand. The project will make provisions for sewing machines for women as a source of home-based income generation. This will create further goodwill towards the project, and also contribute to the esteem of village women as well as the project. A vocational center with some machines and a teacher in each of the resettled villages could be one practical approach, or a mobile training center that could travel between villages. The Bannu Office of Khawenda Kor communicated that they have recently set-up such a vocational center in Shiwa with ten machines and a teacher at a recurring cost of around PKR 60,000 per month.
- A microcredit facility could be promoted by the project through linkages to commercial banks in the project area. The Agriculture Development Bank has been giving micro credit to farmers; the Gender Team could potentially organize area women in setting up micro-credit facilities on behalf of the project.

17 MONITORING AND EVALUATION

17.1 Overview of the Monitoring Framework

Monitoring of resettlement and compensation activities is conducted both internally and externally.

Internal monitoring focuses on inputs and outputs. Internal monitoring uses indicators built in KTDP's management systems (particularly progress indicators) and replicate socio-economic surveys conducted either by KTDP's staff or consultants.

External monitoring focuses on processes and outcomes. It uses the findings of internal monitoring and is also based on separate, external investigations. External monitoring consists of periodic monitoring, and completion audits for each successive phase of resettlement / compensation. External monitoring findings can be disclosed to external stakeholders, as appropriate.

As part of this RPF, KTDP commits to implement internal and external monitoring activities described in further sections. In addition, separate monitoring activities are also relevant to resettlement and compensation activities:

- KTDP's activities are monitored by regulators for compliance with Pakistani regulations; this includes, but is not limited to, compliance with environmental, health and safety, labor, and compensation / land acquisition regulations;
- KTDP social performance, including resettlement and compensation, is also monitored independently as part of its overall commitment to social responsibility.

These two additional monitoring components are not addressed in this document.

17.2 Internal Monitoring

17.2.1 Overview

KTDP internal monitoring addresses a range of input and output indicators pertaining to the following aspects:

- Progress monitoring (compensation, land acquisition, construction, livelihood restoration activities);
- Technical monitoring of resettlement sites: supervision of infrastructure and housing construction where relevant, commissioning and testing of the technical components of the resettlement housing, monitoring of the effectiveness of water supply, waste management, power supply, erosion, and condition of houses and infrastructure;
- Social and economic monitoring:
 - Cost of housing in the displacement area, potential land speculation,
 - Percentage of resettlement compensation spent on productive assets, environmental and health standards, livelihood restoration including agriculture, small businesses, employment and other activities.
- Monitoring of Vulnerable People (see also Chapter 11).
- Grievance Monitoring: Monitoring of the effectiveness of the grievance management system as well as using an ongoing analysis of grievances as a form of feedback on KTDP's social and environmental performance, in an effort to detect and prevent the development of grievances into broader or more acute problems or conflicts.

17.2.2 Indicators and Frequency of Internal Monitoring and Reporting

During the active phase of resettlement, KTDPs monitors and reports internally on several indicators on a quarterly, annual and biennial basis. Findings are benchmarked against baseline studies done before resettlement. Key progress indicators are measured internally by KTDP on a quarterly basis. The data collected are reported in an annual monitoring report, and can be reported internally on a more frequent basis if warranted.

Quarterly Progress Indicators:

- Numbers of households and individuals economically and physically displaced.
- Amount of land affected.
- Number of farmers who have identified replacement land.
- Number of resettlement houses completed. Sites acquired. House designs accepted. Then completed. Finally, title provided.
- Numbers of houses taken possession of by resettled people.
- Grievances (open, pending, closed).
- Number of grievances by severity; average number of days for resolution.
- Amounts of compensation paid per category (structures, land, crops, others).
- Inflation rates (via monthly market survey).
- Stakeholder engagement activities designed to ensure that the population is informed and consulted.

Repeat socio-economic surveys are undertaken three years and five years after the move of physically displaced people, or any such time as determined by the external auditor to provide data for external monitoring and the completion audit. These surveys capture socio-economic quality of life indicators (see below) and livelihood restoration indicators. Questionnaires used in replicate surveys are consistent with those used to describe the baseline situation to allow for comparisons.

Repeat Socio-Economic Survey Indicators:

- Income and income streams.
- Assessment of household expenditures.
- Changes in the cost of living and/or income and expenditures patterns.
- Surface area of land holdings.
- Crops and estimated or observed yields.
- The extent that perennial crops have been replanted.
- Livestock numbers (by species), equipment and other assets.
- Number of unemployed people in the households.
- Number of children attending school.
- Health of the household.
- Extent to which social networks and status have been reestablished.
- PAP degree of satisfaction with compensation and resettlement process.
- Attitude survey of host community.

The results of internal monitoring – particularly related to livelihoods, employment and education – are discussed and acted on by all relevant units of KTDP. If corrective measures require longer-term attention and follow-up, appropriate actions are incorporated into the RAP Units Annual Work Plan for the next year.

17.3 External Monitoring

KTDP hires an external social auditor with significant experience in resettlement to carry out an annual review¹¹ assessing compliance with commitments contained in the relevant RAP(s) and this Resettlement Policy Framework.

Objectives of these yearly reviews are as follows:

- To assess overall compliance with the RAP, RPF and other commitments related to mitigation of physical and economic displacement.
- To assess the extent to which the quality of life and livelihoods of affected communities are restored and enhanced.

¹¹ External audits are conducted annually after resettlement until the auditor determines that the RAP is complete, typically 3 to 5 years after resettlement impacts.

- To provide recommendations to improve RAP implementation and address any gaps.
- To determine when the Completion Audit will take place.

External monitoring reports are prepared independently by the reviewer and released to KTDP Management. Any outstanding issues, shortcomings or oversights identified in these external monitoring reports are fed into follow-up actions and, if longer term in nature, the following year's Work Plan for the KTDP's RAP Unit.

17.4 Completion Audit

The purpose of the Completion Audit is to verify whether KTDP has complied with resettlement commitments defined in the RAP, RPF and more generally whether compliance with applicable guidelines has been achieved. The Completion Audit ascertains if livelihood restoration as well as restoration of housing is complete for physically and economically displaced communities. The audit is undertaken after all RAP mitigation measures and inputs – including compensation and development initiatives – are complete, but well before the end of operations. The timing of the audit should allow time for corrective actions, if any, as recommended by the auditors before the Project is complete. Completion audits typically take place three to five years after resettlement impacts.

Reference documents for the Completion Audit are the following:

- Resettlement Policy Framework.
- The socio-economic baseline relevant to the component-specific RAP.
- Resettlement Action Plans.

The Completion Audit has the following specific objectives:

- General assessment of the implementation of the RAP against the objectives and methods set forth in the RAP.
- Assessment of compliance of implementation with applicable international policies.
- Assessment of the fairness, adequacy and promptness of the compensation and resettlement procedures as implemented.
- Evaluation of the impact of the compensation and resettlement program on livelihood restoration, measured through income, employment, assets (e.g. land, houses, businesses, livestock), productivity of land and crop yields, health, education and access to services, social and cultural factors, with an emphasis on the requirement that PAPs be left no worse off, and ideally better off, as a result of displacement.
- Identification of potential corrective actions necessary to mitigate the negative impacts of the program, if any, and to enhance its positive impacts.

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ANNEX I: ITEMS TO BE ASSESSED DURING RAP DEVELOPMENT

The census and asset inventory need to be conducted for each affected household

Suggested List of Data for Census Survey

1. Background Information
 - Questionnaire code and date of survey
 - Name of interviewer
 - Name of province, district and village/hamlet

2. Household Census
 - Name of household head and all members household members
 - Relationship of household members to the household head
 - Age and sex of each household member
 - Information on ethnicity
 - Education level of each member
 - Primary occupation and monthly income of each member
 - Incomes from secondary sources for each member
 - Location of job or businesses as the case may be
 - Length of stay on present location

3. Tenure Status
 - Category of land
 - Type of land ownership and the name of the owner HH member
 - Type of document possessed to certify ownership type
 - If not owned, name and address of owner
 - If informal use right, type of agreement
 - Number of years used
 - Rent per month paid by tenant
 - Deposits made by lessee

Suggested List of Data for Inventory of Losses

1. Land Use
 - Existing use of land
 - Areas under different land usages, where applicable
 - Total and affected area of land with breakdown by usages, if applicable
 - Estimate whether the remaining area is viable for continued use
 - Total area of land by type for compensation purposes

2. Structures
 - Type of structure
 - Number of floors
 - Area by floor
 - Name of owner of structure
 - Year of construction
 - Whether permit obtained for structure
 - Use of structure and areas by usages, if applicable
 - Description of building material used for roof, walls and floors by surface areas
 - Type of foundation
 - Description of any special features of structure
 - Utility connections (electric meter, water supply)

- Charges paid for utility connections
 - Affected area of structure
 - Estimate whether the remaining structure is viable for continued use
 - Total area of building for compensation purposes
3. Other Structures
- Types of structures (wells, boundary wall, fence, warehouse)
 - Area of fish pond affected
 - Average household income from fish pond
 - Description of areas and construction material of affected structures
 - Use of other structures
4. Agricultural Products
- Type of crops affected
 - Owner of affected crops
 - Total yearly production of crop on affected land
 - Average yield of crop
 - Are any products sold at market
 - Number of employees/labor used for crop production
 - Average value of crop
 - Average yearly household income from agriculture
5. Trees
- Number and types of affected trees
 - Age of trees
 - Name of owner of trees
 - Average yield of fruit bearing trees
 - Average yearly income from fruit trees
6. Business
- Type of business affected
 - Name of owner of business
 - Registration/permit number of business (check document)
 - Total yearly household income from business
 - Average operating expenditure of business
 - Number of employees in business
 - Number of permanent and temporary employees
 - Average income and profit as reported for income tax (check document)
 - Whether the business needs to be relocated
7. Affected Public Utilities and Facilities
- Description of affected community infrastructure
 - Description of affected facilities by area & building material used
 - Estimated number of population adversely affected by the facilities/infrastructure
8. Preference for Relocation
- Whether there is a need for relocation or reorganization
 - Preferred mode of compensation (cash or kind) for land
 - Preferred mode of compensation for structure
 - Preferred type of assistance for income rehabilitation

Suggested Data for Baseline Survey (a sample of all affected households)
Additional information would include the following:

1. Access to Facilities
 - Access to electricity
 - Type of water supply available
 - Type of sanitation facilities within the building
 - Distance to school
 - Distance to health facilities
 - Distance to market
2. Household Assets
 - Type and number of farm equipment and implements owned by the household
 - Type of other business equipment owned by household
 - Estimated value of affected equipment
 - Type of transport owned (bike, motorcycle, truck, animal cart, car, other)
 - Major kitchen equipments owned (stove, cooker)
 - Ownership of fridge, radio, TV
 - General condition of building (excellent, good, average, poor)
 - General condition of household furnishing (furniture, cupboards)
3. Household Income and Expenditure
 - Average annual household income from all sources
 - Average expenditure on major items: food, transport, health, education
 - Any loans taken from bank, friends or relatives
 - Approximate savings, if any
4. Skills Possessed
 - Skills of each household member
 - Types of training or skills preferred for further upgrading

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ANNEX 2: OUTLINE OF THE ADDENDA FOR RESETTLEMENT ACTION PLANS FOR I AND FOR RAPS FOR COMPONENTS 2 AND 3

The plan is based on up-to-date and reliable information about the proposed resettlement and its impacts on the displaced persons and other adversely affected groups and will cover the elements below: (For official guidance, please see OP 4.12, Annex A, Paragraph 25.)

1. Project Description

Detailed description of the component and identification of the project area.

- the project subcomponent or activities that give rise to resettlement;
- the zone of impact of such component or activities;

2. Identification of Impacts

- Impacts (e.g., residential relocation, business relocation, business loss, agricultural loss, crops, trees) by component area, with assessment of severity of loss on family income
- the alternatives considered to avoid or minimize resettlement; and
- the mechanisms established to minimize resettlement, to the extent possible, during project implementation.

3. Socioeconomic studies

The findings of socioeconomic studies to be conducted during project preparation and with the involvement of potentially displaced people, including

- the results of a census survey covering
 - (i) current occupants of the affected area to establish a basis for the design of the resettlement program and to exclude subsequent inflows of people from eligibility for compensation and resettlement assistance
 - (ii) standard characteristics of displaced households, including a description of production systems, labor, and household organization; and baseline information on livelihoods (including, as relevant, production levels and income derived from both formal and informal economic activities) and standards of living (including health status) of the displaced population;
 - (iii) the magnitude of the expected loss--total or partial--of assets, and the extent of displacement, physical or economic;
 - (iv) information on vulnerable groups or persons as provided for in OP 4.12, para. 8, for whom special provisions may have to be made; and
 - (v) provisions to update information on the displaced people's livelihoods and standards of living at regular intervals so that the latest information is available at the time of their displacement.
- Other studies describing the following
 - (i) land tenure and transfer systems, including an inventory of common property natural resources from which people derive their livelihoods and sustenance, non-title-based usufruct systems (including fishing, grazing, or use of forest areas) governed by local recognized land allocation mechanisms, and any issues raised by different tenure systems in the project area;
 - (ii) the patterns of social interaction in the affected communities, including social networks and social support systems, and how they will be affected by the project;
 - (iii) public infrastructure and social services that will be affected; and
 - (iv) social and cultural characteristics of displaced communities, including a description of formal and informal institutions (e.g., community organizations, ritual groups, nongovernmental organizations (NGOs)) that may be relevant to the consultation strategy and to designing and implementing the resettlement activities.

4. Eligibility

Definition of displaced persons and criteria for determining their eligibility for compensation and other resettlement assistance, including relevant cut-off dates.

Valuation of and compensation for losses. The methodology to be used in valuing losses to determine their replacement cost; and a description of the proposed types and levels of compensation under local law and such supplementary measures as are necessary to achieve replacement cost for lost assets. The RAP will document that the unit rates used for valuation represent current market rates in the project area at the time the operation will take place.

5. Resettlement measures

A description of the packages of compensation and other resettlement measures that will assist each category of eligible displaced persons to achieve the objectives of the policy (see OP 4.12, para. 6). In addition to being technically and economically feasible, the resettlement packages should be compatible with the cultural preferences of the displaced persons, and prepared in consultation with them. The resettlement measures will cover both physical relocation and economic dislocation. In the latter case, the presentation will detail the measures and associated support that will be put in place to restore PAP livelihoods to at least their pre-project levels.

Site selection, site preparation, and relocation. When physical relocation is involved, alternative relocation sites are to be considered and explanation of those selected provided, covering

- (a) institutional and technical arrangements for identifying and preparing relocation sites, whether rural or urban, for which a combination of productive potential, locational advantages, and other factors is at least comparable to the advantages of the old sites, with an estimate of the time needed to acquire and transfer land and ancillary resources;
- (b) any measures necessary to prevent land speculation or influx of ineligible persons at the selected sites;
- (c) procedures for physical relocation under the project, including timetables for site preparation and transfer; and
- (d) legal arrangements for regularizing tenure and transferring titles to resettlers.

Housing, infrastructure, and social services. When physical relocation is involved, plans to provide (or to finance resettlers' provision of) housing, infrastructure (e.g., water supply, feeder roads), and social services (e.g., schools, health services); plans to ensure comparable services to host populations; any necessary site development, engineering, and architectural designs for these facilities.

6. Environmental protection and management

A description of the boundaries of the relocation area; and an assessment of the environmental impacts of the proposed resettlement and measures to mitigate and manage these impacts (coordinated as appropriate with the environmental assessment of the main investment requiring the resettlement).

7. Community participation

Involvement of resettlers and host communities

- (a) a summary of the views expressed and how these views were taken into account in preparing the resettlement plan;
- (b) a review of the resettlement alternatives presented and the choices made by displaced persons regarding options available to them, including choices related to forms of compensation and resettlement assistance, to relocating as individuals families or as parts of preexisting communities or kinship groups, to sustaining existing patterns of group organization, and to retaining access to cultural property (e.g. places of worship, pilgrimage centers, cemeteries).

8. Integration with host populations

Where physical relocation to new communities is required, measures to mitigate the impact of resettlement on any host communities, including

- (a) consultations with host communities and local governments;
- (b) arrangements for prompt tendering of any payment due the hosts for land or other assets provided to resettlers;
- (c) arrangements for addressing any conflict that may arise between resettlers and host communities; and

- (d) any measures necessary to augment services (e.g., education, water, health, and production services) in host communities to make them at least comparable to services available to resettlers.

9. Implementation schedule

An implementation schedule covering all resettlement activities from preparation through implementation, including target dates for the achievement of expected benefits to resettlers and hosts and terminating the various forms of assistance. The schedule should indicate how the resettlement activities are linked to the implementation of the overall project, specifically how resettlement activities will be completed (and certified as completed) before the civil works are initiated.

10. Costs and budget

Tables showing itemized cost estimates for all resettlement activities, including allowances for inflation, population growth, and other contingencies; timetables for expenditures; sources of funds; and arrangements for timely flow of funds, and funding for resettlement, if any, in areas outside the jurisdiction of the implementing agencies.

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ANNEX 3 DRAFT TERMS OF REFERENCE FOR VALUATION STUDY

The Kurram Tangi Dam Project (KTDP) consists of three Components: 1. tribal development (located in North Waziristan); 2. Dam and Hydropower (located in North Waziristan and Frontier Region Bannu); and 3. Irrigation (located in the Districts Bannu, Karak and Lakki Marwat). KTDP is in the process of establishing a Resettlement Policy Framework for the overall project and a Resettlement Plan (RAP) for component xx to assure compliance with international best practice (here World Bank OP 4.12).

In that perspective the consultants shall conduct the following Valuation Study (obtain “official data”, market study, comparison)

I. Applicable standards – Definition of replacement value

KTDP is committed to apply the World Bank Policy for involuntary resettlement (OP 4.12), which amongst others requires that any affected asset be compensated at “replacement costs”.

Replacement cost is defined as follows:

Replacement cost is calculated as the market value of the asset plus transaction costs (e.g. taxes, stamp duties, legal and notarization fees, registration fees, travel costs and any other costs such as may be incurred as a result of the transaction or transfer of property). In applying this method of valuation, depreciation of structures and assets should NOT be taken into account.

With regard to land, replacement value is defined as follows:

- Agricultural, pasture and forest land—the market value of land of equal productive use or potential located in the vicinity of the affected land, plus the cost of preparation to levels similar to or better than those of the affected land, and transaction costs such as registration and transfer taxes.
- Residential Land—the market value of land of equivalent area and use, with similar or improved infrastructure and services preferably located in the vicinity of the affected land, plus transaction costs such as registration and transfer taxes.

With regard to structures and infrastructure:

- Houses and other structures—the cost of purchasing or building a new structure, with an area and quality similar to or better than those of the affected structure, or of repairing a partially affected structure, including labour and contractors’ fees and transaction costs such as registration and transfer taxes.
- Other infrastructure: as above, with the proviso that linear infrastructure (e.g., fencing, wells) are valued at the unit cost of replacing the existing infrastructure times the number of linear feet (or well depth).

With regard to crops, replacement value is defined as follows:

Annual crops — the market value of the produce midway between harvest periods for the crop multiplied by the expected yield. In the case of prices experiencing significant seasonal fluctuations, a reasonably robust average should be calculated based on price monitoring or existing statistics and periodically updated. In the case of crops experiencing significant yield variations, similarly a robust average should be calculated based on local measurements or existing agricultural statistics.

Perennial crops – (1) the market value of the produce midway between harvest periods multiplied by the yield for the period until replacement trees come into production PLUS (2) the cost of re-establishing the crop at a similar level of production. (2) is typically calculated as the sum of (a) the cost of replanting the tree (including seedling and labour), (b) the cost of maintaining the tree during the re-establishment period (fertilisers and labour), and (c) the cumulated loss of production during the re-establishment period.

Task I - Identification of existing applicable values

Agencies of the local government in the Districts Bannu as well as FR Bannu and North Waziristan currently involved in negotiated or compulsory land acquisition activities use a set of compensation values deriving from legislation and practice that may or may not meet the replacement value requirement under international standards. These values shall be in task I identified, compiled and assessed. The consultant shall:

- Identify government agencies involved in negotiated or compulsory land acquisition activities, these might include, but not necessarily be limited to the Water Authority, roads agency, the power generation and transmission companies, the main water utilities, the Ministry of Environment.
- Contact these agencies and seek information on compensation values paid in the recent past (3 to 5 years) for land, structures, and annual and perennial crops in the Component I project area;
- Contact the relevant tax authorities to verify whether standard land values that might be relevant to KTDP are applied and to understand the principles of the categorization of land used for taxation purposes;
- Compile these land values for the various tehsils and union councils of the KTDP area from the Patwari (revenue staff at village level) (see attachment 1);
- Compile all official statistics on prices of agricultural produce (see attachment 4), and provide date unit values were determined (if existing);
- For the determination of prices, government agencies involved in agricultural produce trading and institutes preparing economic statistics
- For the determination of yields, government agencies involved in economic statistics, chambers of agriculture and agronomic research institutes, Agricultural professional unions such as Chambers of Agriculture (see attachment 3);
- Verify whether there is any common practice in Pakistan and FATA in respect of evaluating compensation for the acquisition of servitudes/easements
- Present all information in a series of tables.

The consultants shall deliver a draft report on this task to KTDP for review 2 weeks after contract award. All baseline information shall be provided in appendices. The reports will be submitted both in electronic form in predefined format (MS Excel tables) and in hard copy

Task 2 – Development of replacement value for affected assets in Component I

To determine unit values for each type of property in the Component I project area only, the consultant shall:

Land

- Provide a categorisation of affected agricultural land using criteria such as the following: arable/pasture, irrigated/rain fed/dry, steep slope/little or no slope, easily accessible or not. Criteria shall be determined based on onsite observations and criteria generally used for spatial planning and/or for valuation purposes by FATA and other actors;
- Obtain information about informal land sales and/or rental/lease agreements in the project area for the last 5 years. If any, obtain terms and conditions of these sales (costs, size, category of land, improvements)
- As it is assumed that transactions might be understated to the authorities due to tax reasons, the consultant shall attempt to determine the difference between the value as declared to the authorities and the real market value (if there are any declared sales);
- Evaluate transaction costs (cost of registration and any taxes, fees, rights, that might be due to be added on top of the land value);
- Calculate the current replacement value for each of the sub-categories as the sum of the market value as inferred from reference transactions, the “tax understatement factor” as described above, and transaction costs;

- Evaluate the compensation value not only for full acquisition but also for servitude/easement commonly used for transmission lines and roads to regulate land use restrictions.
- Propose an update formula taking into account recent and upcoming inflation.
- Proposed replacement values shall be presented in a MS Excel calculation matrix that shall be provided in electronic version and as appendix to the Task 2 report. The produced data format and data versions must be agreed with the client and will be defined in the ongoing process.

Structures

Based on existing knowledge or a rapid assessment, the consultants shall adjust the following classification table for structures to the specific conditions in the footprint of Component 1. In case there are significant differences between villages, this needs to be reflected in a description specific for each tehsil (see attachment 2).

The consultants shall

- Obtain information about informal house sales and/or lease agreements in the project area for the last 5 years. If any, document for each tehsil/village or other geographical unit proposed by the consultants document for each of these three categories (or categories suggested by the consultants) the amount paid per square feet of residential houses as well as for compounds (walled enclosure) during the last 5 years and establish a market value per square feet for each category for each tehsil taking into account also inflation and other factors if no recent reference transactions can be identified;
- determine for each of the tehsil and category of house material costs and 2) transport costs per mile and 3) subcontracting costs if there aren't masons, carpenters to build a house from scratch
- As it is assumed that transactions might be understated to the authorities due to tax reasons, the consultant shall attempt to determine the difference between the value as declared to the authorities and the real market value - if any;
- Evaluate transaction costs (cost of registration and any taxes, fees, rights, that might be due to be added on top of the land value);
- Based on the results of this survey and the consultant's expertise, calculate the current replacement value for each of the three categories in each of the affected tehsils. This shall be presented in a MS Excel calculation matrix that shall be provided in electronic version and as appendix to the Task 2 report

Annual Crops

An inventory of annual crops cultivated in the footprint has been established and will be shared with the consultants before the commencement of the assignment. A survey of current market prices and potential yields for each of the identified annual crops shall be performed using information collected from: (attachment 3 & 4)

- An exemplary sample of farmers
- A sample of agricultural produce traders and agricultural cooperatives involved in trading agricultural produce
- Where possible, trends shall be identified over the last five years.

Based on the results of this survey and the consultant's expertise, KTDP shall be provided with a calculation methodology in the Task 2 report that shall identify market values of produce per unit of weight or volume and yields in weight or volume per acre to be used for compensation purposes for each annual crop identified. This shall be presented in a MS Excel calculation matrix that shall be provided in electronic version and as appendix to the Task 2 report.

Perennial Crops

The consultant shall:

- Perform a survey of current market prices and yields using the same methodology as described above for annual crops (Annex 5 & 6)
- For each species the consultant shall seek information from the agronomic research and chambers of agriculture on typical growth periods and evolution of yields including tree or plant age

- For each species, propose a simple categorisation of evolution (example: seedling, young non-productive, young productive, mature, old)
- For each species, the consultant shall establish an age category / average yield correspondence (productivity per year for each age group in consideration of long term compensations)
- For each species, the consultant shall establish the cost of seedlings, as well as the cost of initial plantation and annual maintenance until full production is reached
- Calculate the replacement value for each age category and for each species, and present the results in a MS Excel calculation matrix that shall be provided in electronic and as appendix to the Task 2 report.

The consultants shall deliver a draft report on task 2 to KTDP for review 3 weeks after contract award. All baseline information shall be delivered in appendices and in electronic form in predefined format (MS Excel tables).

TASK 3 - Comparison

The consultant shall compare the official unit values for each type of property (Task 1) with the actual current market unit values as determined under task 2 and present a report analysing the information, presenting its sources, and providing a conclusion on (1) whether the official unit values, if existing, meet World Bank replacement costs requirements and (2) the extent of the gap in terms of geography (which tehsils are covered and which are not) and in terms of value (difference between current amounts and replacement values).

The consultants shall deliver a draft report on task 3 to KTDP for review 4 weeks after contract award. All baseline information shall be delivered in appendices and in electronic form in predefined format (MS Excel tables).

Project Assistance to Consultant

Upon commencement of the assignment, KTDP shall provide the consultant with a detailed map that identifies the footprint of the project in relation to the administrative structures in Pakistan (Districts and Tehsil), as well as relevant contact information of government agencies currently available to KTDP.

Deliverables

The consultants shall prepare three reports and present drafts as specified above:

Task 1 report on official valuation rates, presented as draft with all relevant appendices and tables in electronic form 2 weeks after contract award

Task 2 report of current market rates in the Component 1 project area, presented as draft with all relevant appendices and tables in electronic form 3 weeks after contract award

Task 3 report of comparison of official and current unit values in the Component 1 project area presented as draft with all relevant appendices and tables in electronic form 4 weeks after contract award

Task 4 validation of Household Survey results, as draft with all relevant appendices and tables in electronic form 4 weeks after contract award.

ANNEX 4: GRIEVANCE REGISTRATION FORM

THIRD PARTY GRIEVANCE FORM

COMPLAINANT DETAILS

Complainant's name (Or name of a representative for complainant/s)	
Land parcel number (if applicable)	
Complainant's postal address	
Complainant's telephone number and e-mail address (if available)	
Preferred language of communication	
Complainant confidentiality	<input type="checkbox"/> I wish to raise my grievance anonymously <input type="checkbox"/> I request that my identity is not disclosed to anyone internally except the grievance coordinator handling my case
I would prefer if the personnel contacting me is: <input type="checkbox"/> male, <input type="checkbox"/> female, <input type="checkbox"/> gender does not matter	

GRIEVANCE DETAILS

Date of incident:	
Description of incident details (what happened? when? how? where? quantities?)	
Severity	<input type="checkbox"/> One time incident/grievance (date _____) <input type="checkbox"/> Recurring (how many times? _____) <input type="checkbox"/> On-going (currently experiencing problem)
Complainant's request/proposal to resolve grievance (Please explain what would you like KTDP to do to solve this problem?)	
Grievance type (environment, human rights, livelihood, health, legal, property, corruption)	
Level of damage:	<input type="checkbox"/> low <input type="checkbox"/> medium <input type="checkbox"/> high
Additional documentation related to grievance	

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ANNEX 5 VALIDATION WORKSHOP REPORT (NOVEMBER 26, 2013)



Venue

Nazara Hall, Serena Hotel, Islamabad

Purpose

The aim was to present major findings and solicit comments and recommendations on the Environmental Assessment (EA), Environment Mitigation and Monitoring Plan (EMMP), Resettlement Action Plan (RAP), Resettlement Policy Framework (RPF) and other supplemental reports from government and agency level stakeholders including representatives from WAPDA, FATA Secretariat, Provincial Government of Khyber Pakhtunkhwa and other consultants and participating agencies.



Participants

FATA Secretariat: 5 senior officials including departmental directors.

Government of KPK: 7 senior officials from various departments.

WAPDA: 13 senior officials from WAPDA Lahore, Peshawar and Bannu offices.

MMP: 5 members of the KPTD Project team.

ACE: 8 experts and team members.

FORT: 2 representatives.

NESPAK: 14 representatives from the KTDC Project team.

MWH: 17 staff members from the KTDC Project.

USAID: 7 representatives from the donor agency.

Event Snapshot

- The meeting was organized by MWH in Islamabad to facilitate the participation of representatives from Peshawar as well as international staff members of MWH and USAID.
- A total of 78 people participated in the discussions at the event.
- A summary of findings of the major reports compiled by MWH and its sub-contractors were presented to the participants including the EA, EMMP, RAP, RPF, Vulnerable Tribes Plan (VTP), and Cultural Heritage Preservation Plan (CHPP) amongst others.
- The participants were divided into 6 thematic groups to discuss specific topics from the reports and come up with a set of recommendations, suggestions and comments, which they presented for further discussion. The groups included (i) Seismicity and Design (ii) Hydrology and Sedimentation (iii) Irrigation and Agriculture (iv) Watershed Management (v) RAP and RPF (vi) Gender Aspects
- All participants agreed to work together and contribute towards the early commencement of the construction project of the Kurram Tangi Dam.
- The findings of the EA, EMMP, RAP and RPF reports were accepted by the participants for the most part and some valuable comments and recommendations were also presented.
- An overall positive response was seen from all participants on the reports as well as the event.

Main Outcomes

- While the findings of the MWH reports were accepted by WAPDA and other relevant agencies, there were concerns regarding the cost revisions which would have to be budgeted for in light of design review of the project.
- There were major cost concerns regarding changing the specifications of the main dam to account for upward revision in the Maximum Probable Flood estimates. Cost of the project would also have to be revised to account for design changes due to a higher seismic acceleration as suggested in the consultant's report.
- Concerns were also raised about reviewing the dam design in the light of the potentially high sediment yield.
- Recommendations were also made for planning of the command areas of the new canals simultaneously with their construction. Capacity building for the farmers on modern irrigation techniques, water use and rights and grazing rotation methods were also recommended.
- It was agreed that the alignment of canals, roads and the transmission line should be enhanced to avoid structures where feasible
- Working groups also recommended bilateral relations with Afghanistan for watershed management for the Kaitu River as well as reforestation, skills training for local communities, and additional site surveys.

Event Details

After a recitation of Holy Verses by Deputy Chief of Party, Mr. Waheed uz Zaman, the event started off with a welcome address by Mr. Imran Ahmed, Project Management Specialist of USAID, who welcomed the participants and gave an overview of the EA project. Mr. John P. Velon, MWH Vice President, also briefed the guests on the EA project and the roles played by the various sub-consultants and experts on developing the studies and reports.

The first presentation was by Dr. Gorzula, EAKTDC Project Chief of Party, who after outlining the objects of the workshop talked about the Environmental Assessment Report. He informed the participants of the issues and constraints which hindered the development of the studies and appreciated the input of the MWH's sub-consultants.

Presenting the major findings of the EA study, Dr. Gorzula said the major issues seen in Component I of the Kurram Tangi Project include geotechnical aspects, seismicity analysis, increased sediment loads in the Kaitu River, road development and alignments, construction related emissions and waste management, change in river morphology, development of command areas and RAP related issues.



The issues identified in Component 2 include hydrology impacts, increased Probable Maximum Flood (PMF) figures along with the issues identified for Component 1. Similar issues were also part of the study conducted in Component 3 of the KTDC Project along with issues of irrigation management and changes in water quality during construction.

The Senior EA Advisor to MWH, Ms. Charlotte Bingham, presented the findings and major issues highlighted in the EMMP. The principle recommendations of the Component 1 included additional geotechnical investigations and related design revisions, development of command areas, the need for waste management, the need for dredging sediments, and fish surveys.



Recommendations for Component 2 include additional geotechnical and seismic studies, new criteria for major structures, new hydrological criteria for spillway and water management. Issues for Component 3 include additional geotechnical studies, coordination of irrigation infrastructure with command area development, and downstream water management.



This was followed by a tea break after which the participants returned to the hall to hear Mr. Abdul Khaliq Khan and Dr. Izhar ul Haq of WAPDA who gave thoughtful and professional responses to findings of the MWH EA and EMMP efforts. They commented specifically that the seismic and hydrology reports were very professionally done and drew attention to some serious issues especially for the Main Dam in Component 2. WAPDA asserted that it would take these suggestions into consideration. WAPDA also asserted their agreement with the concept of concurrently developing the command areas under the FATA Irrigation Department so that the benefit streams of irrigation could start flowing as soon as possible. Finally, WAPDA acknowledged the unique socio-political situation in the project area and that project implementation should be sensitive to such concerns. John Velon of MWH then thanked the WAPDA representatives for their thoughtful and professionally astute remarks.

MWH Consultant Dr. Kai Schmidt-Soltau then presented the RAP, RPF, VTP, Gender Plan and CHPP. He discussed the permanent and temporary land acquisition for the project, which will result in physical and economic displacement of PAPs in all three Components. He stressed the need to address all social and economic issues as to ignore any aspect may result in resistance against the project from local communities and operational risks. He stressed the need for meaningful consultation with local communities and verified compensation to all involuntarily displaced persons prior to construction.

The major points of the study including compensation entitlements, numbers of physically and economically affected people and households, and an optimized budget for land acquisition and compensation were also highlighted. The number of displaced persons and the compensation budgets were surprising to the participants as they were higher than originally anticipated by the project planners.

Regarding RAP for Component I, he said that the study calls for equitable payment of compensation, detailed design plans, land acquisition strategies, and resolution of existing tribal land disputes. He highlighted that construction of the Kaitu Weir can commence as soon as cash compensation is disbursed and agreements are signed by WAPDA and the FATA Department of Irrigation that those who lose agricultural land receive replacement land as soon as the Spaira Ragha Command Areas are established. In turn, he stressed that other Subcomponents could benefit from a detailed design of linear infrastructure that avoids impacts on houses in order to reduce impacts and associated costs.



For Components 1, 2 and 3, a RPF has been developed, which guides the elaboration of component specific RAPs as soon as the detailed design is available and which in Component 2 will need to focus on the identification of appropriate and acceptable resettlement sites for the physically displaced, and the relocation of the Shrine of Fakir of Shewa. Issues of Component 3 include canal alignments and Command Area Planning to avoid impacts on structures, and that a RAP should be made in the future after financing for the project has been secured and designs finalized.

As far as the VTP is concerned, Dr. Schmidt-Soltau said that participation of local tribes in the decision making process needs to be assured, land disputes resolved amicably, and benefits be provided to local people through rural electrification and local content development and potentially production based benefit schemes. It will also be important to ensure equitable water distribution between the Command Areas, hydropower generation and downstream water needs, as well as within the individual Command Areas to assure the ongoing support from the local Wazir tribes.

Recommendation of the Gender Plan include awareness raising, promoting Islamic laws of female land ownership, strengthening of female education and health infrastructure, psychosocial support for women and livelihoods training and opportunities.



Dr. Schmidt-Soltau also presented an outline of the Cultural Heritage Preservation Plan its recommendations for surveys and studies, moving of artefacts found during construction, realignment of canals to avoid unmovable archaeological finds, monitoring and evaluation of heritage preservation and involvement of the department of archaeology and museums. The need for capacity building and the hiring of qualified staff to assure compliance with national and international standards was stressed.

Following these presentations, the participants were divided into 6 thematic groups to discuss (i) Hydrology and Sedimentation, (ii) Irrigation and Agriculture, (iii) RAP and RPF, (iv) Gender Aspects, (v) Seismicity and Design, and (vi) Watershed Management respectively. Each group included a

Group Leader and a Sector Specialist besides other participants. After 2 hours of discussions, each group presented their recommendations for review by the audience.

Seismicity and Design Group - Main points highlighted by the Seismicity and Design Group included recommended increase in seismic acceleration from 0.2g to 0.8g as the basis for design and the need for further studies to verify workability of the Probabilistic Seismic Hazard Analysis equations. The group asked for verification of studies for optimization and stated that the project costs would increase substantially.



Watershed Management - The Watershed Management Group recommended bilateral relations between Pakistan and Afghanistan for watershed management of the Kaitu River, reforestation and capacity building of the local communities in environment preservation, flushing mechanisms for the Kaitu Weir, archaeological surveys, site studies, and studies in erosion.

Hydrology and Sedimentation - The Hydrology and Sedimentation Group talked of design revisions due to increased PMF estimates in view of updated figures for Probable Maximum Precipitation, potentially higher sediment yield, sediment sampling programs, and small dams along the Thal Canal alignment and review of the associated command area.

RAP and RPF - The RAP and RPF Group discussed the findings from the series of consultations with local communities in all three Components and recommendations on demands made by PAPs on local employment in the project construction, provision of free electricity, modes of compensation, and various other mitigation measures.



Irrigation and Agriculture - The Irrigation and Agriculture Group recommended planning of command areas, equitable water distribution, water rights for downstream users, supply based irrigation rather than demand based, a drainage component along with command area development, upgrading of existing canals infrastructure, cropping patterns to match water supply, a switch to

modern irrigation techniques, monitoring of water tables for waterlogging management, development of tube wells, concrete lining of irrigation channels, capacity building for local farmers and introduction of grazing rotation methods.



Gender Aspects - The Gender Aspects Group recommended upgrading of female related procedures, and development of an organogram and specific TORs for the Gender Aspects implementation team.

While some issues were raised by participants in the course of discussions following these presentations, no major dissent was seen and majority of the participants agreed to the summaries of the reports and group recommendations.



Participants were given certificates and souvenirs to acknowledge their participation in the consultation and disclosure workshop.