



**FEDERALLY ADMINISTERED  
TRIBAL AREAS (FATA)**

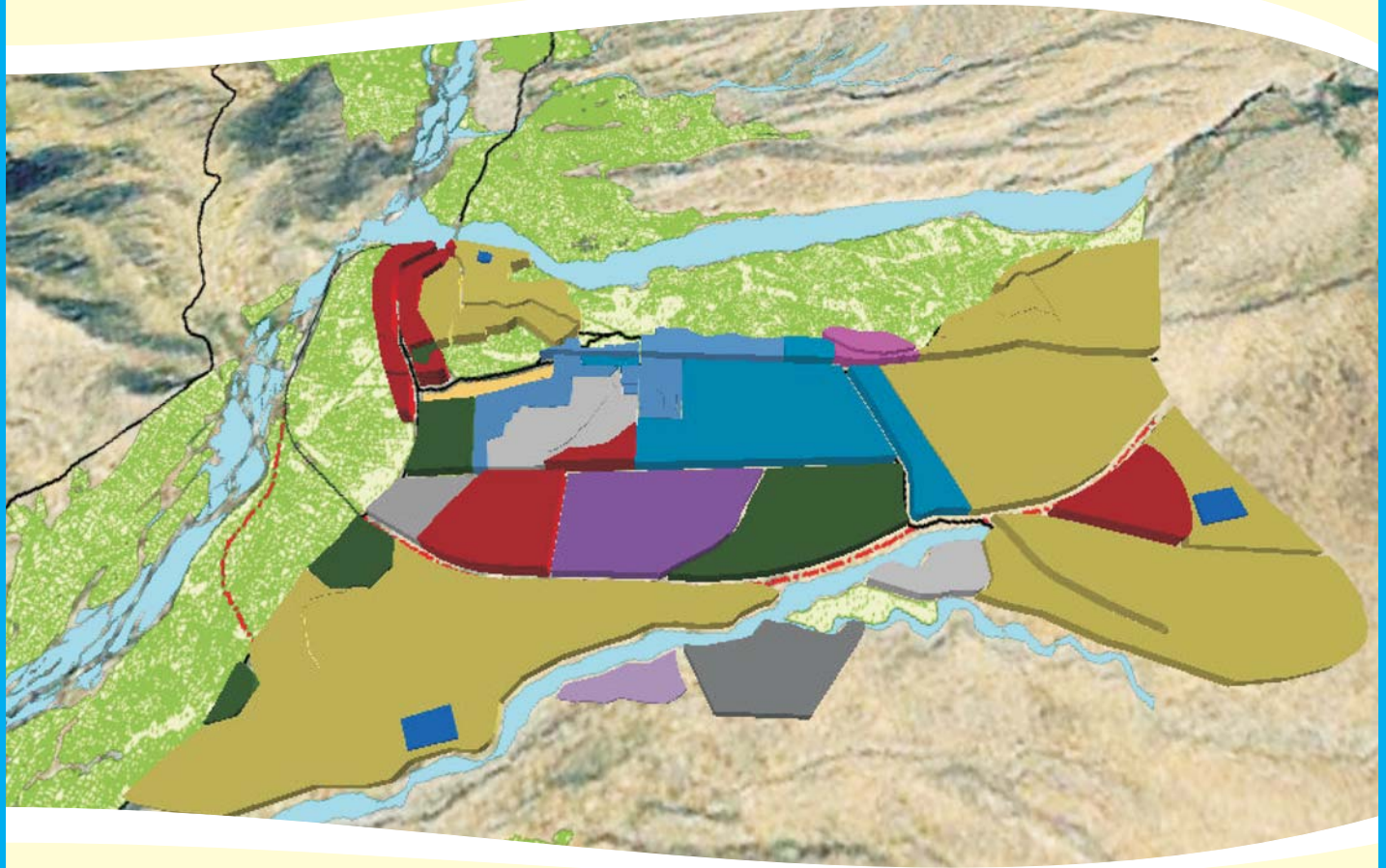
FATA Secretariat, Peshawar



**FATA URBAN CENTRES PROJECT  
(FUCP)**

Tribal Areas Rural-to-Urban Centres  
Conversion Initiative (TARUCCI)

## **SPATIAL / STRUCTURE PLAN FOR SADDA, KURRAM AGENCY**



### **FINAL STRUCTURE PLAN REPORT**

**September, 2015**



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## **SPATIAL/STRUCTURAL PLAN REPORT FOR SADDA, KURRAM AGENCY**

### **EXECUTIVE SUMMARY**

#### **INTRODUCTION:**

The FATA Urban Centers Project (FUCP), started with the assistance of World Bank, falls under the umbrella of the Tribal Areas Rural-to-Urban Centers Conversion Initiative (TARUCCI). The FUCP aims to contribute towards the priority recovery and rehabilitation needs of FATA, identified under the Post Crisis Needs Assessment (PCNA, completed in 2010). It will become a vehicle for social and economic transformation in FATA through provision of better connectivity, employment opportunities, and a range of basic services in its towns and cities to enable them to become engines of economic growth.

The TARRUCI has appointed planning consultants to assess the existing services available in the major towns of FATA and produce an overall planning framework that can be used to guide the immediate and long-term development of the town. The primary objective of this consultancy is to develop spatial/structure plan for the development of Sadda town, taking account of the projected population growth, possible economic development scenarios, the need to serve existing and future population and other relevant factors.

#### **HISTORY:**

Kurram Agency is named after Kurram River that passes through it. Kurram Agency has a rich history and over the years, has been part of Mughal Empire, then Afghan Kingdom and after the World War II, came under British rule with fair amount of autonomy exercised by the local tribes. The main tribe, Turi/Bangash, remained more concerned with Upper Kurram and exercised limited control in Lower Kurram, where Sadda is located, aimed only at keeping the main trade routes secure and open. There has been a sectarian divide between Upper and lower Kurram, but the Taliban Militancy resulted in a severe conflict, which was successfully resolved by armed forces. After the resolution of the conflict in August 2012, the area has been declared as militancy free and travel restrictions have eased considerably.

#### **GEOLOGICAL CONDITIONS:**

Kurram Agency area is rich in minerals such as soapstone, dim stone, rock salt, marble and coal. Soapstone is available in industry feasible quantities, but it is yet to be exploited.

#### **GEOGRAPHICAL SETTING:**

According to the Assistant Political Agent, Lower Kurram, the present boundary of the MC Sadda is covering an urban area of 3,500 acres (14.16 square kilometers).

The town of Sadda is located on latitude N 33 42' 21" and longitude E 70° 19' 42" at an elevation of 1,213 m (3,980 ft) from the mean sea level. Sadda is located at a distance of 42 kilometres from Thall on Thall-Parachinar Road, 148 km from Kohat and 216 km from Peshawar. The town is located on a protrusion of Pakistani territory, and it is closest route to Afghanistan via Shukro border.

## DEMOGRAPHIC CHARACTERISTICS:

Most of the Sadda population belongs to Orakzai, Zaimusht and sunni Bangash tribes. According to 1998 census, Pashto is the most predominant language spoken by 98.6% of population. People are deeply religious minded, staunch Muslims and patriotic Pakistani. Most of the people are doing business, jobs and farming in the town. Around 40% of the present population is out of the town or country due to their business, jobs and security reasons.

Present population of town estimated by Political Agent is 54,559. Estimates by other methods give different figures such as 55,499 by counting of housing blocks on GIS map and 64,975 by number of legal electric connections. From these estimates, the Consultants recommend to take 55,000 as population of 2014. For future population three different projections have been made i.e. 84,000 @ AGR 2.14%, 93,525 @ AGR 2.69% and 111,573 @ AGR 3.6%. Since Sadda is being planned to be an economic, institutional and administrative hub of Lower Kurram Tehsil, a significant in-migration can be expected from the rural areas of Lower and Central Kurram in particular and Kurram Agency. Therefore Consultants estimate that population of MC Sadda could reach around 94,000 by 2034 @ 2.69% AGR for the next twenty years.

## LAND USE:

The land use distribution of Sadda town is typical of a secondary town with large administrative, social services and commercial activities. Spatially, the town can be divided in four land use zones, as shown on the Zonal Map, Map # 03.

**Zone "A": the main Commercial Area:** Zone A is main trade and commercial centre of the town, situated along both sides of Thall-Parachinar Road. This zone also includes some government offices as NADRA Office, Post Office, Court/Kacheri.

**Zone "B": the Old Town Area,** is bounded by the Commercial Zone A in the west, Khurmana River in north, Cantonment Area Road in the south and agricultural fields in the east. The building density in this area is comparatively high with low height residential area also including some schools. The area is prone to floods and the worst affected is the primary school area.

**Zone "C": the Institutional Area:** it is the town's main institutional and administrative centre. It lies along both sides of the Cantonment Area Road between Zone A and Ajab Khan Chowk in the west and Sateen Village in the east. This Zone includes major public uses as main administrative buildings, FC Fort, Vocational/Technical College, Tehsil Head Quarter Hospital, Govt Degree College, Grid Station Colony, CW Quarters and Offices, APA Lower Kurram Colony, APA Central Kurram Colony, Irrigation Office, Zakat Office, Education Office, Tablighi Markaz and Cantt /Chhawani area.

### Zone "D" Housing Clusters,

**D1 Sateen and Shaheen Clusters:** This zone is situated at the north east of town area, which consists of two large housing clusters Sateen and Shaheen, with scattered medium and small size plots. This is relatively new housing development. In south east, there is also a big abandoned refugee camp.

**D2 Pir Qayum:** This zone is situated at the south of the main town and east of the Thall-Parachinar Road. Whole of the areas consists of scattered housing with low height. The main village has small shops and large open areas between housing clusters.

## VISION:

Sadda is visualized as a model, eco-sustainable modern city, a focal point of social and economic services delivery to large local and regional population and a symbol of good local governance.

## URBAN STRATEGY:

Sadda basically developed on the confluence of the Khurmana River and Thall–Parachinar Road (TPR). The regional trade on TPR and fertile agricultural lands around helped Sadda’s growth. Later establishment of a cantonment, public administration buildings and community facilities on an easterly road leading to Sateen and Shaheen Villages, became a second axis of urban growth and health-education and government offices, were built on both sides of this road generally known as Cantonment Area Road forming a ‘T’ junction with the commercial development. In order to avoid strict checking on the Cantonment Road, a parallel by-pass road, south of Cantonment Road has been proposed, which further east turns into Dogar Road providing connectivity with the central Kurram Area.

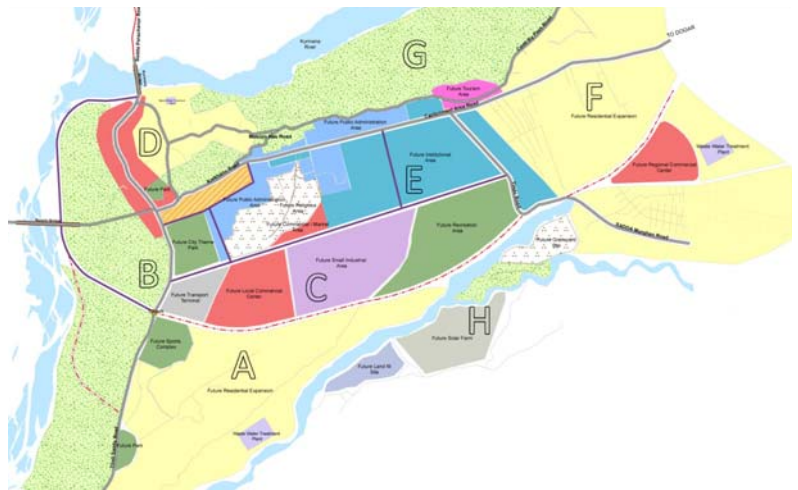
The main issues relating to urban development in Sadda are:

- i. Ribbon commercial development on both sides of TPR
- ii. Extreme congestion on the TPR during business hours
- iii. Unavailability of land on either side of TPR for widening of road
- iv. Overstretched linear development along Cantonment Road, resulting in long distances among housing clusters and between housing clusters and the commercial development along TPR.
- v. Integration of Sateen/Shaaheen and Pir Qayum, having long distances in between, into urban structure

### • **Spatial Strategy**

The spatial strategy for Sadda would be:

- i. Decrease congestion on the TPR passing through the commercial development
- ii. Given the constraints on the availability of land, shift some local commercial activities away from this road to elsewhere in the town in properly planned markets
- iii. Shift remodelling auto workshops to planned small industries estate
- iv. Provide By-pass to TPR to shift through traffic away from the existing congested commercial area.
- v. Improve connectivity among housing clusters
- vi. Consolidate dispersed development and encourage compact neighborhoods self-sufficient in community facilities





- **Spatial Plan**

The recommended model of this town is “overall consolidation within the developed area and to discourage further spatial sprawl”.

The proposed spatial pattern is characterized by the major road network. Thall Sadda road (part of TPR) will remain the main artery but from PSO pump to Parachinar Taxi Stand, it will be categorized as urban road. Cantonment area road is the major road that is starting from the F.C check post towards the Ajab Khan Chowk on East, connecting all major institutions.

In order to reduce the traffic congestion in the old town area, immediate bypass road is being suggested which will be completed in two phases. In phase-1 Bypass road is originating from the north-west of the Khurmana Bridge along the river bank rejoining the TFR south of existing Mehmood’s market. In phase two bypass road will extend to the FC check post near Pir Qayoom through which all the heavy traffic including Afghan trade traffic will bypass the old town and cantonment area.

Another dual carriageway is being suggested to reduce congestion from the main Cantonment Road from south of PSO pump to the Dogar Road east of New Durrani Camp. Proposed road will be the hub of all commercial, industrial and institutional activities. Dualization of existing roads is being suggested including Thall-Sadda road from PSO pump to Khurmana Bridge and Cantonment Road from Ajab Khan Chowk to Dogar road.

## **ECONOMIC DEVELOPMENT:**

- **Agriculture**

Sadda’s economy is agriculture based with significant potential for Maize, Rice, Potato, Tomato, Groundnut, Turnip, Onion and Pulses. Besides, new cash crops and fruit orchards can be developed with some assistance from the Agriculture Department, resulting in substantial increase in incomes.

Agriculture production will depend on availability of irrigation water. Besides increase in the number of solar tube wells, supply will have to be increased by construction of check/recharge dams, and reuse of waste water.

Farmers will need to be helped with the marketing of their produce at the best price, by increasing their holding capacity and providing warehouses and cold storages.

- **Livestock**

The livestock farming provides additional income support to many households of the area. Ownership of livestock is completely private and governed under customary law. There is a need to initiate a project for on-farm delivery of veterinary services. Awareness, trainings and facilitation for cooperative farming, loans to cattle and sheep farmers and other measures to be adopted for livestock development.

- **Fisheries**

In Kurram Agency approximately 1,824 acre area is used for fisheries. Government has developed trout hatcheries in Malana and Shablan. Trout fish is in high demand and trout farming should be expended. Development of ice factory and cold chain should be facilitated for marketing of trout fish at least upto Peshawar.

- **Poultry**

Poultry products are in big demand in Parachinar, Sadda and surrounding areas, but no poultry farms exist there. The local demand for poultry is met through import of chicken and eggs from other areas. The private sector should be encouraged to establish the poultry farms on household and industrial basis

- **Industries**

Sadda has a number of highly skilled artisans and craftsmen. Specially blacksmiths, carpenters, furniture makers, electricians, mechanics and several small workshops exist in Sadda. It is necessary to provide serviced land for industrial development so that various workshops spread all over the city could be shifted.

There is a scope of establishing small scale industrial units for stone processing, wooden furniture, auto repairs, mechanical/electrical shops, ice factory, food processing, rice husking and ghee making etc.

- **Trade and commerce**

The town is close to the main trade route to Afghanistan. The main export of this area is potatoes and tomatoes, while grapes, other seasonal fruits and household goods are imported. A large number of shops and branches of major banks in Sadda point to brisk business climate. The main market area is very congested and relocation of some of the wholesale markets and workshops is proposed. Security, drainage, parking, power supply and streetlights are the major needs of the existing market area.

- **Mineral Development:**

No minerals have been discovered within the limits of Sadda town. However, some mineral are discovered in surrounding areas such as, soaps stones, marble, magnetite, rock salt, coal and industrially feasible dolomite deposits. The mineral potential of this area has remained unutilized. The PMDC should initiate projects for marble and soap stone exploitation

- **Tourism**

Sadda & Parachinar have all the ingredients to become famous summer tourist destinations such as scenic views, pleasant climate, hospitable people and good connectivity with large towns. Security issues, lack of tourist infrastructure, specially hotels and recreational sites, are the main constraints. The private sector should be facilitated to develop tourist infrastructure while the government will need to ensure security. Tourism has a multiplier effect and can boost up the economy of the area.

## **SOCIAL DEVELOPMENT:**

- **Housing:**

According to 1998 census, there were 1,474 housing units with average household size of 11.5 persons. At present, there are more than ten residential colonies in the town, almost all are legal and no informal housing has been found in the town, although Kacha houses exist in less privileged areas within the Sadda MC.

At present some 4,800 houses of different types are available, while until 2034, additional 5,200, housing units will be required. The land requirement for additional housing will be approximately 260 acres, which can be easily met by infill in the existing residential areas and by planning townships in designated residential zones. The land acquisition problems can be avoided by encouraging formation of cooperatives of land owners to pool land for the development and building of housing.

- **Health Facilities**

At present, there are 37 different types of health facilities in Lower Kurram. A THQ hospital with 160 beds and only 15 doctors serve the population, where as, the sanctioned strength of doctors is 38. Presently, the town has sufficient number of beds. By 2034, the total requirement will increase from 160 to 190 @ 2 beds per 1000 population. The satisfaction level of public is low. The shortage of medical and paramedical staff, maintenance of equipment and buildings, addition of missing facilities (like waiting rooms in THQ) and power load shedding are the major problems, which will need to be solved immediately.

- **Education Facilities**

The existing situation in education sector in Sadda is comparatively better than in other agencies of FATA. There are three colleges, 15 schools with 127 class rooms and 7,829 students in public sector schools. But on the basis of present enrolment, the number of class rooms should be doubled. The school and college level enrolment ratio at present is 38% and 9% respectively. In the next 20 years, this ratio is recommended to be 76% and the average class room density is proposed to be 30 students per class room. The structures of government primary and secondary schools are old with poor maintenance and lacking water supply and toilet facilities.

- **Recreational**

The town appears to be well provided in terms of sports facilities having cricket and football ground but there is no family park where female population and families can freely enjoy open air.

Structure Plan proposals include the development of a family park, amusement park, and later a theme park associated with the city garden.

- **Religious places and graveyard:**

About 80% of the population belongs to Sunni sect of Islam. There is only one large land area dedicated for Eid Gah located at Masozo Road opposite the APA lower and central Kurram offices. A very large area has recently been allotted to 'Tablighi Markaz' in Sadda near APA Colony.

## **INFRASTRUCTURE DEVELOPMENT:**

- **Transportation**

Sadda is connected through two land routes with the rest of country and with Afghanistan. It has the road link with the rest of the country through Thall-Parachinar Road (TPR). Sadda town is situated on main TPR road. In the city center, there are problems of traffic congestion, haphazard parking, and mixed traffic. The congestion is proposed to be released through dispersal of some of the activities outside the city centre, regulation of taxis and car parking and management of traffic flow.

The plan proposes two major roads to rationalize future traffic flow: a proposed bypass road which is proposed to be completed in two phases. In first phase, bypass road originates from the Khurmana Bridge and running south along the river meets the TPR again south of Ajab Chowk . In the second phase, the bypass is extended further south to the FC check post near Pir Qayum. The plan also suggests that Right of Ways of major road should be notified and strict control should be exercised by the MC to stop encroachments on roadsides.

Another dual carriageway is being suggested to reduce congestion from the main Cantonment Road from the PSO pump to the Dogar Road west of New Durrani Camp. Proposed road will be the hub of all

commercial, industrial and institutional activities. Dualization is also suggested for TPR PSO pump to Khurmana Bridge and Cantonment Road from Ajab Khan Chowk to Dogar road.

- **Water Supply**

At present 215,000 gallons of water is supplied to almost half of the town's population through 9 tube wells. The remaining population meet their water needs through dug wells, public stand posts or purchase water. The population connected with the system, on average gets 8.7 gallons per capita per day. The future water demand for the estimates population in 2034 works out to 1.41MGD. The water demand is proposed to be met by solarisation of existing tube wells, installation of new solar tube wells, and increasing surface water supply through small dams and infiltration galleries on the Kurram River.

- **Sewerage and Drainage System**

In Sadda, there is a combined system of sewerage and storm water drainage. Only about 45% of the town is served by a combination of open drains, sewers and covered collector drains. Waste water disposal is in the agricultural fields or in the river without any treatment. Waste water discharge at present is estimated as 150,000 gallons per day and it will increase in future with the increase in population and per capita water supply. For next 20 years, more drains will be required for the estimated wastewater discharge, which will be 330,000 mgd.

The structure plan suggests full coverage of the town with proper drains in the short term and phase-wise provision of the piped sewers in the long term.

- **Solid Waste Management**

Solid waste collection and disposal is almost non-existent as MC's meagre financial and human resources are a major constraints. Currently, solid waste generation is estimated as 14 tons per day requiring a landfill site of 0.7 acres. Waste generation for 2034 population is estimated as 47 tons per day requiring 04 acres for landfill area.

As immediate action, the MC should install rubbish bins at suitable locations and arrange for equipment/POL for collection and disposal. Communities could be mobilized to manage the sanitation of their own neighbourhoods.

In the long term, specialized waste management company may be invited to collect and recycle waste at a profit on the basis of 4R solid waste management system (Reduce-reuse-recycle-reject).

- **Energy**

WAPDA/FESCO is the power supplier in the town. There are 6,633 legal connections in the town. Present supply of electricity is 19 MW. By the end of 2034 energy, demand will be 40 MW. As the power supply from the national grid will remain uncertain, solar energy or small hydal generators may be the most economical and efficient solution of the energy crisis. An energy study needs to be undertaken immediately. In the meantime, solarisation of street lights and tube wells should be undertaken on priority basis.



## SPATIAL/STRUCTURAL PLAN REPORT FOR SADDA, KURRAM AGENCY

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### **LIST OF ABBREVIATIONS**

FATA	-	Federally Administrative Tribal Areas
FATA DA	-	FATA Development Authority
FDMA	-	FATA Disaster Management Authority
FUCP	-	FATA Urban Centers Project
GIS	-	Geographic Information System
GOP	-	Government of Pakistan
TDPs	-	Temporarily Displaced Persons
IUCN	-	International Union for Conservation of Nature
LG&RDD	-	Local Government & Rural Development Department
MC	-	Municipal Committee
MDTF	-	Multi Donor Trust Fund
MW	-	Mega Watts
NRM	-	National Reference Manual
PCNA	-	Post Crisis Needs Assessment
P&D	-	Planning & Development, FATA Secretariat
PESA	-	Pakistan Emergency Situational Analysis
PID	-	M/s Partners in Development
PMU	-	Project Management Unit
PTCL	-	Pakistan Telecommunication Company Limited
TARUCCI	-	Tribal Areas Rural to Urban Centers Conversion Initiative
TESCO	-	Tribal Electric Supply Company
TPMU	-	TARUCCI Project Management Unit
WAPDA	-	Water and Power Development Authority
USAID	-	U.S. Agency for International Development

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# **PART – I**

## **PROJECT CONTEXT**



## PROJECT CONTEXT

### 1. BACKGROUND<sup>1</sup>

The recent crisis in FATA is not a result of any short term events or a policy, but this is a result of years of negligence, regional instability and poor governance. The political and administrative set up of British era, Cold War regional dynamics, easy availability of weapons, radicalization in the post nine eleven (9/11)<sup>2</sup> era and the coalescing of disparate groups around extremist ideologies, contributed towards the development of present crises in FATA. The situation is further compounded by years of marginalization and inequity in FATA that is still prevailing under the current legislation.

Militants in FATA have exploited the poor socio-economic conditions and frustrations of the local population over the existing corruption and decades of weak governance, to their advantage by involving them ostensibly in the religious war. This has resulted in destabilization of the region and exposing the local population to even greater vulnerability, as the lack of livelihoods has increased poverty, making it easier for the population to be exploited by the extremists.

Since independence, FATA has not been given the same priority with regard to development initiatives as other parts of the country. Most development initiatives and allocations in FATA are normally concentrated around sectoral facilities benefiting few influential and politically active sections. This approach has deprived large segments of the population of social uplift and economic empowerment.

The socioeconomic indicators of FATA suggest, that it is one of the poorest areas of the country. FATA consistently ranks lowest in Pakistan with respect to key human development indicators in health, education, water supply, sanitation and other critical sectors. The key reasons for this historical socioeconomic under-development are resource and capacity constraints; lack of infrastructure; scarce economic activities; socio-cultural barriers and law and order situation.

It has been argued that religious extremism and terrorism are the direct outcomes of the underdevelopment of this region. To curtail the militancy and to re-establish Government's writ in the area, it is necessary to improve the present system of governance in FATA and improve the socio-economic conditions of the local population by bringing-in necessary changes.

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<sup>1</sup> Social Transformation through Urbanization, TARUCCI, FATA Secretariat Peshawar

<sup>2</sup> 9/11 refers to September 11, 2001 bombing of World Trade Centre, New York, USA

The analysis of existing population trends and patterns in FATA reveals, that the population in FATA is very scattered which is not very conducive to the provision of utilities, facilities and modern conveniences in an efficient and cost effective manner. In order to overcome this problem, the existing rural-tribal society needs to be encouraged to move into more concentrated population centers so that necessary modern facilities and conveniences can be provided to them in a cost effective manner. The dispersed rural population and hamlets can be provided with civic services more effectively in selected urban areas with good road linkages with the catchment areas. These need to be upgraded in a planned manner to become hubs for the delivery of urban services. That is the concept behind “Tribal Areas Rural to Urban Centers Conversion Initiative” (TARUCCI), with an objective to provide post conflict rehabilitation, under FATA Urban Centers Project (FUCP).

## 2. FATA URBAN CENTERS PROJECT

The FATA Urban Centers Project (FUCP) falls under the umbrella of the Tribal Areas Rural-to-Urban Centers Conversion Initiative (TARUCCI). The FUCP aims to contribute towards the priority recovery and rehabilitation needs of FATA, identified under the Post Crisis Needs Assessment (PCNA) completed in 2010. It will become a vehicle for social and economic transformation in FATA through provision of better connectivity, employment opportunities, and a range of basic services in its towns and cities to enable them to become engines of economic growth. The FUCP has the following components:<sup>3</sup>

### 2.1 Priority Infrastructure Investment Projects

This component will support priority infrastructure investments in FATA, focusing first on Khar in Bajaur Agency then replication in other agencies in FATA including Parachinar and Sadda in Kurram Agency. The agreed universe of infrastructure projects to be supported under this component includes expansion or upgradation of municipal infrastructure and services including water supply, solid waste, streetlights, drains, parks, and roads for the existing population of urban center. The criteria utilized for identifying these prioritized investment projects will include:

1. The established need for the targeted service within the existing populations in conformity with an overall strategy and plan for improving infrastructure services in the town;
2. Sub-project readiness for implementation;
3. Availability of adequate implementation capacity;
4. Capacity to operate and maintain facilities after implementation.

In the event that capacity to operate and maintain facilities is not currently available, there will be a need to identify the steps needed to develop this capacity by the time the proposed projects are ready to be commissioned.<sup>3</sup>

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<sup>3</sup> Extract from the Project's Term of Reference

### **3. APPOINTMENT OF CONSULTANT**

TARUCCI, FUCP has appointed a Planning Consultant to prepare Structure Plan to provide a framework for future investment in urban infrastructure.

The Planning Consultants are required to assess the existing services available in the town and produce an overall planning framework that can be used to guide the immediate and long term development of the town. This exercise would be conducted in close coordination with the concerned stakeholders at the Agency, Municipal and FATA Secretariat levels, as required.

The primary objective of this consultancy is to develop Structure Plan for the future development of Sadda town, taking account of the projected population growth, possible economic development scenarios, the need to service existing and future development and other relevant factors. The planning approach should take account of physical and institutional constraints, existing conditions, the availability of financial and human resources and all relevant policies, laws and government directives. More particularly, it should provide early guidance as to the best investment options to bring about immediate improvements in living and working conditions in Sadda.

The structure plan will provide a framework to guide the sustainable socio-economic and infrastructure development of the city and environs. The planning process will:

- Propose a long term development plan.
- Prepare sectoral development plans.
- Provide short term action plans for public investment.
- Suggest a sustainable local governance structure.

The structure planning consultancy will be followed up by an engineering consultancy for the preparation of engineering design of infrastructure facilities identified by the Structure Plan for their subsequent execution.

## **4. METHODOLOGY**

### **4.1 Approach**

The Consultants have formed an in-house multidisciplinary team of experts and support staff. Expert inputs will be ensured as per the proposed man-months given in the Request for Proposal. Soon after the award of the contract by the Client, the Consultants had a kick off meeting with the Client to clarify the understanding of the projects, scope of work and to refine the work plan. Most of the analytical and strategy formulation work will be done at Consultant's head office at Karachi, while field work and primary data collection will be done by associate's office in Peshawar and Sadda. During the execution of the project, a liaison person resident in Sadda will attend to the requirements for any additional information or physical verifications.

### **4.2 Main Tasks**

#### **Identification of Stakeholders**

Following focal groups have been consulted in order to evaluate the needs and priorities of various sections of the community, and to address their concerns in the development of the future spatial / structural plan:

- Community Elders
- Welfare Society Members
- Female Population
- Health Sector
- Education Sector
- Government Employees
- Agriculture Sector
- Businesses Sector (Shops, Hotels, Industry)
- Transportation Sector

Dialogues were conducted with various stakeholders of the city, to have better understanding of existing socio-economic and development conditions. The dialogues helped in getting their vision, level of knowledge, awareness and commitment for development of the city.

Assessment of the following was kept in mind while carrying out the focal group discussions at Sadda, Kurram Agency:

- Status of available resources.
- Priorities and needs identification.
- Gap between the available and the required Resources.
- Suggestions from the stakeholders in addressing the gaps between the existing and the required resources.
- Willingness to the implementation of the plan.
- Willingness to taking responsibilities in the development of the city.
- Willingness to resolve sectarian issues through peaceful means.
- Suggestions for mitigating sectarian rifts.

The Consultants had visited public offices and met the stakeholders and decision makers. A detailed list of persons consulted is given in Annexure – A.

### **Collection of Information**

The Consultants collected data from primary sources as well as secondary sources. For the primary data, a sample socio-economic survey was carried out in Sadda to get a snap-shot of current demographic and physical housing conditions, which will be compared to historical data available through other secondary sources (Census 1998) to indicate trends. The secondary source data has been analyzed and utilized to set up baseline indicators in housing, social amenities, (education, health, recreation, etc.), basic utilities (water supply, sewerage, drainage, energy, etc.), infrastructure (roads and streets).

A list of documents collected for this purpose is enclosed as Annexure-B.

### **Preparation of Digital Base Map**

The Consultants ordered high resolution (0.5 m) imagery from the recent archives. A digital base map has been developed and GIS analysis on different layers has done.

The Municipal Committee or any other agency, was not able to provide a map showing the present Municipal boundary. The Political Agent's office and Chief Officer, Sadda Municipality have both provided the area within the MC limits as 3,500 acres. The exact limits and names of the villages to be included in the MC boundary has not been notified yet.

As Task (made to order) satellite imagery would have long delivery period the Digital Satellite imagery from the recent archives was ordered from Digital Globe as per the following specifications:

Area:	31 sq km
Imagery:	30/01/2014
Bands:	4 band Pan-Sharpended
Bit depth:	16 – bit
Pixel Resolution:	50 cm (0.5m)
Spatial Reference System:	
Projections:	UTM
Datum:	WGS 84
Coordinates	WGS 84 geographic

The satellite imagery was subject to GIS analysis on ArcGIS and Verification on site and a base map was produced with 25 layers.

#### **Field Studies / Primary Data Collection**

In pursuit of data collection activities, Consultant's teams with senior experts of the Project Team visited the town several times. A senior engineer, resident of Kurram Agency, has been appointed as coordinator to provide liaison between the local officials and the project team. The following activities were carried out during the field visit:

- Structured household interview in selected communities
- FGDs with the target groups
- Drinking water sample testing
- Establishment of GPS coordinates, for different Control Points, for the preparation of base map
- Interviews with stakeholders
- Baseline data for various facilities

The Project Team organogram of the Consultants is attached as Annexure-C.

The detail Focal Group Discussion with different Stakeholders is attached as Annexure-D.





## **PART – II**

### **INTRODUCTION TO SADDA, KURRAM AGENCY**

## PART – II

### INTRODUCTION TO SADDA, KURRAM AGENCY

#### 1. INTRODUCTION

The conflict in FATA has affected Kurram Agency as it has affected the rest of FATA. It is evident that after such a massive upheaval caused by the militant insurgency, sectarian strife and consequent operations for re-establishment of government's writ, the present system of governance seems to have lost its effectiveness thus necessitating a paradigm shift both in governance and socio economic approaches.

##### 1.1 Federally Administered Tribal Areas (FATA)

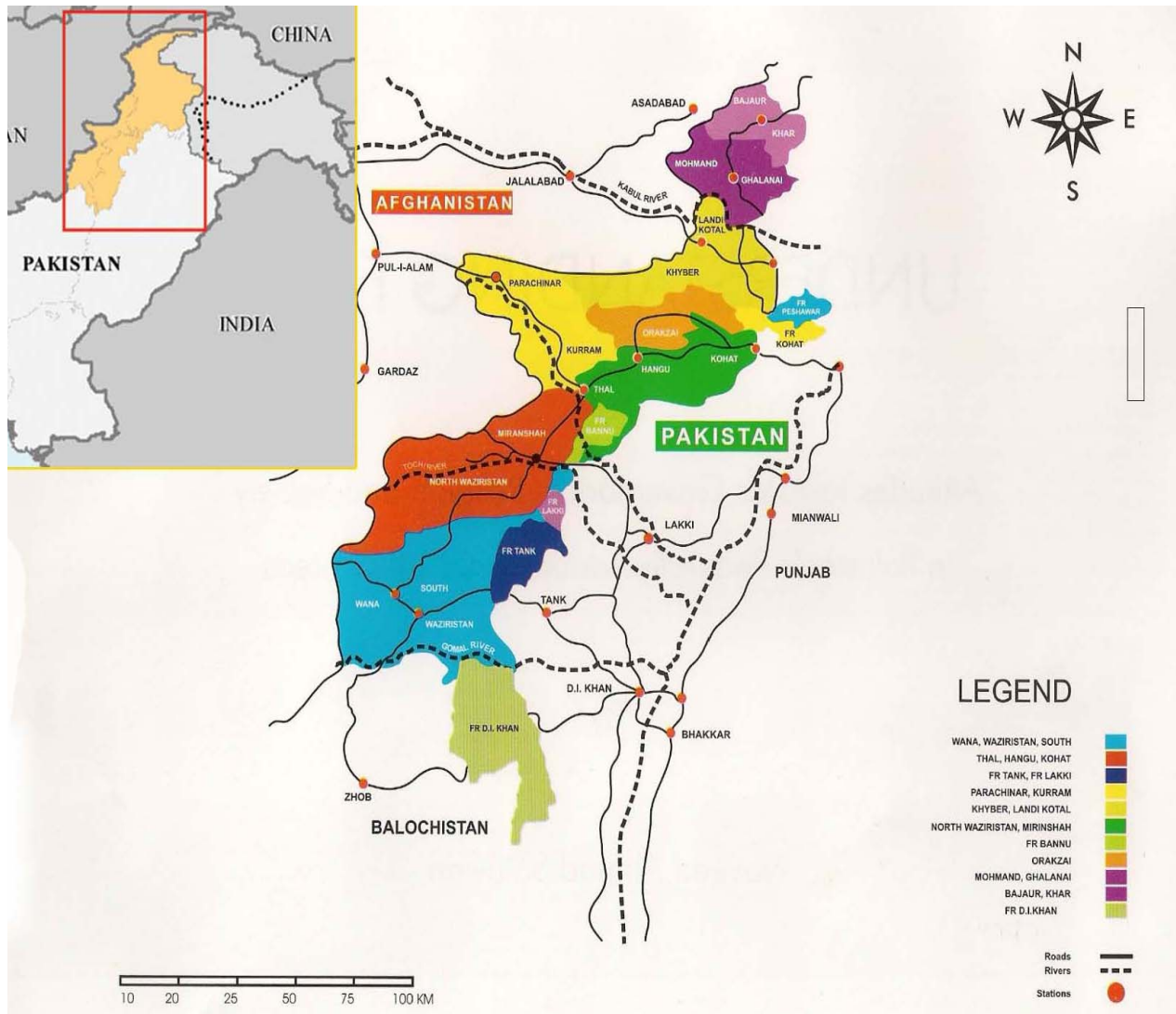
The Federally Administered Tribal Areas (FATA) is a semi-autonomous tribal region in the northwest of Pakistan. It is bounded by Afghanistan's provinces of Kunar, Nangarhar, Paktia, Khost and Paktika to its west and north, Khyber Pakhtunkhwa to its east and Balochistan to its south.



**Source:**

- United States National Imagery and Mapping Agency Data
- World Data Base II

FATA comprises of seven tribal agencies, namely: Bajaur, Mohmand, Orakzai, Kurram, North Waziristan, South Waziristan and Khyber and six Frontier Regions (FRs) namely: FR Peshawar, FR Kohat, FR Bannu, FR Lakki, FR D.I.Khan and FR Tank. These are directly governed by Pakistan's federal government through a special set of laws called the Frontier Crimes Regulations (FCR).



The territory is almost exclusively inhabited by the Pashtuns, who also live in the neighboring Khyber Pakhtunkhwa and Afghanistan and are devoted Muslims. Main towns of FATA are Parachinar, Miranshah, Razmak, Kaniguram, Wana, Kalaya, Landi Kotal, Ghalanai and Khar.

The inhabitants in each Agency are divided into tribes and sub-tribes, who fiercely maintain their independence and identity. Elders of tribes have strongholds on the tribes and settle matters among them. Feuds among the tribes are not uncommon, which if not settled mutually, are referred to Political Agent, who solves them through the Jirga.

Pakhtun culture and heritage embodied into the pakhtunwali custom is jealously guarded by all tribes and all individuals. Tribal rivalries have made the people very security conscious and they live in houses, which are far apart with high boundary walls and garrets. Sometimes the extended families live within the same fortification. The fortified complexes or houses are dispersed over a large area in villages. Traditionally, the distance between the houses was to keep the homes far enough to be out of the range of the neighbor's guns.

The militancy in the tribal areas is further exacerbated by sectarian strife in the Kurram Agency and law and order remains fragile as under the seemingly peaceful surface, the sectarian under currents are visibility strong.

Although girls' education is not frowned upon, women folk are expected to stay indoors. Even when they venture outside, they have to be fully covered from head to toe burqa and always in the company of the spouse or close relatives. The tribal attitudes toward women a folk in Kurram Agency seems to be comparatively soft.

## 1.2 Kurram Agency

Kurram Agency takes its name from the river Kurram which passes through it. Presently Kurram Agency comprises of three administrative sub divisions (Tehsils) namely:

- i. Upper Kurram
- ii. Lower Kurram
- iii. Central Kurram



The Upper and Lower Kurram have long been under agency administration and record exists for most of the farmed area in these two Tehsils. In Central Kurram however land settlement has not been carried out. Until 1974, it was called Frontier Regions Kurram; and remained inaccessible terrain. A portion of its territory forms part of Tirah, and from old maps (mid-1960s and earlier), it appears that the said part, at least nominally, belonged to Khyber Agency.

Most of the agricultural wealth and all the government staff working in the Agency are based in two Tehsils - Upper Kurram and Lower Kurram. Central Kurram Tehsil remains the least tractable and its level of development lags substantially behind the other two Tehsils but efforts are being made by the local administration to bring it at par with the other areas. Recently,



there is substantial interest in development projects in Central Kurram and some access roads have been constructed.

### 1.3 Settlements

There are 164 villages in Upper and Lower Kurram and over 100 in Central Kurram. Chapri, which is physically located in Kohat, somehow comes under Kurram Agency jurisdiction.

Kurram Agency has three important towns:

- i. Parachinar
- ii. Sadda.
- iii Dogar

**Parachinar** lies in Upper Kurram and is the administrative headquarter of Kurram Agency. It is the largest and an important town of the FATA. Parachinar is a big market for a large population residing in the surrounding areas. It is also famous for timber and dry fruits. Turi and Bangash are the major tribes living in the Parachinar Town.

**Sadda** is the tehsil headquarter and central town of Lower Kurram. Sadda has grown enormously during the past ten years due to the concentration of refugees in its neighborhood. It is a big trade market for the people of Lower Kurram and Central Kurram. It bustles with business activity attracting customers and traders from all over Kurram Agency.



**Dogar** lies in Central Kurram and is the third largest town both population and area-wise. It is an important market for local made arms.



## 2. HISTORY <sup>4</sup>

The name Kurram comes from the river Kurram, which flows along the valley. The Kurram River and its valley have found mention in the “Rig Veda”. The river is mentioned under the name of Krumu. It is believed that great migrations took place during 4,000 to 2,000 BC through Kurram Valley, which had been one of the easiest and most used routes to India. The Koh-e-Safaid range that forms the boundary of the present Kurram Agency, appears to be the same as the ancient sevethpatha, and it is likely, that the rich and healthy uplands of the Kurram and Khost areas had been favorite places of habitation and agriculture. The Hindu names of some of the mountain peaks and rivers that exist to date are testimony to the undoubted occupation by early Hindu Aryan immigrants.



It seems that a Greek settlement was established in the area by the successors of Alexander the Great. Three coins recently found in Bagzai village have been identified as belonging to the reign of King Sotermegas, or Kodphises; two other coins found in the same place have been attributed to the Sahia dynasty that ruled over the entire territory between the river Indus and Afghanistan in the 10<sup>th</sup> century AD.

The first important landmark in the history of the Kurram was when in 1148 A.D; Behram Shah of Ghazni fled there after being defeated in a battle, and gathered forces with which he subsequently returned and re-conquered Ghazni in 1163 A.D. In 1176-77 A.D, the Sultan of Ghor conferred the two villages Shilozan and Karman to one of his dependents, Taj-ud-Din Yaldaz and he used to halt there every year on his way to India. After his assassination, Kirman continued to be capital until 1206 A.D. Between 1206 to 1239 A.D, the area remained unstable, governed by several rulers. A big flood in 1239 A.D destroyed all historical traces.

At the time of Mughal King Humayun’s reconquest of India, the area was occupied by Bangash tribe, who appeared to have descended on the Kurram valley after wandering for nearly two centuries. During the reign of Humayun’s son Akbar the Great, Kurram was a part of the area held by Bangash tribe and was divided into two districts of Upper Bangash (the Kurram valley proper) and Lower Bangash, the present Kohat District. The Afghans of this tract called Karlanria Afghans, led Afghan opposition to Mughal rule, with the Kurram as a secure base. They were

<sup>4</sup> Retrieved from: <http://parachinar.net/history.htm>

suppressed under Jehangir, but the Mughals appeared to have exercised very little real control in this remote periphery of their empire. As such the area was nominally governed independently of Kabul by Bangash tribal leaders from Kohat.

After the fall of the Mughal Empire, Kurram became part of the kingdom of Afghanistan. In the meanwhile, the Turis had overcome the Bangash tribes. This followed the great dispersal from central Afghanistan where most of the tribes led by the Yusafzais, who had inhabited the north-west frontier of India, moved over the mountains and settled in the Kurram Valley.

The origin of the Turis is obscure, but according to them they came originally from Persia, and that driven from there, they wandered in nomadic fashion till they came to Arabia and the adjacent country at the top of the valley. There they established a summer headquarters, and in the winter took their flocks and herds down country as far as the River Indus, returning each year to the parent colony.

Throughout the seventeenth century, the Bangash remained in possession of Kurram, while the Turis from the country above pursued their nomadic wanderings up and down the valley. Meanwhile, the Turis appear to have increased in strength and numbers, while the Bangashes were weakened not only by internal feuds but by the drain on their resources caused by the colonization of Miranzai and by the struggles with the Orakzais for the possession of that valley.

In the beginning of the eighteenth century, a serious crisis emerged over an insult done to Turi women. The Turi threw off the disguise of nomad vassals, and attacked and conquered Barki which stands on the higher ground above Khalachi. Then they proceeded to consolidate themselves for a time, after which they captured Peiwar and held command of the two passes from Afghanistan. The chief obstacle to further progress lay in the villages of Shilozan and Zeran, by far the largest in the valley. With these villages some arrangement was made, and passing by Shilozan, the Turis took Milana. Peiwar was divided among the Chardai section and Milana among the Saragalla. The Bangashes of Shilozan and Zeran were not long in perceiving the turn of events, and on their embracing the Shia tenets; were admitted into full brotherhood and equal rights with Turis. The remaining Bangashes, pressed from mountains above, and probably summoned from valleys below, joined the struggle against the Orakzais, and the Turis soon found themselves in possession of the whole valley with the Bangashes as their dependents or tenants.

It is to be remembered, however, that the Turi tribe at that time still retained its nomadic habits and was devoid of any fixed residence except for the settlements under the Safed-koh, which they had previously wrested from the Bangashes and used mainly as summer headquarters. Their presence in the summer in the Parachinar plateau and their alliance with the Bangashes of Shilozan and Zeran enabled them to retain an effective hold over the plateau.

In the Lower Kurram the case was different and the Turis confined their annexation to only that portion of the country, which lay on their line of March to their winter grazing grounds. This route lay on the western side of Charmoghar and left untouched the country on the riverbank from Arawali up to the mouth of the Parachinar plateau.<sup>5</sup>

It was not until about 1848, that the Turis were brought directly under the control of Kabul, when a governor was appointed who established himself in Kurram. During the rule by Kabul, every five or six years a military expedition was sent to collect the revenues, the soldiers living meanwhile at free quarters on the people. The local Turi population continuously resisted and resented the Afghan domination.

The area, which forms the present day Kurram Agency, was a part of Afghanistan before the Second Afghan War. During the Second Afghan War in 1878-79, Turis assisted Sir Frederick Roberts throughout the way from the Kurram Valley and the Peiwar Kotal to Kabul, and lent him all the assistance in their power. As a consequence, their independence was granted them in 1880 from the Afghan control. Due to internal strife, intrigue and also British manipulation, Turis failed to establish satisfactory self-government. In 1892, British intervened on the request of the Turi tribes and brought the area under British rule. Technically the administration of the Kurram Valley ranked, not as a British district, but as an agency or administered area. Later on, the people of Kurram valley took part in the liberation movement of India so when India was liberated from British rule, this area became a part of Pakistan.

## **2.1 The Conflict**

Kurram Agency has a history of sectarian tension and clashes between the Sunni and Shia sects which resulted in thousands of deaths on both sides. There was a stronghold of the Tehrik-e-Taliban Pakistan till 2008 when the Pakistani Army ordered a military operation in the Agency to flush out the militants. The armed forces of Pakistan extended the Operation Rah-e-Nijat to Kurram Agency in December 2009.

In recent years the Kurram Valley has once again assumed a strategic position and has been the scene of intense Taliban activities. In July, 2011, the military launched the latest operation dubbed Operation Koh-e-Sufaid (White Mountain) against Taliban militants in Kurram agency. The operation targeted militants in central and lower Kurram with the principal objective of securing and reopening the Thall-Parachinar road, a major thoroughfare through Kurram that had come under repeated attack by militants. The militants blocked Thall – Parachinar Road which had left Parachinars Shia population effectively under siege for several years. The security situation in Kurram Agency was marred with sectarian violence and remained volatile in the first

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<sup>5</sup> Retrieved from <http://parachinar.net/history.htm>

half of 2012. In August, 2012, the operation had been successfully completed and the principal objectives attained. The Upper and Lower Kurram were de-notified as conflict zones, while military operation continued in Masozai Area of Central Kurram. Thall - Parachinar road was opened for all traffic and residents of Parachinar no more to go via Afghanistan.

## **2.2 Security Conditions**

Security situation in the area can be best described as “uneasy calm”. The local residents feel that a small incident any where can cause immediate flare up. The security agencies are in control and have established pickets at important locations. On Thall- Parachinar Road there are twenty four pickets which are effective, but add to the travelling time on the road. Non-locals are looked at with suspicious by both groups and are advised to keep a low profile. Consultant’s field work was therefore greatly constrained and they had to work within the parameters defined by the security situation.

Turi – Bangash who are in majority in Parachinar, seem to be determined to foil any effort to change the demographic equation in the area and are thus averse to selling land to avoid inhabitation by outsiders. This aversion to part with land can be a constraint in future urban development. Ways will have to be founded to have a land bank for various landuses for the future spatial development of Parachinar.

### **3. PUBLIC ADMINISTRATION SET-UP**

As per 1998 census, the Kurram Agency is divided into two administrative categories: 'protected' and 'non-protected' areas. Upper and Lower Kurram, being protected areas are under the direct control of the government, while Central Kurram is still partially a non-protected area administered indirectly through local tribal elders.

#### **3.1 Governance**

Kurram was declared as an agency in 1892 during British rule and was made part of Pakistan in 1947. Until the year 2000, when the old divisions were abolished, the Kurram District used to be part of the Peshawar Division of the Khyber Pakhtunkhwa (KPK) Province (previously North-West Frontier Province) of Pakistan.

Until 2002, decisions related to planning and development in the tribal areas were taken by the FATA section of the KPK Planning and Development Department, and implemented by government line departments. In 2002, FATA Secretariat, headed by the Secretary FATA was set up. Four years later, in 2006, the Civil Secretariat FATA was established to take over decision-making functions, with an Additional Chief Secretary, four secretaries and a number of directors. Project implementation is now carried out by line departments of the Civil Secretariat FATA. The KPK Governor's Secretariat plays a coordinating role for interaction between the federal and provincial governments and the Civil Secretariat FATA.<sup>6</sup>

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<sup>6</sup> Retrieved from <http://fata.gov.pk/Global.php?ild=29&fid=2&pid=25&mid=13#>

### 3.2 Political Administration

In Political Administration, Political Agent is the head and key person responsible for dealing with administrative matters of the Kurram Agency. The agency is divided into three sub-divisions i.e. Upper Kurram, Lower Kurram and Central Kurram each headed by an Assistant Political Agent.<sup>7</sup>

**Table 1: Political Administration**

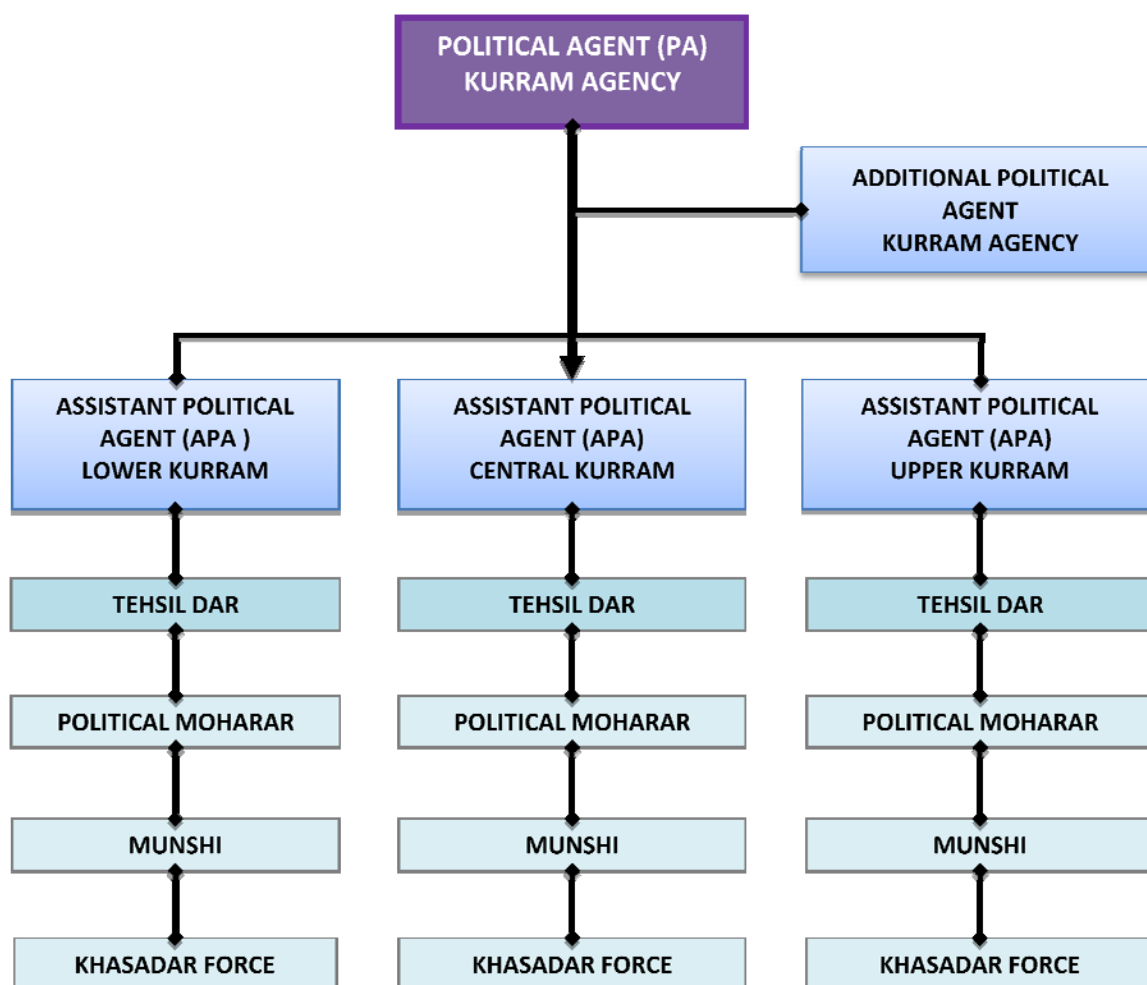
Sr. No.	EXECUTIVE
1	Political Agent
2	Additional Political Agent
3	Assistant Political Agent Upper Kurram
4	Assistant Political Agent Lower Kurram
5	Assistant Political Agent, Central Kurram
6	Tehsildar Mahal Parachinar
7	Tehsildar Alizai
8	Political Naib Tehsildar - Central Kurram
9	Political Naib Tehsildar – I
10	Political Naib Tehsildar - II

Political Agent is placed at the top of the hierarchy, who is assisted by several officers, including Additional Political Agent, Assistant Political Agents, Tehsildars, Political Moharars and Munshis. Under the command of Assistant Political Agent the Agency's affairs are managed in the various tehsils by Tehsildars (administrative head of a tehsil). These Tehsildars are assisted by Political Moharar (deputy tehsildar / Naib Tehsildars) who are further assisted by the Munshi / (junior clerk / Mirza); as shown in the organogram.<sup>8</sup>

A part from executive officials, Khassadars force comprising various members of local police and Security forces including levies and scouts, also assists Political Agent in maintaining law and order.

<sup>7</sup> 1998 Census Report of Kurram Agency, Population Census Organization, Statistics Division, Government of Pakistan, Islamabad, December 2000

<sup>8</sup> Conflict in Kurram Agency – Nature and Causes, FATA Research Centre 2012



### Political Agent's Roles and Responsibilities:

The Political Agent is the Top Official in the Agency who performs major administrative functions for the governance of the agency. He is also responsible for coordination with the military authorities and sharing information with provincial governor, who possesses highest administrative powers in the FATA Administration.

The Political Agent plays a supervisory role for development projects and chairs an agency development sub-committee, comprising various government officials, to recommend proposals and approve development projects. He also works as project coordinator for rural development schemes. The Political Agent also monitors the performance of concerned line departments and various utility service providers. Political Agent plays the role of mediator for resolving inter-tribal disputes, monitors consumption / preservation of natural resources and regulates trade activities relevant with natural resources. The Political Agent usually does not interfere in the tribal affairs, except in critical disputes. He exercises his benevolence powers, if any communal strife takes place.

Additional Political Agent plays an important role is coordinating development activities and fund allocation for projects. He also supervises the preparation of PC-I Forms for projects and pursue their approval.

Besides, Agency level offices of Local Government, the other government departments represented in Sadda include Agriculture Department, Irrigation Department, FATA-DC, C&W, PHED, Education Department, Health Department, LG&RDD, MC Office, TESCO, PTCL, NADRA, Zakat and Post Office.

Among tribal agencies, Kurram Agency and Tochi valley are the only tribal areas that collect land revenue from cultivated land in Upper and Lower Kurram areas. Land revenue is the only aspect in which Upper and Lower Kurram can be designated as settled area.

### **3.3 Municipal Committee**

FATA elects members to the federal legislature through adult franchise. The system of devolution introduced elsewhere in the country in 2001 by means of provincial Local Government Ordinances (LGOs) was not implemented in tribal areas. Recently a separate LGO for FATA has been drafted and is awaiting approval. Meanwhile a system of partial local-level governance is operating through councils in the tribal agencies. Elected councilors are involved in various aspects of development planning and decision making.

According to notification issued in November 2010<sup>9</sup>; the Governor Khyber Pakhtunkhwa has approved the constitution of Municipal Committee in Towns of 'Parachinar' and 'Sadda'. Thus municipal committees are in operation in these towns. Apparently this is an interim arrangement and will have to conform to the Local Government Law as soon as it is promulgated.

As informed by Additional Political Agent Kurram, new boundary of the MC Sadda is covering an urban area of 3,500 acres (14.16 square kilometers).

The Consultants suggested that the municipal boundary should be extended if needed on rational criteria not on arbitrary basis. Extension of MC boundaries brings large peri-urban and rural areas within the MC jurisdiction increasing its responsibilities to provide municipal services without proportionate increase in the revenues. On the other hand, it may be necessary to control the urban development in the areas on the periphery of the existing development (which is actually the future land bank) otherwise haphazard development will take place which

<sup>9</sup> Letter no PD/TARUCCI/MCs/1-1/2010 dated on 25th November, 2010 of Administration and Coordination Department, FATA Secretariat, Peshawar



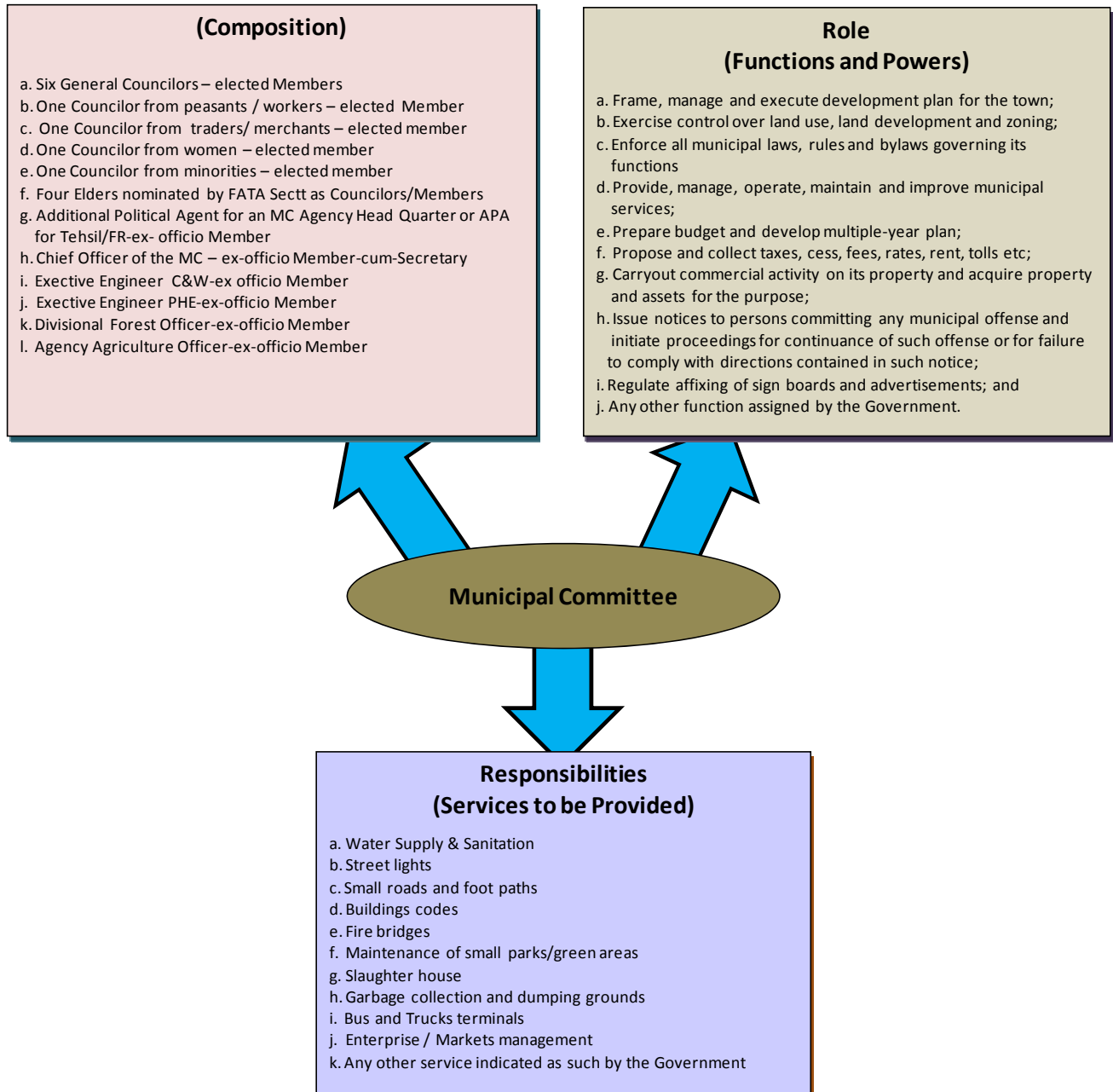
will cost dearly for the extension of municipal services in future. This also brings in the question of MC's present capacity to control any development.

The existing system of governance hierarchy is shown below:<sup>10</sup>



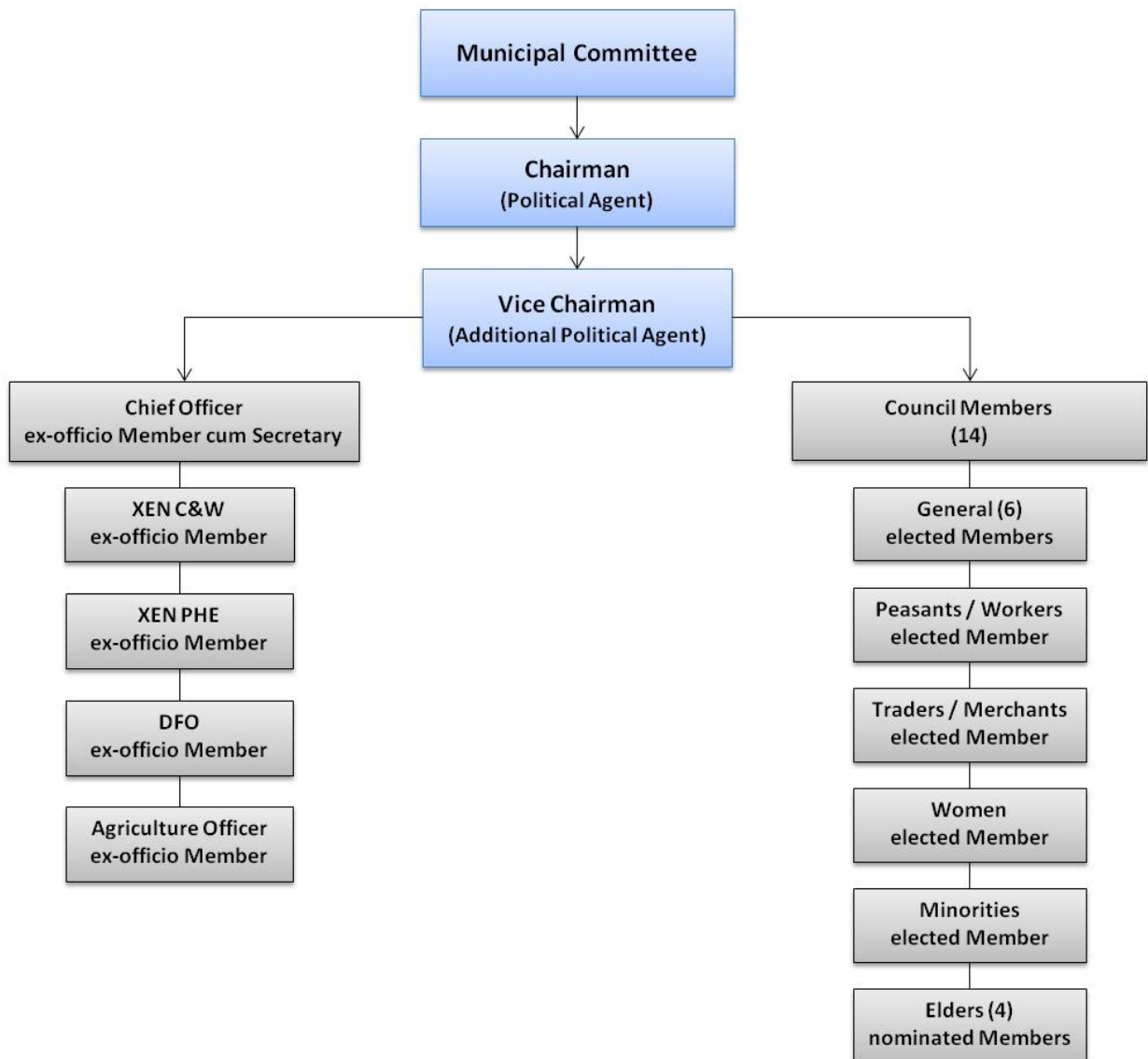
<sup>10</sup> Interpretation of Notification letter no PD/TARUCCI/MCs/1-1/12338-46 dated on 26th November, 2010; Administration and Coordination Department, FATA Secretariat, Peshawar

**MUNICIPAL COMMITTEE’S ROLES AND RESPONSIBILITIES<sup>11</sup>**



<sup>11</sup> As mentioned in the letter no PD/TARUCCI/MCs/1-1/2010 dated on 25th November, 2010 of Administration and Coordination Department, FATA Secretariat, Peshawar

A graphical interpretation of Notification letter no PD/TARUCCI/MCs/1-1/2010 dated on 25th November, 2010; received from Administration and Coordination Department, FATA Secretariat, Peshawar is as below:<sup>12</sup>



<sup>12</sup> Notification letter no PD/TARUCCI/MCs/1-1/2010 dated on 25th November, 2010; Administration and Coordination Department, FATA Secretariat, Peshawar

### **3.4 Revenue System**

Kurram Agency is revenue paid agency divided into two sub-divisions; Upper Kurram and Lower Kurram. Tehsildar Mahal and Tehsildar Alizai act as Revenue Officers in Upper Kurram and Lower Kurram respectively. There is one Saddar Kanongo, three field Kanongo Circles and 28 Patwaris with one in each Patwari Halqa. Though Revenue Act is not actively executed in overall Kurram Agency but the execution covers major areas. Historical assessments of the land in the agency area have been carried out between years 1905-06 and 1943-44.<sup>13</sup>

### **3.5 Security and Defence**

The security apparatus in Kurram Agency consist of:

- Kurram Militia
- Levy Force
- Khassadar

There is no official police set up in the valley area, a militia force named as 'Kurram Milita' provides security in the valley. This force also provides assistance to Naib Hakims that work as arresting agency.

There are 25 military check posts and 20 newly deployed militia units recently installed. The levies mobile teams also patrol 24 hours to avoid any unfavorable incident. The 'Thall Scouts' provide security measures from 'Thall' town area upto 'Alizai' town, beyond which 'Kurram Militia' take over the security responsibilities.

### **3.6 Magistracy**

At present, FATA's matters are governed under the auspices of Frontier Crimes Regulation 1901 (FCR 1901). It is administered by Governor of KPK who has been nominated as an agent by the President of Pakistan and work under overall supervision of Ministry of States and Frontier Regions, Islamabad. In protected areas, criminal and civil cases are decided by political officers bestowed with judicial powers. In non-protected areas, disputes (cases) are resolved through a local 'Jirga' system. Residents of tribal areas can approach the apex courts (Supreme Court of Pakistan and Peshawar High Court) with a constitutional writ challenging a decision issued under the 1901 Regulation.

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<sup>13</sup> 1998 Census Report of Kurram Agency, Population Census Organization, Statistics Division, Government of Pakistan, Islamabad, December 2000

FCR (1901) is not very popular with local population so much so that it is sometimes referred as Blacklaws. Under FCR rules, an innocent person could be sentenced to 50 years imprisonment without any trial, byelaws like these demonstrate inequality and violation of human rights. This system is pervasive in this region from more than 100 years. While under the control and jurisdiction of the central government, each 'Pashtun' tribe has its own representative spokesman and each tribe is ensured of its own autonomy. But in reality very few locals see it vindicated.

### **3.7 Analysis**

Overall setup in Sadda is run by Municipal Committee a strong coordination system exists between the line departments. Lack of funds creates governing issues like delaying of development activities and security problems. Unavailability of proper policing system has created lot of difficulties to overcome security problems in Sadda. The municipality is usually helpless to enforce its rules or punish the violations including encroachments. It is important that the capacity building of municipality should be undertaken. The following measures are recommended to be taken:

- Establishment of police station and training centers. (enforcement capacity)
- Reorganize municipal staff and departments to improve their efficiency. (operational capacity)
- Develop a sound plan for restructuring the revenue collection system. (financial capacity)

The active judiciary system in Sadda is outdated. It is essential to count Sadda / Fata as the part of Pakistan and merge them with present judiciary system of Pakistan. There is a pressing demand for abolition of FCR.

Jirga system in Sadda is more expensive as compare to judiciary system. Society cannot afford to convene a Jirga due to expensive requirements for a Jirga to be held, including hospitality (boarding, lodging, meals, etc.), which are increasingly beyond the means of ordinary people.

## 4. GEOGRAPHICAL SETTING AND PHYSICAL FEATURES

### 4.1 Area

Kurram Agency lies in the northwestern part of Pakistan bordering Afghanistan. The Agency is 115 kilometers (72 miles) long in a northwest direction from Thall to Peiwar Kotal on the Afghan border. The total area of Kurram Agency is 3,380 square kilometers (1,280 sq mi). Central Kurram is the largest Tehsil in the area, followed by Upper Kurram and then Lower Kurram. The width of Upper and Lower Kurram varies from 22 to 43 km, while the width of the Central Kurram varies from 43 to 86 km.

As informed by Additional Political Agent Lower Kurram, new boundary of the MC Sadda is covering an urban area of 3,500 acres (14.16 square kilometers).

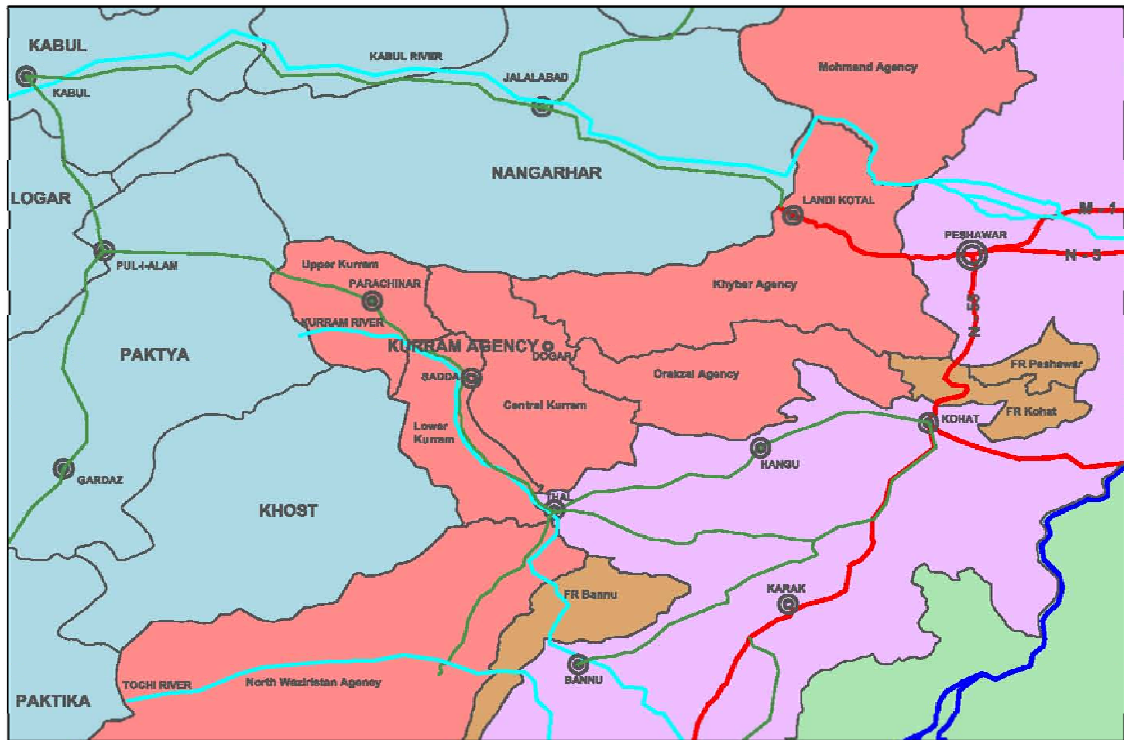
### 4.2 Location

Kurram Agency lies between N 33°-20' to N 34°-03' latitudes and E 69°-50' to E 70°-45' longitudes.<sup>14</sup> Kurram Agency is surrounded by three provinces of Afghanistan. In the north, the agency borders the Afghan province of Nangarhar where the famous Al-Qaida base Tora Bora was situated. While in the west and southwest, it borders the Afghan provinces of Puktia and Khost respectively. In the south, it borders North Waziristan Agency, while on the east two other agencies of FATA namely Orakzai and Khyber Agencies are located. In the southeast, the agency borders with the Hangu District of Khyber-Pakhtunkhwa.

The town of Sadda is located on latitude N 33° 42' 21" and longitude E 70° 19' 42". The elevation of the Sadda town is 1,213 m (3,980 ft) from the mean sea level. Sadda is at a distance of 32 and 42 kilometers from Parachinar and Thall respectively, on Thall-Parachinar road.

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<sup>14</sup> 1998 Census Report of Kurram Agency, Population Census Organization, Statistics Division, Government of Pakistan, Islamabad, December 2000



The northern part of the Sadda town is covered by Khurmana River, while on the west side Kurram River followed by Lakka Tiga mountain range. Few agricultural settlements are present in the environs of the town which include: Khar Kalai in the north, Badama and Dogar in the northeast and Palosotong in the south.

### 4.3 Climate

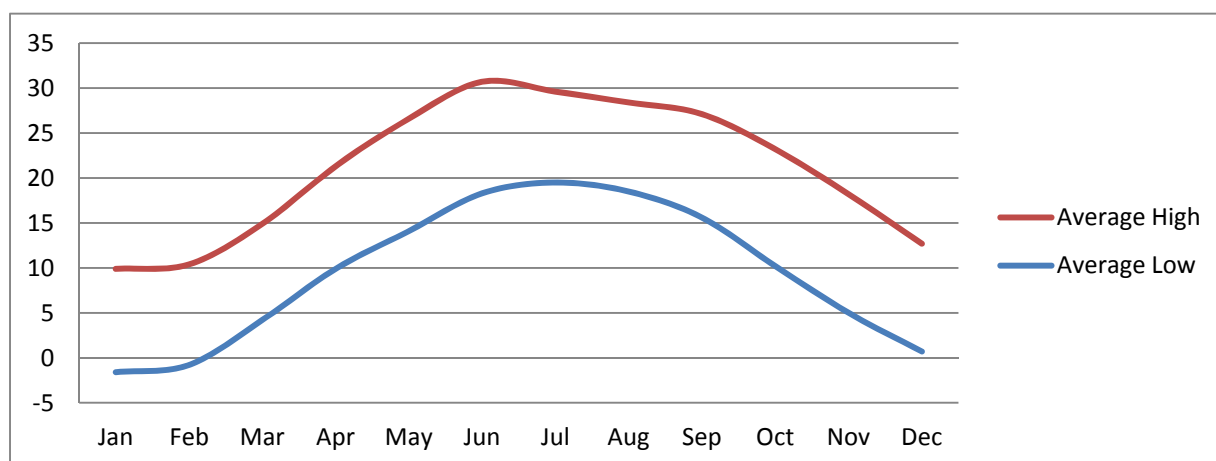
Kurram Agency is one of the coldest location in Pakistan<sup>15</sup>. The summer season lasts from April to September with the mean maximum temperature of 30°C, while the winter falls during October to March with mean minimum temperature of -2°C. Much of the precipitation occurs during spring and summer seasons, while autumn and winter are generally dry seasons. The average annual rainfall in the town is 781.7 mm (30.8 in).

Kurram Agency has a moderate humid subtropical climate (Köppen climate classification Cfa) with higher rainfall including significant monsoons than most areas of Pakistan. The most frequent source of rain is western depressions and related thunderstorms. During the winter, snowfall is common and frosts occur on most mornings. Snow closes the Peiwar Pass, located on the Paktia border just over 20 km west of Parachinar, for up to five months per year.

**Table 2: Monthly Temperatures °C**

Month	Average High	Average Low
Jan	9.9	-1.6
Feb	10.4	-0.8
Mar	14.9	4.2
Apr	21.3	9.9
May	26.6	14.1
Jun	30.7	18.3
Jul	29.6	19.5
Aug	28.4	18.5
Sep	27.1	15.6
Oct	23.2	10.2
Nov	18.2	5.0
Dec	12.7	0.7

**Figure 1: Monthly Temperatures °C**

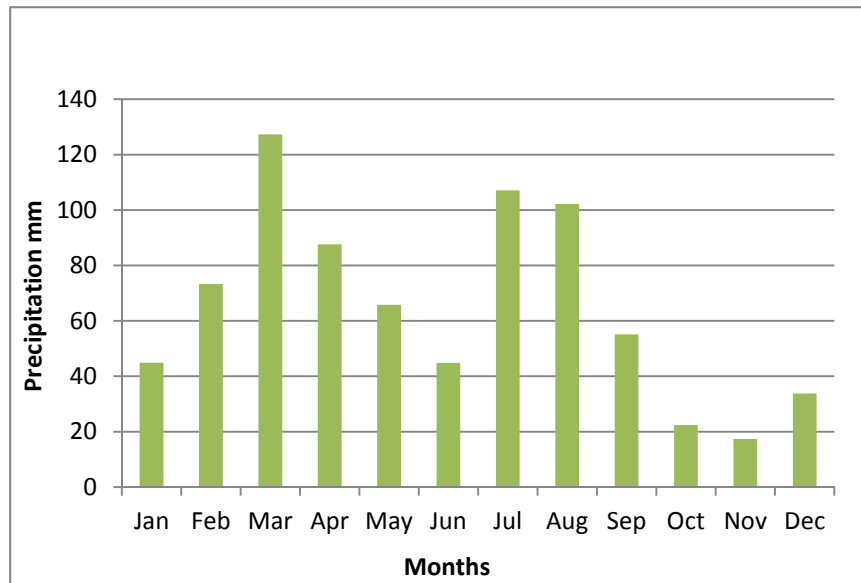


<sup>15</sup> Weather charts website "Climate-Charts" that uses data available from the World Meteorological Organization.



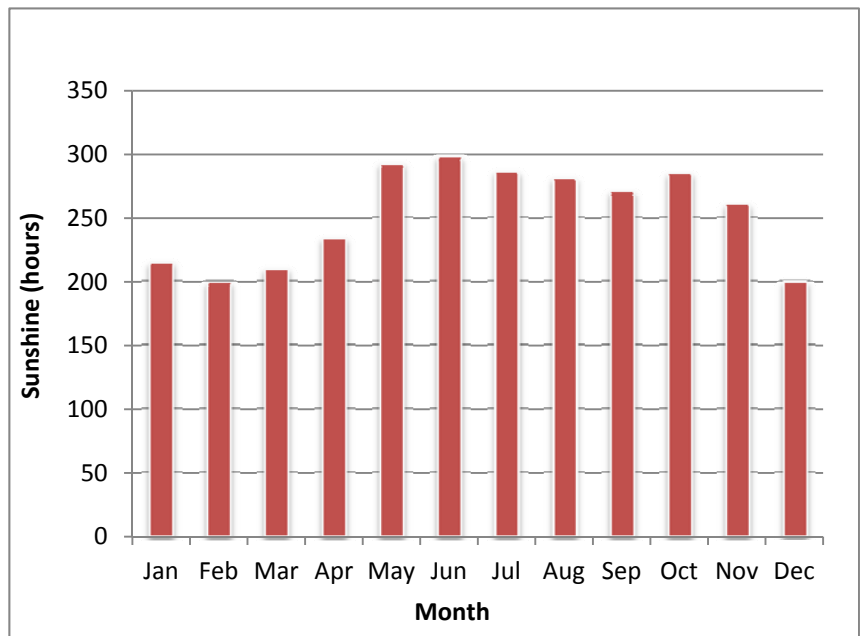
Monthly Precipitation	
Month	Precipitation mm
Jan	44.9
Feb	73.3
Mar	127.3
Apr	87.6
May	65.8
Jun	44.8
Jul	107.1
Aug	102.2
Sep	55.1
Oct	22.4
Nov	17.4
Dec	33.8

Figure 2: Monthly Precipitation



Monthly Sunshine	
Month	Sunshine hours
Jan	214.5
Feb	198.8
Mar	209.4
Apr	233.5
May	292.1
Jun	297.3
Jul	285.7
Aug	280.6
Sep	270.2
Oct	284.3
Nov	260.1
Dec	199.2

Figure 3: Monthly Sunshine



#### **4.4 Mountain Ranges**

##### **4.4.1 Koh-e-Safaid Range**

The principal mountain range in the agency is the Koh-e-Safaid (Spin Ghar or White Mountains), with highest peak of Sikaram Sar 4,728 meters (15,620 feet) high, which is a natural boundary and water shed with Afghanistan. The peak of Sikaram Sar also visible from Parachinar, remains covered with snow throughout the year. The range rises northeast of Ghazni city, peaks at over 15,000 feet in the northwest corner of the Agency and then runs almost due east, descending rapidly in altitude across the central part of the KPK and ending at Attock.

The upper slopes of the Koh-e-Safaid used to be covered with thick pine forests but those forests are now depleted due to overcutting. In its higher slopes, it is steep and rocky and rather devoid of vegetation, but lower down, it is thickly wooded with pine trees of all descriptions. The southern slope of Koh-e-Safaid is about eight miles wide and covers a total area of 114 square miles. Its southern slope is very steep, falling in altitude almost 10,000 feet within a six mile stretch of territory.

A number of streams drain the southern slopes and, due to steepness, bring a lot of debris down with them. The plain of Parachinar is in fact formed by such accumulated deposits. The hills are heavily eroded. These streams have carved narrow gorged valleys which provide access to the interior of the range.

##### **4.4.2 Mandher Range**

The other mountain ranges found in the area are not as high as the Koh-e-Safaid. South of the Peiwar Kotal, the hills of the Mandher range rise gradually till they drop at the southwest corner of the plateau at Kharlachi, the point where Kurram River enters the valley. That portion of the Mandher range between the Paiwar Kotal and Khalachi is of varying height but rarely exceeds 8,000 feet. It too is copiously wooded. The other hills are barren, bearing little else than scrub. Of these the highest are Khwaja Khidr in the Khush Kurram range, and Ding Sar behind Sadda in Zaimusht country.

#### **4.5 Valleys**

##### **4.5.1 Kurram Valley**

Apart from the high mountains, the other important feature is the Kurram valley. The valley is irrigated, well populated and dotted with small fortified villages, orchards and groves, to which a fine background is afforded by the dark pine forests and alpine snows of the Koh-e-Safaid. The

valley starts from Thall in Hangu district and continue northwest upto Peiwar Kotal on Pak Afghan border. It can be divided into two parts i.e. the Lower Kurram and the Upper Kurram. The Lower Kurram extends from Thall in Hangu district to Sadda. It is narrow and hedged by low hills on either side of the Kurram River. After that the valley opens up into the Parachinar plateau, which is a large oval shape plain sloping towards southeast. The Upper Kurram valley from Sadda to Peiwar Kotal is bounded by high mountains on all side.

#### 4.6 Rivers and Streams

There are two major rivers in the Lower Kurram Tehsil; the one is the major river of the Kurram Agency i.e. **Kurram River** on the west side of the Sadda Town and the other is **Khurmana River** at the north side of the Sadda Town coming from Central Kurram.

##### 4.6.1 **Kurram River**

The Kurram River flows west to east and crosses the Paktia Province at Afghan-Pakistan border about 80 km southwest of Jalalabad. The total length of the Kurram River is more than 320 km (200 mi) starting from Afghan-Pakistan border and ending in the Indus River. In between several hill torrents and streams join the Kurram River.



The river enters into Pakistan at Kharlachi passing through Tangi, Sadda and then it crosses over to Thall from where it enters into North Waziristan Agency.<sup>16</sup> Finally passing through the north of Bannu and Lakki Marwat it joins the Indus River near Isa Khel.

This river, for practically the whole of its length, flows through hilly trans border territory and is within the Kurram itself for only a few miles. The steep hills on the either side render it practically useless for irrigating higher land on either bank.<sup>17</sup>

The Kurram river bed is wide, owing to erosion due to flood waters. Downstream Sadda, the river is fed by rainfall and snow melt drainage that flows from the hills through numerous ravines in the east from the Zaimukht Mountains and in the west from the Charmoghar range and other hills separating Khost and Kurram. In some areas south of Sadda, farmers have planted rice in the river bed. The quantity of water in the river becomes larger as one came close to the Agency boundary with FR Kohat, while driving south east on the Thall-Parachinar road.

<sup>16</sup> 1998 Census Report of Kurram Agency, Population Census Organization, Statistics Division, Government of Pakistan, Islamabad, Dec 2000

<sup>17</sup> Retrieved from <http://www.parachinar.net/Rivers.htm>

#### 4.6.2 **Khurmana River**

Khurmana is a major tributary of Kurram River flow along the north of Sadda. In fact Sadda town is located at the confluence of Khurmana River with the Kurram River. It is prone to high floods during raining season which damages the town and agriculture around it.



#### 4.7 **Flora and Fauna**

Different varieties of Pine, dwarf palm, mulberry, poplar, willow, ailanthus, robinia platinus, walnut, oleander, oak, pistacia, cedars and some species of conifers are found in the area.

Monal pheasant, woodcock, grey and black partridge, red legged partridge (Chikor) sissy, wild pigeon and seasonal migratory birds such as water fowl, Siberian cranes etc., among birds, and Ibex, urial, hog, makhore, jackals, rabbits, porcupines, wild cats and rodents, among animals, are also found in the area.

#### 4.8 **Forests**

According to 1998 Census Report, forest activities in the area were limited before 1977. However, since 1977-78 extensive afforestation activities have been undertaken in the area and plantations carried out throughout the Agency. By 1998, plantation successfully carried out in Kurram Agency included 7,959 acres in Upper Kurram, 25,868 acres in Lower Kurram and 5,970 acres in Central Kurram. The replanting of forests has continued and freshly planted pine samplings were seen in the Malana area.

## 5. GEOLOGICAL CONDITIONS

### 5.1 Rocks<sup>18</sup>

Kurram Agency is underlain by all three major groups of rocks as under:

#### 5.1.1 **Sedimentary Group**

Sedimentary group comprises limestone with interblended shale, subordinate sand-stone and alluvial deposits.

#### 5.1.2 **Igneous Group**

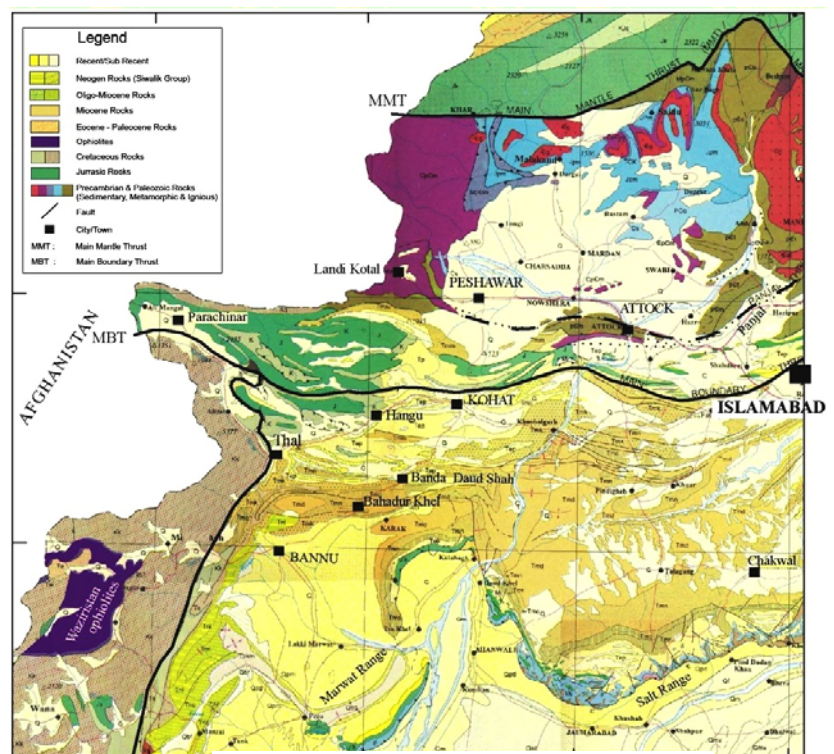
Igneous group consisting of extrusive rocks (volcanoes), intrusive rocks (granite, granodiorite and diorites). Ultramafic rocks i.e periodotites dunites, serpentinites, pyroxenite, harzbergites and other ultrabasic sills.

#### 5.1.3 **Metamorphic rocks**

Metamorphic rocks comprise crystalline limestone and dolomite (marble) amphibilites, gneisses, schists, shales and quartzites.

Most of the igneous and metamorphic rocks are concentrated in the northern parts of the Kurram Agency while some are found in the north western part. Igneous and metamorphic activities are responsible for mineralization in the Agency. The sedimentary rocks found in northern part of the agency include limestone, shale and sandstone of Jurassic to Paleocene age. These constitute high mountain ranges in the region, which extend into the Khyber and Orakzai towards east.

Figure 4: **Geological Map K.P.K Regions and Part of the Northern Areas, Pakistan**



Source: (from Geological Map of Pakistan GSP, 1993)

<sup>18</sup> 1998 Census Report of Kurram Agency, Population Census Organization, Statistics Division, Government of Pakistan, Islamabad, December 2000



## 5.2 **Soil**<sup>19</sup>

The residuum colluviums soils from limestone, sand stone and shale are moderately deep, well drained, slightly to moderately calcareous, gravelly coarse and medium textured (sandy loam and silt loam) and moderately eroded.

Terraced piedmont alluvium soils are medium and fine textured (loam and clay loam) deep calcareous, well drained and slightly eroded. Climate of the area is sub-humid, sub-tropical continental and physiographic positions of the soils are lower and middle mountain slopes/ level to gently sloping. Trees and grasses are natural vegetation on mountain slopes wheat, rice, fodder and orchards are major crops in the plateau.

South east and east of Sadda, shale is dominantly inter-bedded with mud stone, silt stone, sand stone and sub ordinate limestone. The shale is calcareous and ranges from soft flaky to hard fissile and platy, and show variegated dark green, green, olive grey and maroon. The mud stone is medium to thick-bedded, light grey, and at places maroon and fine grained. The silt stone is light grey, thinly bedded and occurs occasionally as intervening strata. The inter-bedded limestone and shale sequence grades downwards into a dominant shale litho logy. The limestone is thin to medium bedded, grey to dark-grey and black. It is re-crystalline to fairly coarse-textured, with shaly, oolitic, pelitic and pisolitic inter-beds<sup>20</sup>.

## 5.3 **Minerals**

The most economically viable mineral in the agency is soapstone. The area of mineralization of soapstone lies in the eastern extreme of Koh-e-Safaid and makes the upper parts of the valley. The soapstone associated with the dolomite is an important mineral commodity of the area. It may also be pointed out that the dolomitic limestone formation is recrystallized and also embodies lithological variation; therefore there is every chance of having marble and industrially feasible dolomitic deposit. Some marbleized horizons have been noted around Zuhra and Gandao area.

The lenses of soapstone range 10 feet in thickness and their horizontal extent varies between 300-400 meters along with vertical length of 400-500 meters. According to PMDC, the soapstone deposits excavated from this site are the best in quality as compared to other soapstone deposits found in Pakistan and are compatible with international quality standards.

<sup>19</sup> 1998 Census Report of Kurram Agency, Population Census Organization, Statistics Division, Government of Pakistan, Islamabad, December 2000

<sup>20</sup> Geology and Structure of the Westernmost Hill Range, Sadda Area, Kurram Agency, North West Pakistan, April, 2012, Syed Muntazir Abbas; National Centre of Excellence in Geology, University of Peshawar.

The brightness ranges between 92 to 98 per cent and it is found in lumps formulated in white powder form.

No minerals have been discovered within the limits of Sadda Town. However, some minerals including soft stone, dim stone, rock salt and coal are identified in the surrounding mountains. Currently no mineral exploitation activity is seen.

## 6. DEMOGRAPHIC CHARACTERISTICS

### 6.1 Tribes

The population of Kurram Valley consists of a number of tribes inhabited in different parts of Kurram Agency namely; Turi, Bangash, Orakzai, Zazai, Parachamkani, Massozai, Alisherzai, Alizai, Muqbil, Zaimusht, Mangal, Kharotai, Ghaljis and Hazara.

The majority tribes in Lower Kurram are the Orakzai, Zaimusht and Bangash while other minority tribes are Para chamkani, Turi and Zazai.

### 6.2 Languages

According to 1998 census, Pushto is the most predominate language in the agency spoken by 98.6 percent of the population. Pushto speaking tribes include Syeds, Turis, Bangash, Orakzais, Mangals, Para Tsamkanis, Zazais, Malekhels, Ghilzais, Muqbils, Hazaras, Khoshi as well as a small Sikh community.

### 6.3 Culture and Religion

People are deeply religious minded, gentle, hospitable and courageous. They are staunch Muslims and patriotic Pakistani who are ever ready to lay down their lives for their country. The brave tribal people actively participated in the Pakistan-India war of 1948, 1965, 1971 and laid down their lives for the honour of their motherland.<sup>21</sup>

*“Religion is important and outlook of the people is generally conservative. In addition, the Pakhtun way of life preserves, to varying degrees, the code of “Pakhtunwali”<sup>22</sup> which includes the following values and concepts: revenge, hospitality, escort, jirga, honour, tradition, tor, asylum, sawarah (settlement of disputes with inter-marriages) baramtah (tit for tat), hujra<sup>23</sup> and truce.”*

*“Pakhtun society is highly paternalistic and the marginalization of women is reflected in their exclusions from the most of public life.”<sup>24</sup>*

<sup>21</sup> 1998 Census Report of Kurram Agency, Population Census Organization, Statistics Division, Government of Pakistan, Islamabad, December 2000

<sup>22</sup> Pakhtoonwali is an unwritten democratic, socio-political culture, law and ideology of the Pakhtoon society inherited from their forefathers and carried on to the present generation, it is a dominant force of Pakhtoon culture and identity.

<sup>23</sup> Hujra represents the sociable character of the Pukhtoons, is a useful institution and it plays a pivotal role in their daily life. It serves as a dormitory, guest house, a place for ritual and feasting, a community centre for social functions; council hall for the settlement of family and inter-tribal disputes, condolences are offered on the demise of a person and public resort for leisure to discuss tribal, national and international affairs and matters of mutual interest.

<sup>24</sup> Extract from Post Crisis Needs Assessment (PCNA) Report 2010: Geographic and Demographic overview; page 23



#### 6.4 **Family Structure**<sup>25</sup>

An attractive feature of the Pukhtoon way of life is the joint family system which signifies their deep love for the family's solidarity and welfare. The desire of communal life emanates from a consideration of economic security and integrity. All the family members, even the married sons, live jointly in a house large enough to separately accommodate each married couple under the authority of the father who, as head of the family, manages the family affairs and exercises an immense influence in his own domain. The internal management of the household rests with the mother who exercises her authority within her own sphere of influence. The joint family system, however, is gradually giving way to individualistic trends under the impact of modern influences. It is losing its hold, particularly on educated classes and well-off sections.

All the earning hands of the family, married as well as un-married sons, contribute their share of income to the common pool of resources. All expenses on food, clothing, education, health, birth, marriages and deaths are defrayed from this common fund. The mantle of authority falls on the eldest son's shoulders after the death of the father or when old age renders him unable to discharge his functions efficiently. The system of Nikat (ancestral line) which regulates the shares of losses and gains, debts and liabilities of each family, is the mainstay of Pukhtoon society.

#### 6.5 **Occupation / Profession**

Generally in FATA, people are not literate and earn living by farming as tenants on land owned by others. However, in Kurram Agency literacy rate is high and a significant number of locals are residing and working abroad and have brought prosperity to the area.

As per MC Sadda, most of the people are doing business, jobs and farming in the town. Around 40 percent of the present population is out of the town and country due to their business, jobs and security.

#### 6.6 **Migration of Temporarily Displaced Persons (TDPs)**

Even before hostilities commenced in Kurram, locals began fleeing areas expected to come under attack. At the onset of the operation, it was estimated that 8,000 to 12,000 families could be displaced, but the actual number turned out to be closer to 21,000. As of July 27, 2011, the operation in Kurram had displaced around 100,000 residents of the agency, nearly one-fourth of the agency's population. The number far exceeded Pakistani government expectations and led to shortages of relief materials for the TDPs.

<sup>25</sup> Retrieved from <http://www.parachinar.net/sociallife.htm>

TDPs flows to relief camps varied, depending on where families were fleeing from. The majority of TDPs who ended up in camps went to the New Durrani camp, located approximately 2.5 miles from Sadda. Most of them, fled from areas in the upper sections of the eastern Kurram valley, such as Murghan, Manatu and the Ali Sherzai area. Those in the lower valley, including large numbers fleeing fighting near Kurt, Khalwat, Dumbakai and Dand, moved to adjacent Hangu district, where they took up residence in smaller camps in Togh Sarai, Tora Warai, Doaba, Naryab and Darsamand. A large number of TDPs, however, did not go to any camp and preferred to stay with relatives in Sadda or Hangu.<sup>26 27</sup>

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<sup>26</sup> Retrieved from - <http://www.criticalthreats.org/pakistan/jan-worby-military-operation-kurram-agency-september-6-2011>

<sup>27</sup> According press reports, the return of displaced families of Kurram has started and in the first phase, 4,500 families will return in first week of September, 2015

## 6.7 Population

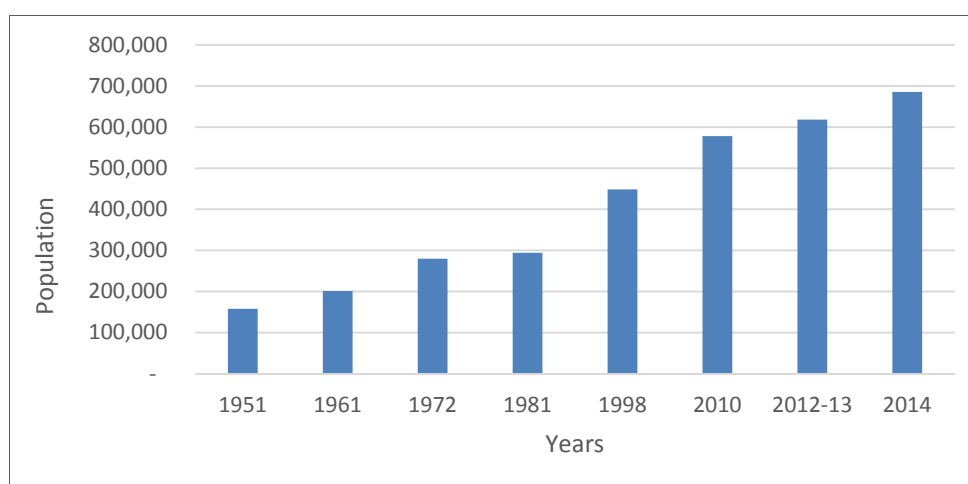
The total population of Kurram Agency was 448,310 as enumerated in 1998 census with an intercensal increase of 52.4 percent since 1981 census when it was 294,362. The average annual growth rate was 2.5 percent during this period. The total area of agency is 3,380 square kilometers which gives population density of 133 persons per square kilometers as against 87 persons observed in 1981. This indicates a rapid rise in population growth of the agency which could be either due to over enumeration in 1998 or under enumeration in 1981.<sup>28</sup>

**Table 3: Population of Kurram Agency: Historical Trend**

Year	Population	AGR	Area sq km	Density per sq km
1951	158,000	-	3,380	47
1961	201,000	2.40	3,380	59
1972	280,000	2.90	3,380	83
1981	294,362	0.60	3,380	87
1998	448,310	2.50	3,380	133
2010	578,261 <sup>29</sup>	2.69	3,380	171
2014	685,537 <sup>30</sup>	2.69	3,380	203

Source: 1998 Census Report of Kurram Agency, Population Census Organization, Statistics Division, Government of Pakistan, Islamabad, December 2000.

**Figure 5: Population of Kurram Agency: Historical Trend**



<sup>28</sup> 1998 Census Report of Kurram Agency, Population Census Organization, Statistics Division, Government of Pakistan, Islamabad, December 2000

<sup>29</sup> Letter No. 1491-95/Dev/TARUCCI/Kurram to Secretary P&D, FATA Secretariat, Peshawar dated 30th November, 2010

<sup>30</sup> Growth rate of 2.69% is the national growth rate of Pakistan in 1998, used by the Political Agent, Kurram Agency for the estimation of present population of 2014

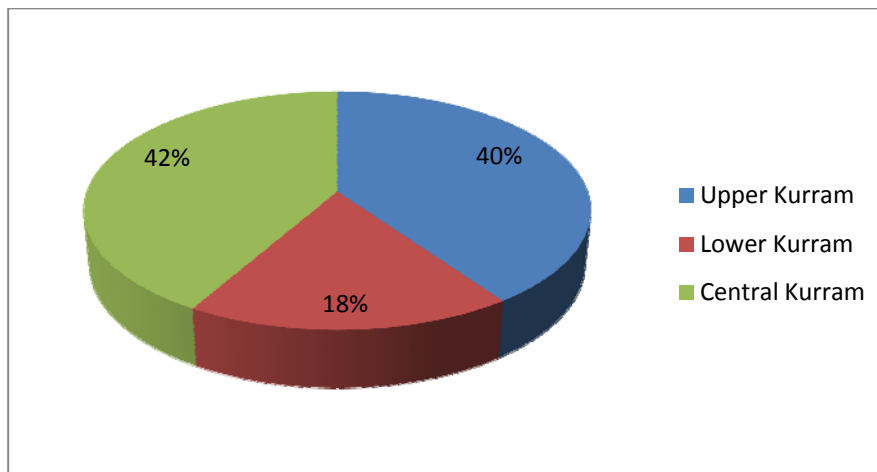
The population of Kurram Agency in 2009-2010 was estimated by the Political Agent as 578,261 at 2.69% annual growth rate applied on 1998 census population<sup>31</sup>. The same annual growth rate of 2.69% was applied to estimate the 2014 population of Kurram Agency as 685,537, having density of 203 persons per square kilometers.

The Tehsil wise distribution of Agency Population is as follows:

**Table 4: Population Distribution in Three Tehsils of Kurram Agency**

Tehsil	1981 Census	1998 Census	<sup>32</sup> 2010 Estimate @ 2.69%	<sup>33</sup> 2014 Estimates @ 2.69%
Upper Kurram	118,476	185,571	235,647	283,766
Lower Kurram	53,073	81,323	106,046	124,355
Central Kurram	122,813	181,416	236,568	277,416
<b>Kurram Agency</b>	<b>294,362</b>	<b>448,310</b>	<b>578,261</b>	<b>685,537</b>

**Figure 6: Population Distribution in Three Tehsils of Kurram Agency**



<sup>31</sup> Letter No. 1491-95/Dev/TARUCCI/Kurram to Secretary P&D, FATA Secretariat, Peshawar dated 30th November, 2010

<sup>32</sup> Ibid

<sup>33</sup> Growth rate of 2.69% is the national growth rate of Pakistan in 1998, used by the Political Agent, Kurram Agency for the estimation of present population of 2014

### 6.7.1 Present Population of Sadda

Demographic data is very basic to planning, particularly for the assessment of basic needs and gap analysis. The most authentic and reliable source of demographic data is Census of Population. Unfortunately, the last census of population was carried out in 1998, some sixteen years ago. In case of Sadda the municipal boundaries have also changed from 1,226 acres in 1998, to 3,500 acres in 2010<sup>34</sup>. Although the new boundary is yet to be notified, several villages are now included in the new boundary.

As per 1998 Census, the Municipal Committee of Sadda had the population of 17,103<sup>35</sup>. For the estimation of the present population and projecting future population to 2034, three alternatives were used:

**Table 5: Present Population 2014 as Per Different Methods**

S. No.	Data Source	Population Estimates (numbers)
1	Political Agent Estimates	54,559
2	Counting of Houses on GIS map	55,499
3	Number of Electric Connections	64,975

#### i. Political Agents Estimates

The Political Agent has worked out the present population estimates, which are officially quoted.

- Applying AGR of 2.69%<sup>36</sup> to 1998 census population of 17,103, the population of Sadda in 2014, is estimated as 26,193.
- Present Population of New Durrani Camp in Sadda is 3,366.
- In past years due to sectarian unrest Afghan Refugee Camp for 100,000 population was established in Sadda, out of which some 25% have settled in the Sadda MC area.

Adding a,b&c the 2014 total population of Sadda Municipal Committee is worked out as 54,559.

<sup>34</sup> Letter No. 1491-95/Dev/TARUCCI/Kurram to Secretary P&D, FATA Secretariat, Peshawar dated 30th November, 2010

<sup>35</sup> Information provided by Municipal Committee, Sadda

<sup>36</sup> Growth rate of 2.69% is the national growth rate of Pakistan in 1998, used by the Political Agent, Kurram Agency for the estimation of present population of 2014

**ii. Counting of Houses on GIS Map**

The house count from GIS maps is 2,413. However the number is based on aerial view, which shows one block even if two or more houses are attached or houses are more than one storey high. Assuming that there are two households per housing unit counted from GIS, the present population, at HH size of 11.5 persons, work out to 55,499.

**iii. Number of Electric Connections**

The data received from Tesco revealed, there are 5,650 domestic connections. With a household size of 11.5, the total population works out as 64,975. Since the domestic connections numbers may include some connections outside the municipal limits, the population worked out in this manner may give a higher than actual figure.

It may be noted that population estimates by any of the above methods will have some margin of error. However, the Political Agent's estimates and the GIS map counts are very close to each other (a difference of about 940 only). Therefore we are inclined to recommend the present population of MC Sadda may be taken approximately as 55,000.

However, the Consultants suggest that the population figures should be reviewed as soon as the new population census takes place as announced to be in March 2016.

**6.7.2 Future Population of Sadda**

Estimation of present population and projections of future population forms the basis for the need assessment and planning. The future population growth rate will largely depend on the factors which are uncertain at this stage.

Keeping the present population of 55,000 the future population is projected on the basis of different AGR. The criteria for the selection of different growth scenarios are as follows:

1. For low growth scenario, the FATA AGR between 1981-98 is observed, as the greater region of Sadda has similar social structure.
2. For medium growth scenario, the national AGR is applied which is also used by the Public Administration and Municipal Committee and secondly it is closer to Lower Kurram Tehsil AGR of 1998 census that was 2.54%.
3. For high growth scenario, city of Peshawar AGR is applied which is the closest major city from Sadda.

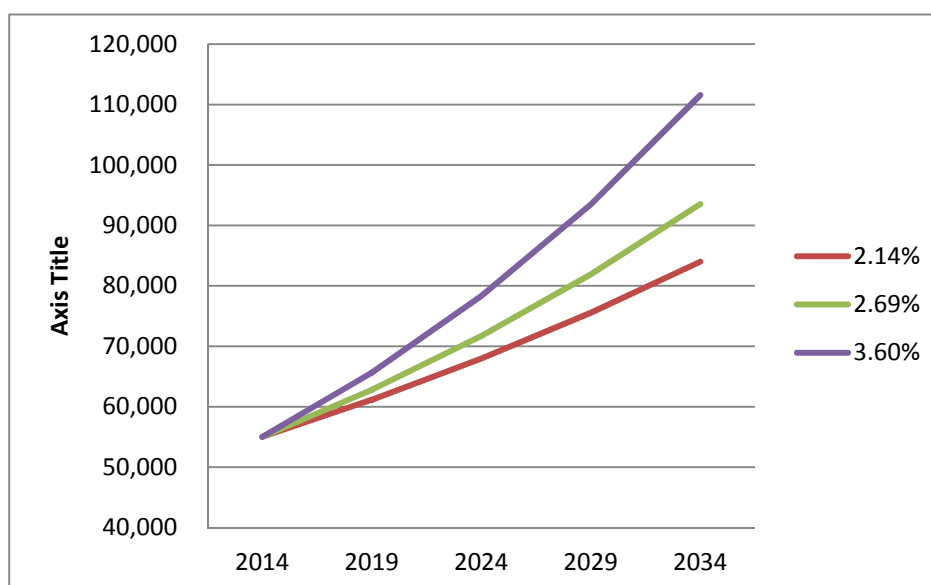
**Table 6: Population Growth Scenarios Sadda**

Years	Low Growth Scenario	Medium Growth Scenario	High Growth Scenario
	2.14% AGR	2.69% AGR	3.6% AGR
2014	55,000	55,000	55,000
2019	61,142	62,806	65,639
2024	67,971	71,721	78,336
2029	75,561	81,900	93,489
2034	84,000	93,525	111,573

Low Growth Scenario: Inter-census growth rate of FATA between 1981-98

Medium Growth Scenario: Inter-census growth rate of Pakistan between 1981-98

High Growth Scenario: Inter-census growth rate of Peshawar between 1981-98

**Figure 7: Population Growth Scenarios Sadda**

The available data suggest that growth rate of FATA has been rather lower than that for Pakistan as a whole. Population Growth rate of Sadda could be higher than that of FATA as:

1. Ancient trade route to Afghanistan
2. TARUCCI program to develop Sadda as the urban hub

As Sadda is being planned to be an economic, institutional and administrative hub of Lower Kurram Tehsil, a significant in-migration can be expected from the rural areas of Lower and Central Kurram in particular and Kurram Agency in general.

The population growth, particularly the migration to Sadda from rural areas will depend on a number of factors such as:

- Public investment in social and physical infrastructure.
- Incentive package for private investment in commercial and industrial development.
- MCs role in ensuring good quality of life, the proper implementation of the structural plan and development of the town.
- Improvement in security situation.
- Improvement in connectivity especially with Upper and Central Kurram

The Consultants estimates that the past trends in population growth will continue for future and the population of MC Sadda could reach around 94,000 by 2034 @ 2.69 AGR for the next twenty years.

As there has been no population census since 1998, there is a long period of sixteen years from 1998 to 2014 and another 20 years of plan period from 2014 to 2034, therefore any population projection will be a long shot. Thus the population profile of two generations is undocumented and any assumptions based on the previous trends (1981-1998) may have a margin of error. **It is strongly suggested that as soon as the next census takes place and the data is published, the population estimates should be reviewed and adjusted.**



## **PART – III**

# **FUTURE STRUCTURE PLAN PROPOSALS**

## 1. VISION

Sadda is basically a service center for the delivery of administrative, health and education services for the Lower and Central Kurram area. Being a Tehsil Headquarter town, Sadda has offices of APA, security forces and various government offices. It is also a big market and trade and commerce services for the Lower and Central Kurram.

The vision for the development of Sadda is to become a major urban center in the Lower and Central Kurram area for the delivery of services and utilities.

***Sadda is visualized as a modern eco-sustainable city, a focal point of social and economic services to large population in Lower and Central Kurram Agency, in the next 20 years***

## 2. OBJECTIVES

The objective of the Structure Planning is to assess the present situation and baseline indicator of service delivery, study the potential for growth and provide for the future needs in a planned manner. It should have enough attraction to pull the scattered rural population to migrate to urban area for the delivery of essential services.

### **Tourism**

Sadda has a strategic location on Thall-Parachinar Road, with good climate and vast agricultural lands. It has enchanting scenic views and can be a favorite summer resort of population from the plains. Presently, the conflict and security concerns have eroded its tourism prospects but potential is still there, waiting to be exploited as soon as the situation improves.

### **Agriculture**

The population is well versed with traditional agricultural practices, hardworking and enterprising. They need advice and facilitation to venture into new crops, fruits, poultry and trout fish farming, to increase exports, improve incomes and make the town prosperous.

### **Health and Education**

The literacy in Sadda, both male and female, is one of the highest in FATA. There are several good secondary and college level institutions. Building up on existing foundation, Sadda could become an educational centre for the local and regional population attracting students from Lower, Central Kurram and other parts of KPK. A Madrassa has recently been allotted a large parcel of land which will be in operation soon.

In Tehsil Headquarter Hospital, Sadda has good secondary level medical facilities; the town can become the health service provider for Lower and Central Kurram region.

Development of physical infrastructure including road network and utility services is a prerequisite for spatial development of the town and should take priority in fund allocation. The thrust of the future investment in Sadda should be in the above mentioned sectors: agriculture, tourism, health and education and small industries relating to auto workshops and auto modifications.

The specific objectives are:

- ***Balanced and integrated development of productive economic sectors, social amenities and physical infrastructure.***
- ***Accelerated development of high potential sectors to improve incomes and employment to boost the local economy.***
- ***Establish Sadda as the regional urban centre and service provider with good connectivity with the region.***
- ***Environmental improvement of the existing city and the quality of life indicators for the local population.***
- ***Capacity building of local government for good governance.***

## SPATIAL DEVELOPMENT

### 3. LANDUSE ANALYSIS

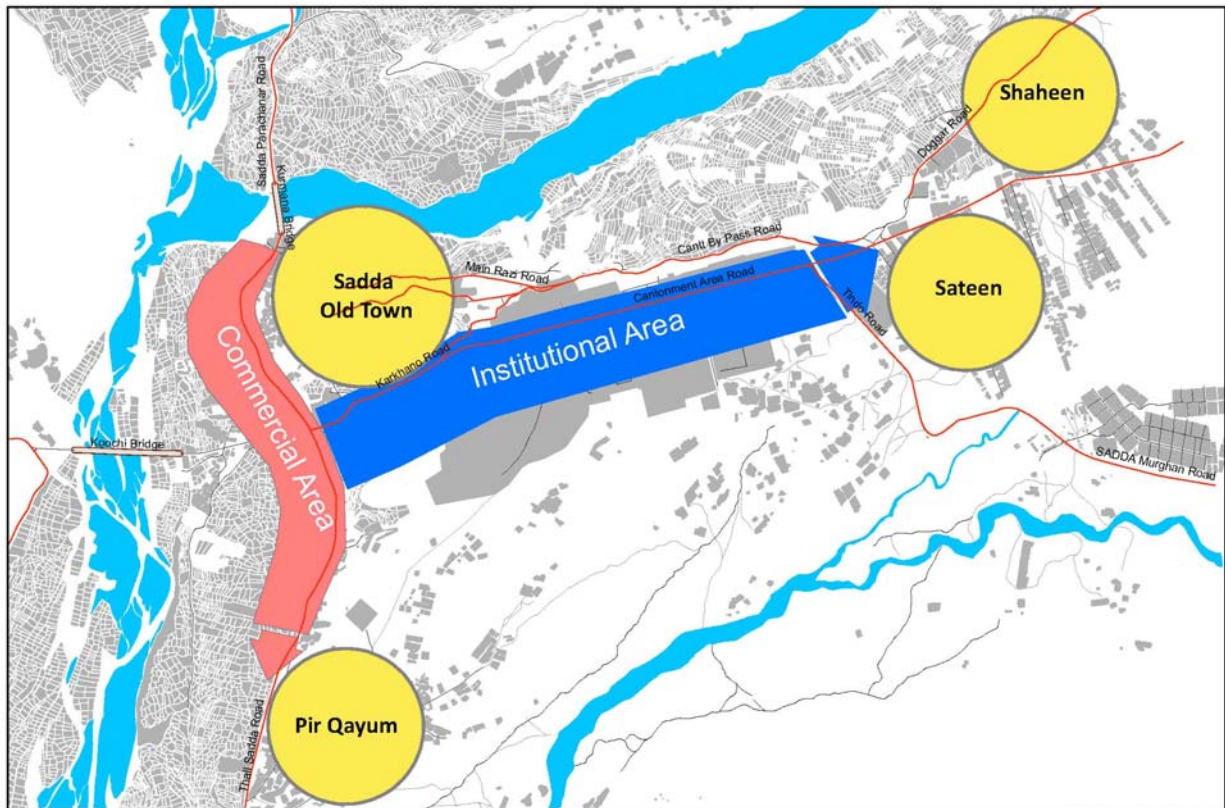


#### 3.1 Existing Land Uses

Sadda Town developed is on the confluence of two major rivers in the valley; Kurram and Khurmana. The town originated around old market area near Sadeeq-e-Akbar mosque and spread along the Thall-Parachinar Road.

As graphically presented in the following figure, Sadda has three major housing clusters at the present; Sadda Old Town, Sateen and Shaheen Colonies and Pir Qayum; inter linked, physically and functionally by Commercial Ribbon Development on Thall-Parachinar Road in north-south direction; and Institutional Area on Cantonment Area Road, in east-west direction.

### Graphical Presentation of Existing Sadda Town



**Note:** The figure shows the predominant land use in the area although other land uses of less significance may also occur in the zone.

### 3.2 **Zoning Distribution**

The existing area of Sadda Town can be divided into five main zones based on their distinct land uses characteristics, as shown in the Map, titled 'Sadda Zonal Map'.

Zone A.	Commercial Area
Zone B.	Old Town Area
Zone C.	Institutional Area
Zone D1.	Shaheen, Sateen Housing Clusters
Zone D2.	Pir Qayum Housing Clusters

#### 3.2.1 **ZONE A. Commercial Area**

The ribbon development along both sides of the main Thall-Parachinar Road west of the town is main trade and commercial centre of the town, which includes: Hashmat market, Mangal market, Noor market, Zawar market, Bangash market, Mechanic market, Shahin market, Awami market, Afridi market. This area is the main transport hub with main bus stand and taxi stand besides some government offices such as NADRA Office, Post Office, Court/Kacheri. Some service industry, mainly auto reassembly workshops, black smithy and mechanical repairs shops are also located here. The area is congested with little possibility of lateral expansion.

#### 3.2.2 **ZONE B. Old Town Area**

The old town area stretches from the Commercial Zone A in the west, Khurmana River in north, Cantonment Area Road in the south and agricultural fields in the east. It has mainly high density low height residential area with some schools. Most of the construction is old style pacca housing, with narrow streets and open drainage. The area has some open plots which can be used for future uses. The area is prone to floods and the worst affected is the primary school area.

### **3.2.3 ZONE C. Institutional Area**

Zone C is the town's main institutional and administrative centre. It lies all along both sides of the Cantonment Area Road between Zone A, Ajab Khan Chowk in the west to Sateen Village in the east. The prominent public uses in this zone are: FC Fort, Vocational/Technical College, Tehsil Head Quarter Hospital, Govt. Degree College, Grid Station Colony, CW Quarters and Offices, APA Lower Kurram Colony, APA Central Kurram Colony, Irrigation Office, Zakat Office, Assistant Education Office, Tablighi Markaz and Cantt Chhawani area. Most public uses have large plots with low floor area ratio. However, the largest area is allotted to Tablighi Markaz. The future expansion of this zone is only possible in the southern direction.

Zone C is the only zone which characterizes Sadda as the premier service centre for a larger region of Lower and Central Kurram. This area also accommodates a small residential land use.

### **3.2.4 ZONE D1. Shaheen / Sateen Housing Clusters**

Situated in the north east area, Zone D consists of two large housing clusters, scattered in medium and small size plots. This is relatively new housing development. In south east, there is a big abandoned refugee camp which can be part of future land bank for housing.

Some of the important residential areas/villages of this zone are: Sateen Village, Shaheen Village, well planned Sateen Camp, New Durrani Camp and demolished Afghan Refugee Camp. This is low density housing zone with several open parcels of land for future development.

### **3.2.5 ZONE D2. Pir Qayum Housing Clusters**

Pir Qayum Village is situated at the south of the main town east of the Thall-Parachinar Road. Whole of the area consists of scattered housing. The main village has small shops and large open areas between housing clusters. This area also has two graveyards which are also used by surrounding areas. This town is named after Pir Sahib Qayum Baba.



### 3.3 Land Use Distribution

The Sadda MC area although has an urban character but it is worth noting that about 75% area is under agriculture or an open brown field. Excluding the agricultural (656 acres), brown fields (1977 acres) and river (378 acres) areas from the total MC area of 3,500 acres, the land use distribution of urban area is as follows:

**Table 7: Land Use Area Distribution of Sadda**

S. No.	Land Uses	Area (acres)	Area (km <sup>2</sup> )	Percentage %
1	Cantonment	17	0.07	3.53
2	Commercial	23	0.09	4.67
3	Education	59	0.24	12.03
4	Graveyard	3	0.01	0.71
5	Health	21	0.09	4.39
6	Public Administration	2	0.01	0.41
7	Recreational	4	0.02	0.84
8	Religious	52	0.21	10.62
9	Residential	298	1.20	60.92
10	Security	2	0.01	0.32
11	Transport	5	0.02	0.98
12	Utilities	3	0.01	0.56

The area wise land use distribution of Sadda is typical of agriculture based medium size town. Among the developed area, residential is the most prominent land use occupying about 61% of the built up land with low rise development. The religious and educational are the other important land uses of the town. The Cantonment Area is hardly 4% of developed land, and commercial area is too congested occupying only a small area of 5%.



### 3.4 Land Ownership

Sadda covers an area of 3,500 acres according to the new MC limit. Sunni Muslims comprise 70 to 80 % of Sadda property whereas rest of the property is owned by Shia communities who have migrated to Parachinar or Shia dominated surrounding areas. There is not much free hold or government owned land available in Sadda, other than what is already in the possession of various public uses. Tribes are not willing to sell their land.

It is important to note that administration and law enforcement agencies can occupy any place for their use in the public interest. Normally no land compensation is given to land owners; they are only given jobs in the constructed facility. Administration can thus manage and arrange the required places for any developmental activity which is in the interest of the people of Sadda. This is the only window of opportunity for making land available for government functions.

### 3.5 SWOT Analysis

The need assessment of the town spatial development is based on the SWOT analysis discussed below:

#### **Location and Connectivity:**

Sadda is very well connected through metaled roads to Peshawar and other major towns. Intercity public transport is available for as far as Karachi.

#### **Topography:**

Town's terrain is suitable for any physical development projects, including buildings and road infrastructure. It has natural surface drainage.

#### **Socio Economic Potential:**

- There is great potential for agricultural growth specially in vegetables and fruit orchards development.
- Sadda's hinterland is rich in minerals, tourism resources, livestock and fisheries.
- Sadda is already a trade hub with thriving commercial activities, financial services and health services.

#### **Tribal Cultural:**

- Despite low literacy, tribal areas have shown natural talent in trade and transportation sector, not only within the tribal areas but across the whole country as well as abroad

- The tribal culture is not anti-development and that is a positive factor taken as potential for future development.

**Prospects of Social Change:**

- Pakhtun tribes are amenable to social change and have shown their ability to adjust to more sophisticated ways of progressive societies within Pakistan and abroad.
- High level of educational and health services and better literacy rates indicate a good level of human capital

**Urban Form:**

- The town is suffering with un-planned street network and uncontrolled land encroachments.
- Brisk commercial activity on both sides of the TPR is creating congestion.
- Urban sprawl will make the infrastructure development very expensive.

**The Conflict:**

Kurram Agency especially Sadda has a history of sectarian tension and clashes between the Sunni and Shia sects which resulted in many deaths on both sides.

- Clashes increased rapidly after the talibanization occurred in the area.
- The security agencies are in control and have established pickets at important locations.

### **3.6 Strategy Formulation**

#### **3.6.1 Urban Development**

Commercial area is congested with insufficient road capacity to serve even the present traffic. Road side parking reduces the road space for traffic movement even further. There is no possibility of widening the road involving acquisition and demolition of buildings, which will be expensive and may not be possible due to social and political pressures. The possible solution for easing congestion in the city centre as well as for accommodating future growth is to shift wholesale trading outside the city centre in specialized markets in suitable locations. The stakeholders, who are fully aware of the problem, should be bought-in with advocacy and incentives. The markets should be owned and built by the respective traders' associations.

Shifting of whole sale markets is necessary due to reasons mentioned earlier, even though land acquisition will be a problem. The MC and the Political Agent as Chairman of MC need to carryout intense advocacy with the representatives of traders, transporters and landowners to form a cooperative and to buy-in the proposal for relocation with each party getting some benefits as incentives such as subsidized (by MC) rent / ownership. The MC has to provide funds at least partially for basic infrastructure - access road, parking, electricity, water supply and drainage. The operation of markets, truck stand may be left to the cooperatives with a certain mutually agreed levy paid to the MC.

The new markets to be developed will include fruits, vegetables, meat, poultry, fish and grains markets. These markets should be able to divert some heavy traffic from the town centre and reduce congestion in the main commercial area.

The ideal location for these markets will be in the future geographical centre of the town, out of the congested area, but not too far to be a disincentive for traders or customers. Markets complex will consist of wholesale areas, retail areas, truck terminal, car park, taxi stand, public toilets, food and drinks kiosks and some landscaped areas.

The main issues relating to urban development in Sadda are:

- 1) Ribbon commercial development on both sides of TPR
- 2) Extreme congestion on the TPR during business hours
- 3) Unavailability of land on either side of TPR for widening of road
- 4) Overstretched linear development along Cantonment Road, resulting in long distances among housing clusters and between housing clusters and the commercial development along TPR

### 3.6.2 Future Growth

The most prominent function of the town is the provision of government services to the local as well as agency population. It seems that housing and other development follows the direction set by location of government and public facilities. The present trend shows the development is taking an eastern direction on both sides of Cantonment Area Road where a large number of public facilities are located which include: Tehsil Headquarter Hospital, Model School, College and some officials' colonies.

Ribbon development along the road is not the most desirable pattern of urban growth because if the proper urban development controls are not exercised, the road will ultimately be choked with the local traffic and encroachments. It will be difficult to reverse the trend and the future development, specially large land uses, would follow the trend of expansion along this road. However, the right of way of the road should be clearly defined as a minimum of 40 meters (120 feet) to provide scope for future expansion as four lane dual carriageway with service roads on both sides. The ROW will need to be jealously guarded against any encroachments. A clear hierarchy of roads essentially required for the distribution of traffic is missing. The major objective of the plan is to rationalize the traffic circulation.

However, the acquisition of land for road ROWs will be problematic and expensive. Also it will be difficult to control encroachment. 'Guided Land Development' will be a better option. Individual landowners or cooperatives of landowners would be encouraged to initiate development schemes in accordance with land use zoning, surrendering land for roads and community facilities (as per detailed plan) to MC. (This model has been adopted in Islamabad Zone 5, Karachi and Gwadar)

The challenge will however be to ensure that it is implemented. There are perhaps two options: (a) Government acquires the land required for the rights of way up-front; or (b) work with landowners and other 'stakeholders' to agree to a scheme including the required lateral roads. This will need to be a form of 'Guided Land Development', which will critically depend on capacity to engage with the various stakeholders, and reach agreement on the form of future development.

### 3.6.3 Urban Form

Sadda basically developed on the confluence of the Kurram and Khurmana River on Thall-Parachinar Road (TPR). The regional trade on TPR and agricultural lands made fertile due to revitalization of soil by frequent floods, helped the town grow. Later, establishment of a cantonment, public administration buildings and community facilities were built on an easterly road leading to Sateen and Shaheen Villages, which became a second axis of urban growth and health, education and government offices were built on both sides of this road generally known as Cantonment Area Roads. In order to avoid strict checking on the Cantonment Road, a parallel by-pass road, north of Cantonment Road has been provided which further east becomes Dogar Road providing connectivity with the central Kurram Area. This Cantonment By-Pass Road is not a very desirable alternate route to Cantonment Road for future development due to its irregular road pattern, difficult topography and rich agricultural area at the north.

There are three main housing clusters i.e Sadda Town, Sateen / Shaheen Villages and Pir Qayum. A large abandoned Afghan Refugee Camp exists on Sadda-Murghan Road which will be reserved for future housing development. There are also several smaller Afghan Refugee Camps including New Durrani Camp which have been mostly abandoned.

### 3.7 Spatial Strategy

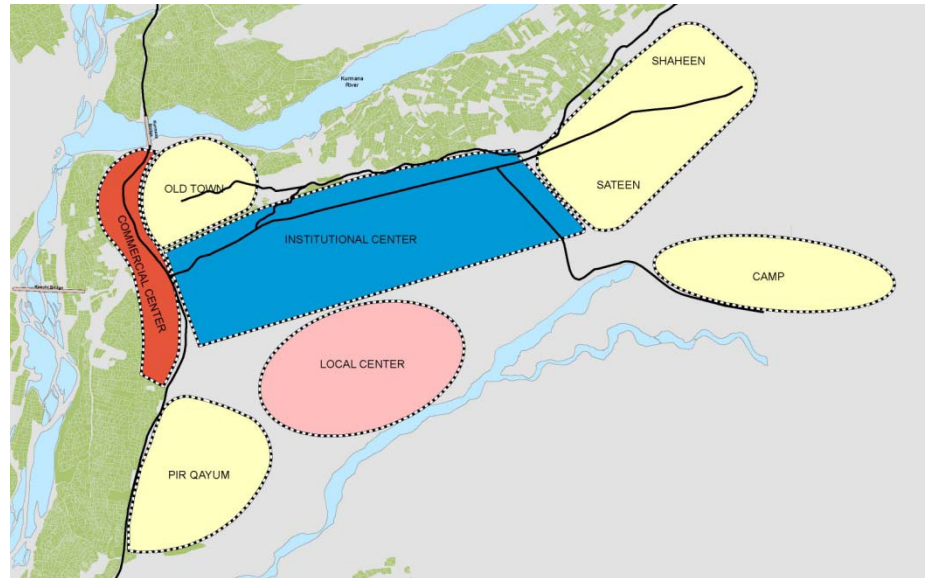
The spatial strategy for Sadda would be:

- i. Decrease congestion on the TPR passing through the commercial development.
- ii. Given the constraints on the ROW of TPR, shift some local commercial activities away from this road elsewhere in the town in properly planned markets.
- iii. Shift remodeling workshops to planned small industrial estate.
- iv. Provide a Bypass road for traffic on TPR
- v. Improve connectivity among housing clusters.
- vi. Consolidate dispersed development and encourage compact neighborhoods self sufficient in community facilities.

### 3.7.1 Options for Spatial Pattern

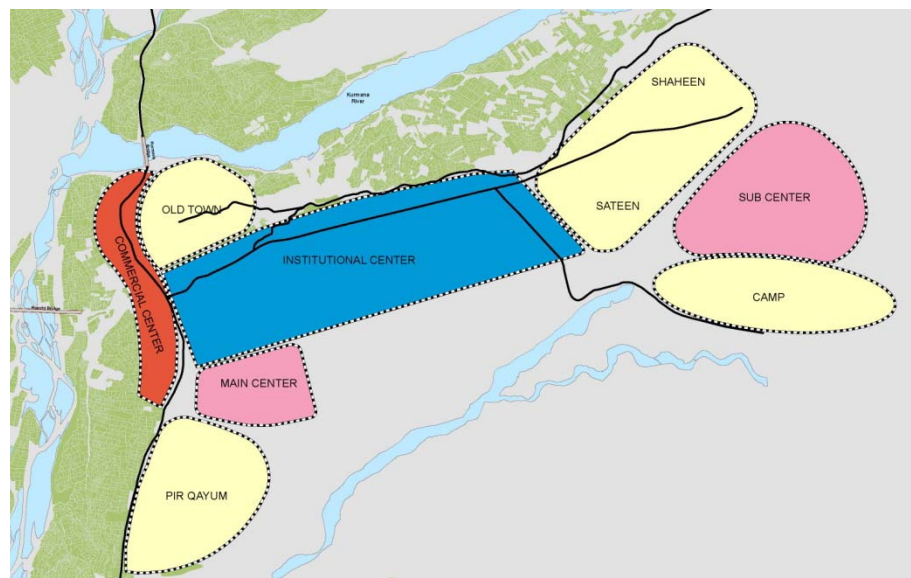
#### a. Local Centric Approach

In local centric approach Sadda is supposed to serve as a trade and service centre by Lower Kurram Tehsil population particularly and Central Kurram Tehsil generally. Another thing could happen that this centre will attract population from both Lower and Central Kurram, but will have less to offer in terms of facilities. In both cases it would be difficult to fulfill need of urban centre of two tehsils.



#### b. Regional centric Approach

Regional centric approach is for creating dual centers i.e. main centre and sub centre. The main centre will fulfill the purpose of existing old commercial area while sub centre will cater to the population of Central Kurram. This sub centre is needed considering security and less development in the Central Kurram. Sadda itself has limited land available at the north and west because of rich agricultural fields, rivers and mountains.



### 3.8 Spatial Plan

The recommended model of this town is “overall consolidation within the developed area and to halt the further ribbon development”.

The proposed spatial pattern is characterized by the major road network. Thall Sadda road will remain the main artery but from PSO pump to Parachinar Taxi Stand, it will be categorized as urban road. Cantonment area road is the major road that is starting from the F.C check post (near Dogar) towards the Ajab Khan Chowk on East, connecting all major institutions.

In order to reduce the traffic congestion in the old town area, a bypass road is being suggested which will be completed in two phases. In phase-1 Bypass road is being originating from the north-west of the Khurmana Bridge along the river bank crossing towards the west of Koochi Bridge and lower side of existing Mehmood’s market. In phase two, bypass road will extend to the FC check post at TPR (near Pir Qayoom) through which all the heavy traffic including Afghan trade traffic will bypass the old town and cantonment area.

A parallel dual carriageway is being suggested on south of Cantonment Road to reduce congestion from the main Cantonment Road. Proposed road will be the hub of all commercial, industrial and institutional activities. Dualization of existing roads is being suggested including Thall-Sadda road from PSO pump to Khurmana Bridge and Cantonment Road from Ajab Khan Chowk to Dogar road. This could be achieved with the restriction of on street parking, improve the existing carriageway, removal of encroachments, encourage traffic to take the proposed new by-pass and land acquisition to make property line at a distance of proposed ROW.

The Road Network is described in the following categories:

- **Bypass Road** : 120 feet Dual carriageway with service road on both sides
- **Primary Roads**  
Cantonment Road and the two proposed roads : 120 feet Dual carriageway with service road on both sides  
Right of Way (ROW) in the urban area
- **Secondary Roads:**  
Karkhano Road, Akbar Khan Road, Sadda Main Bazaar Road, Cantonment Bypass Road, Tindo Road/New : 100 feet dual carriage way

Durrani Camp Road, Thall  
Sadda Road and  
Proposed lateral link roads  
Right of Way in urban area

- **Main Urban Roads** : 60 feet ROW four lane (40') single  
Including existing roads : carriageway

At present MC has little capacity to control encroachments. If no action is taken to increase capacity of the MC, the uncontrolled encroachments will reduce the roads capacity like what has happened in Sadda Bazar area.

In twenty years perspective, such right of ways would be required to meet the additional traffic needs. The mechanism would be to notify the ROW and prohibit all new construction or reconstruction within the ROW. Over the years, this may yield the required ROW. (In Karachi Saddar, such restrictions, proposed in 1940s are still in place)



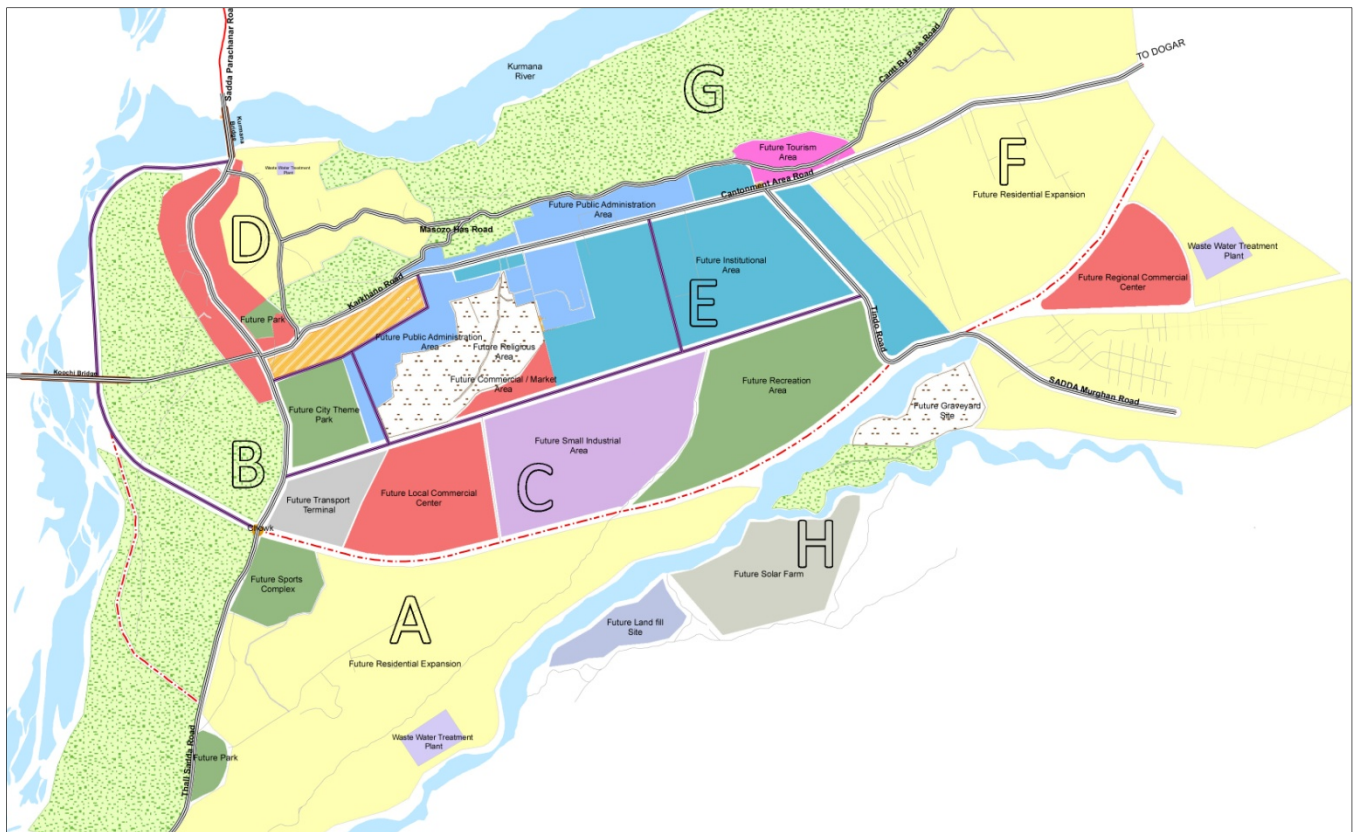
### 3.9 Proposed Landuse Zoning

The proposed zoning of Sadda Structure Plan is suggested considering MC under Local Government Ordinance will be able to exercise its powers for the enforcement of building bylaws and regulations. As private land ownership is quiet high, the implementation would expect to be mostly by private sector, while for public functions MC would need to acquire land through different methods of compensations. Thus, all the future development either public or private would follow the strict land use zoning.

The Spatial Plan divides the town into several blocks with the existing and proposed land use as follow:

**Table 8: Proposed Landuse Zoning**

S. No.	Futures Zones	Land Use Zoning	Location
1	<b>Zone-A</b>	Residential Area	Includes Pir Qayum village and scattered housing around it
2	<b>Zone-B</b>	Agriculture Area	All area west of TPR upto the river excluding the commercial belt
3	<b>Zone-C</b>	Future Main Commercial, Industrial and Recreational	The area enclosed between two new east-west roads south of Cantonment Road
4	<b>Zone-D</b>	Residential (Old Town Area) and Commercial Area	The area bounded by TPR , Cantonment Road in the south and river on the north
5	<b>Zone-E</b>	Public Administration and Tourism and Religious uses	The area south of Cantonment Road
6	<b>Zone-F</b>	Future Sub Commercial Centre including Residential Expansion	Area existing of Sateen/Shahen villages and abandoned Afghan Refugee Camps
7	<b>Zone-G</b>	Agriculture Area	The area north of Dogar Road and Cantonment Bypass Road
8	<b>Zone-H</b>	Utilities	New Durrani Camp Road, Sadda Murghan Road. The area reserved for the Solar Farm and Garbage Disposal Site



### 3.9.1 Plan Flexibility

The spatial plan includes a range of proposals, some of which are critical to the success of the overall planning strategy while others refer to actions that are desirable rather than critical. Some appear to be geographically determined while the locations proposed for others appear to be indicative rather than fixed. For example, the location of the proposed wholesale market is fixed by its relationship to the two roads that cross on its southern border. The locations of the solar farms and the future recreation area on the other hand, could be moved without undermining the overall plan concept. The MC will need to take this into account during the plan implementation.

## **PART – IV**

# **SECTOR WISE STRUCTURE PLAN PROPOSAL**

## **ECONOMIC DEVELOPMENT**

Sadda town as an “engine of economic growth” for the Kurram Agency has to lead socio-economic up lift of the region with the provisions for investment incentives and infrastructure for the accelerated growth of agriculture, industry, tourism, health and education. An integrated approach will be required for coordinated action by various agencies to raise economic investment, skill development and entrepreneurship.

### **Gender Based Involvement**

No economic development is expected to exploit full potential without involving the half of its population comprising females. Besides, concerted efforts for increasing female literacy, women should not be left out of skills and entrepreneurship development programs. Home based craftsmanship and skills training with micro financing and facilitation for marketing of handicraft and domestically produced dairy items, could be considered as practical first step.

The structure plan suggests that conscious efforts should be made to bring women folks gradually into economic activities without offending the cultural sensitivities. The plan objective is to bring, at least one fourth of the women of economically active age group into the gainful employment by 2034: initially operating from home, but gradually extending and diversifying their activities specially in education, health and handicraft sectors.

The sequence of enabling women will be:

- Increase education and literacy
- Provide training in vocations, such as tailoring, handicraft, fruits and vegetables processing, stitched garments for ladies.
- Provide teaching and midwifery training in controlled environment.
- Introduce micro financing for home based and cottage industries
- Provide training to develop entrepreneurship
- Provide marketing facilitation
- Sensitize political leadership at local levels as to the need for women’s participation in local decision making.

## 1. AGRICULTURE

### 1.1 Existing Situation

Parachinar and Sadda located close to each other with only 32 kilometers and hardly one hour travelling time between them. The population also has tribal linkages but sectarian divide segregates them from taking full advantage of their complementarities in economic development. Yet Sadda is dependent on Parachinar for government services, Parachinar as the capital of the Agency, has several government offices located there. Thus the economy of Sadda cannot discuss separately from Parachinar.

Sadda's economy is agriculture based, therefore agriculture features fairly high in local priorities. Fisheries, horticulture and mining have significant potential, which is largely underutilized.

Agriculture Department is providing extension services, farm management, and developing nurseries in the Agency area<sup>37</sup>. Besides, the Department has established a laboratory for providing soil and water testing services to farmers.

#### 1.1.1 Crops

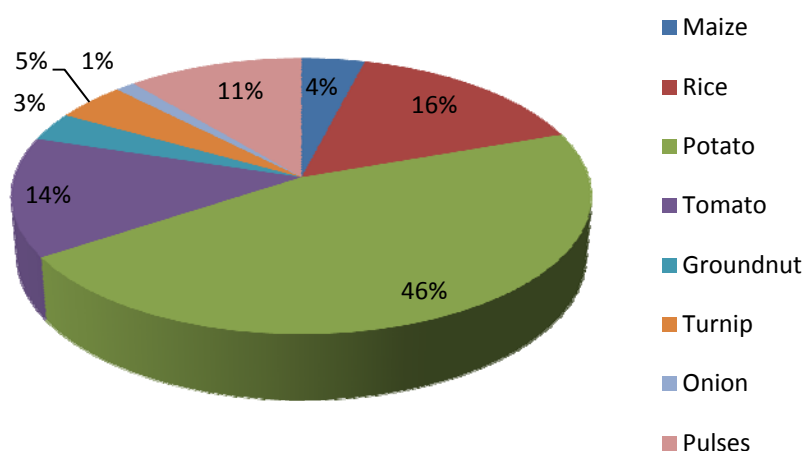
Potato, rice, pulses and tomato are the main cash crops of Kurram Agency. Wheat is also grown in some areas but only at the subsistence level.

**Table 9: Annual Crop Production in Kurram Agency, 2014  
(metric ton)**

Crop Name	Production	Percentage %
Maize	5760	4
Rice	22400	16
Potato	66000	46
Tomato	20000	14
Groundnut	4800	3
Turnip	6400	4
Onion	1800	1
Pulses	16000	11
<b>Total</b>	<b>143,160</b>	<b>100</b>

<sup>37</sup> Refer Annexure - E for organizational setup of Agriculture Department

Figure 8: Crop Production Pie Chart



### 1.1.2 Agricultural Inputs

#### Seeds and Saplings

The main fruit farm situated at close by Parachinar accommodates a fruit nursery for apricot, apple and peach production along with facility of seed enrichment for wheat cropping. Due to continuous shortage of water supply in region, wheat production here is mainly fed by rainwater and fruit farming has suffered major loss of production in last few years.

A new cherry nursery which has distributed 2,000 sprouts to local farmers has also been established by Agriculture Department at Kirman near Parachinar. Fully functioning fruit nurseries have also been established at Sadda and Alizai towns. The Alizai nursery produces walnut seeds.

Seeds produced by these nurseries cover 40-50% demand of local farmers. Rest of the farmers purchase seeds from a farm established at Tarnab area near Peshawar city. Agriculture Department statistics show that private farmers also cultivate approximately 2,000 flower plants for commercial use.

In order to increase the level of knowledge and adequate skills, Agriculture Department has also established Agricultural Training Center for local farmers. This project is in its initial stage and the prime objective of this project is to introduce a four day short course training program for local farmers.

**Agro-Chemicals Fertilizers**

Many farmers of Kurram Agency area are quite familiar with benefits of using fertilizers. However, they possess very limited knowledge and skills for growing healthy crops using fertilizers of appropriate type at proper time and in optimum quantity. High price of fertilizers is also a matter of concern for poor farmers. Local authorities dealing with these issues feel that government should enhance and improve soil testing services for fertilizers and water testing used for agriculture and farming.

Horticulture crops of Agency are also affected by pests and crop diseases. Agro-chemicals in comparison to fertilizer are less likely to be used in the valley, except in fruit farming. Local farmers complain that price of agro-chemicals is very high.

**Credits**

More than half of farmers of Kurram Agency are in debt, which includes main categories of farmers: owner-cultivators, owner with tenants, and tenants. It is an interesting fact that most farmers cannot sustain themselves from agricultural income alone and have to supplement their income through livestock farming.

Invariably all the loans are provided by non-institutional lenders at higher than market interest rates. However, interviews with concerned stakeholders revealed that only the farmers holding title of land are eligible to get loan from financial institutions such as Agricultural Development Bank which provides loans for farming and livestock development.

In 1968, Agriculture Development Bank (ADBP or ZTBP) established its first branch at Parachinar. Second one has been opened in Sadda recently. ADB's agriculture loan policy is affordable and provided with very low interest rate. Both, the production and development loans can be returnable at constant interest rate including original debt as per suggested schedule. Parachinar, Sadda and Alizai also accommodate branches of public and private banks. No commercial bank provides loan to farmers of tribal areas.

**1.1.3 Agri- Business**

A number of fruits are grown and processed (dried) in the Agency area. Dry fruits of Kurram valley are not as good as those imported from Afghanistan. Afghan dry fruits are imported in Kurram Agency via Kabul-Peshawar route. Experts from local Agriculture Department suggest that rather than providing infrastructure for fruit processing, the local government should focus on establishing cold storage infrastructure to increase the shelf life for fruits and vegetables. They believe this effort will bring more income to farmers by selling stored goods in different seasons.

## Marketing and Transport

Parachinar Town is the main market for selling goods and products in the region. Whereas, people of Central Kurram buy their goods and do businesses mostly in the main market of Sadda they also visit Parachinar to sell their agricultural goods.

Wagon (pick-up trucks) and Lorries are the available mode of transportation for transfer of agricultural goods from farm to market. Lorry is the most preferred mode of transport even though the availability is uncertain at times. Farmers face considerable problems in bringing their produce to the markets due to non-availability of public transport and poor quality of rural roads.

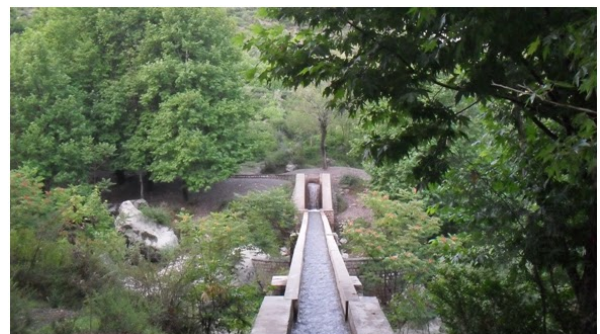
### 1.1.4 Horticulture

Kurram River is the main source of irrigation. Beside this, a large portion of valley is irrigated by water channelled by a canal from Koh-e-Safaid. Some areas in valley are served only by rain water because there is no river water source available. The altitude of the area varies between 457 to 2,133 meter with annual precipitation rate of 800 millimeters. Hailstorms during spring and autumn are the major natural hazard which affects quality and yield of main horticultural crops.

In July 1990, Local Government Department started an adaptive research program to boost fruit production in FATA including Kurram Agency areas. The pivotal aim of this project was to develop a technology based advancement package that could increase fruit production per unit area. This initiative had been taken to support local economy of the area by giving boost to fruit farming activities.

### 1.1.5 Irrigation<sup>38</sup>

Agricultural activities in Upper and Lower Kurram areas are mainly dependent on water sources irrigated by channels of Kurram River that support seasonal cropping. There are 148 tube wells in Kurram Agency area. Out of this, 109 are installed in Upper Kurram and 35 installed in rest of the Agency.



In Upper and Lower Kurram valley, only a few farms are reported as barren while Central Kurram is largely barren.

<sup>38</sup> Refer Annexure - E for organizational setup of Irrigation Department



There are two type of irrigation systems installed in Kurram Agency Area.

**a) Perennial flow Irrigation System**

This irrigation system has been installed along the bank of River Kurram and mainly comprised of sub-nallas. Approximately 18,124 hectares land of the agency is irrigated by this system.

**b) Tube Wells Irrigation System**

There is no surface water source available in plains of the agency and only alternative is tube well based irrigation system. Federally Administered Tribal Area Development Corporation has installed 90 tube wells in this area. Total irrigated area of Kurram Agency which is served by tube wells and canals is 11,806 hectares.

**Table 10: Sources of Irrigation in Kurram Agency 2012-13**

SOURCE	AREA (hectares)
Canals Govt.	28
Canals Private	11,080
Tube Wells	275
Wells	73
Others	350
<b>Total Irrigated Area</b>	<b>11, 806</b>

Source: Director Agriculture Statistics FATA, Peshawar

## 1.2 Need Assessment

Sadda is producing export quality fruits, crops and dry fruits which can play the vital role in the local income. It has a vast land under agricultural use, but due to shortage of irrigation water and old cropping methods, production is not growing in relation to the potential. Besides this, farmers are bearing massive losses in profit due to non availability of cold storage godowns and monopoly of local traders. Farmers can make more profit to preserving and storing fruits, vegetables and grains in peak season and sell them off-season at higher price. Availability of cold storage will motivates the farmers and increase the agricultural incomes.

Social awareness programme and trainings are required for farmers to learn the modern trends of cropping and new hybrid seeds, less time or less water taking crops. Agriculture Extension Department need to reactivate and introduce new hybrids seeds having more productive capability.

Irrigation is the pre-requisite for agricultural production. Supply of irrigation water needs to be increased through:

- Flood water storage/ reservoirs
- Installation of more solar tube wells
- Use of treated waste water

### **1.3 Strategy Formulation**

A huge quantity of flood water is generated by rain and ice melting annually. Flood water can be stored with check dams / recharge dams and to provide sustained supply of irrigation water. On the other hand the farmers need to be made aware of cash generating crops and fruits plants. Micro financing and low interest loans can improve the capacity of farmers and increase production affectively.

### **1.4 Immediate Action Plan**

- Hydrological Studies for the establishment of check dams / recharge dams.
- Investigation of solar power tube wells.
- Pilot project of irrigation solar tube wells.
- Rehabilitation of old nurseries and orchards.
- Study to investigate the ways to grow and markets new cash crops.
- Introduction of new crops / fruits (olive, strawberry, cherries apples etc).
- Boost the performance of agriculture extension services to train farmers in selection of seeds, pesticides and fertilizers.
- Availability for credit facilities to small farmers.
- Warehouses for dry fruits, vegetables, fruits and grains.

### **1.5 Long Term Plan**

- Construction of dams, if found feasible.
- Private sector investment to enhance productivity market value of agricultural products.
- Moving from subsistence farming to market-oriented and commercial farming.
- Covering entire value chain for future export and import.
- Subsidies and economic incentives.
- Cooperative fruits and vegetables farming to be introduce to facilitate and promote production and marketing.

## 2. FORESTRY

### 2.1. Existing Situation

According to 1998 Census Report, forest activities in the area were limited before 1977. However, since 1977-78 extensive afforestation activities have been undertaken in the area and plantations has been carried out throughout the Agency. By 1998, plantation successfully carried out in Kurram Agency included 7,959 acres in Upper Kurram, 25,868 acres in Lower Kurram and 5,970 acres in Central Kurram. The replanting of forests has continued and freshly planted pine samplings were seen in the Malana area.

Forests are integral part of rural economy and play significant role in livelihood of rural population. Dense forests of Kurram valley help water retention, control floods and soil erosion, and protect habitat of indigenous flora and fauna, which helps to maintain clean and healthy environment.



Forests also offer job opportunities in activities like tree felling, saw mill operations and sale depots. Commercial activities such as charcoal kilns and furniture factories also rely on forest resources.



Approximately 104,404 hector area of Kurram agency is forest. It accommodates dry temperate forest, sub tropical broad leaves forest and afforestation plantation, rangeland, shrubs and bushes. The forest includes trees of various species such as deodar, coil, oaks, pine, walnut, chinar, snatha and olive.

At present Kurram Agency's forest industry is in decline. Deforestation or over-exploitation is the key reason for the decline. According to the Forest Department<sup>39</sup>, the annual deforestation ratio has been estimated as 171 million kg for fuel and 1.979 million kg for timber production. Approximately 1000 persons of the Agency work in wood and forest industry. Wood trade in this area is largely unregulated and controls by the Forest Department are weak.

<sup>39</sup> Refer Annexure - E for organizational setup of Forest Department

## **2.2. Immediate Action Plan**

- Increase the number of forest nurseries to protect eco system and reducing the process of deforestation.
- Authorities should take priority action to deal with the illegal logging of Timber (smuggling).
- Constituting strict byelaws for forest reserves and new forests.
- Initiate tree planting campaign with school children.

## **2.3. Long Term Plan**

- Establishment of new forests lands and reserves with strict byelaws.
- Promote the sustainable use of forest ecosystems, whether exploited or not exploited for the production of timber and wood, in such a way that the genetic resources they contain are safeguarded.
- The interest of local peoples and partnership with them is essential. Work should be done at the request of local people, for them and by them.
- To ensure the active and integral participation of all institutions and social sectors in the forest area with a view to making forestry development technically efficient and productive and socially effective.

### 3. LIVESTOCK, FISHERIES AND POULTRY

#### 3.1. Existing Situation

##### 3.1.1 Livestock

The livestock farming provides additional income support to many households of the area. Animal products and their byproducts like milk, meat, draught power, dung, and products made from animal bones and skins are good sources of income generation for local people. Many households of Kurram Agency supplement their income through poultry farming by selling chicken and eggs.

Livestock grazing is a common activity in Sadda Town and its surrounding areas where a large majority of households keep livestock. The bucolic character of the valley offer ideal milieu for cattle farming and growth. Particularly the upper valley area of this region with high growth of grass and scrub used for fodder is suitable for sheep and goat grazing.

According to Assistant Director Livestock and Dairy Development Department, there are 4 veterinary hospitals, 4 artificial insemination centers each run by veterinary officer, 11 dispensaries and 11 veterinary centers established in Kurram Agency. Approximately 3,410 artificial insemination cases are dealt with annually through these facilities.

For many local households, live-stock farming means investment for future. If crop production fails any year, cattle farming provide income support for poor and low income farmers. The size of herd depends upon household's purchase capacity and quality of food fed to animals. In winter season animals are fed with stored food because natural fodder vanishes due to extremely cold weather.

**Table 11: Number of Live Stock in Kurram Agency**

Livestock productivity is also affected by various factors: food shortages, inadequate veterinary cover, inferior genetic potential and poorly developed animal market infrastructure are main problems of livestock business. Malnourished animals are less productive and more vulnerable to parasites and diseases.

Names	Production	Percentage %
Cattle	121,457	12
Buffaloes	3,171	0
Sheep	766,698	76
Goats	113,588	11
Camels	47	0
Horses	673	0
Asses	3,966	0
Mules	901	0
<b>Total</b>	<b>1,010,501</b>	<b>100</b>

In Kurram Agency, animals are normally grazed in common land area named as Shamilat. Ownership of livestock is completely private and governed under customary law.

### **3.1.2 Fisheries**

Approximately 1,824 acre land in Kurram Agency is used for fisheries. This area accommodates 35 non-trout fish farms out of which 24 are functional and 11 are non-functional. Parachinar town accommodates 17.5 acres of land for non trout fish farms. The government based trout hatchery in Malana is spread over one acre, whereas Shablan trout hatchery is of 1.50 acre in size.

The trout hatchery at Malana produces 100,000 eggs and 50,000 fry annually. Until 2006, a trout production unit at Shablan was also active in Kurram Agency area, which used to produce 1,000 kilograms of fish every year. Dam fishery at Kot Ragha (Kurram Agency) and Milward dam (Khyber Agency) stock fish seeds and experiment fish harvesting.

A fish pond named as Ibrar Hussain has an area of 3 acres. Another fish pond named as Kachakeena has occupied land of 2 acres at Shalozan. Fish ponds are well served by two small dams named as Kot Ragha and Maidani. These dams are constructed on area of 500 and 1300 acres respectively.

Government has been working to improve and expand fish production in order to boost economic profile of the region. Fisheries Department is headed by an Assistant Director who manages all fishery related activities of FATA.

Private fish production is about three tons per year. Fish production and business has considerable potential for expansion and can be enhanced by promoting awareness and facilitating fish farmers with the provision of seeds and availability of credit. Improvements in infrastructure like new water sheds development and management would play vital role in increasing fish production.

Fish farming also support income generation and provide employment opportunities. Large tracts of waste and marginal lands of the region can be used for fish production. Fish culture enhancement can also contribute in food security and improve nutrition.

### **3.1.3 Poultry**

Poultry products are in big demand in Sadda and surrounding areas. No poultry farms exist in Sadda and surrounding areas and most of the demand is met from imports from the plains. The

local skills are available for breeding free range chicken and eggs on a family-level. It is important to promote poultry not only for income generation but also for food security.

### **3.2. Need Assessment**

- Trout and fish farming can be promoted with encouragement for joint farming and market infrastructure.
- Government should introduce the livestock and poultry farming skill program for locals to get in house employment, especially for women.

### **3.3. Strategy Formulation**

- On-farm interventions, adapted to specific agro-ecological conditions and production systems.
- Institutional changes, including the structure and function of support services covering input supply, research, extension and training, processing and marketing and credit.
- Genetic improvement programmes aimed at improving the livestock resource base.
- Animal health programmes aimed at limiting the impact of disease on animal production.
- Processing and marketing policies related to investment in the necessary infrastructure that enables livestock products to safely meet existing demands as well as those of the future.
- Private sector should lead up the fish and trout farming.
- Moving from subsistence farming to market-oriented and commercial farming.
- Support the preparation of a wide-ranging participatory analysis of the fisheries sector.
- Supports the participatory development of a fisheries sector policy with generalize rules.
- Help to build the capacity to undertake participatory sector analysis and fisheries policy development in the region.

### **3.4. Immediate Action Plan**

The common initiatives for the livestock immediate action plan are:

- Professionally run corporate body (free from unnecessary controls), will also act as holding company.
- Capacity building of the stakeholders.
- Marketing/information campaign.
- Public participation and implementation process.

### 3.4.1 Livestock

- Initiate a project on-farm delivery of veterinary services.
- Awareness, trainings and facilitation of cooperative farming and marketing of by-products (wool, meat, hides, poultry feed etc).
- Initiation of value addition to wool for making shawls/ blankets.
- Provision of loans to cattle and sheep farmers to increase supply of wool, meat and milk.
- Feasibility of dairy farming and production of milk.

### 3.4.2 Fisheries

- Rehabilitate old trout/fish farms and provide cold storages/ice plants.
- Reactivation of non-operational trout farms to expand the supplying of fries and seeds.
- Storage and marketing, promotion of trout fish farming.
- Introduction of cooperative fish farming on a commercial basis.
- Promoting land availability on rent/lease for fish farming.
- Introduction of reefer for the transportation of frozen fish to other areas.
- Encourage special arrangements for water availability for fish ponds.
- Provision of solar power for fish farms.

### 3.4.3 Poultry

- Encourage establishment of poultry farms on cottage and industrial basis.
- Sadda area can specialize in the production of free range chicken and eggs.
- Establishment of poultry feed factory base on animal by-products.

## 3.5. Long Term Plan

- Private sector investment to enhance market value and economy.
- Moving from subsistence farming to market-oriented and commercial farming.
- Covering entire value chain for future export and import.
- Measurement of fishing capacity.
- Subsidies and economic incentives.
- Cooperative Dairy Farming to be introduced to facilitate and promote production, processing and marketing of milk and meat covering entire value chain.



## 4. INDUSTRIAL

### 4.1. Existing Situation

FATA has not been able to realize its full potential for industrial development due to poor condition of infrastructure, lack of energy and skilled labour. Kurram Agency is thus one of the most economically disadvantaged regions.

Majority of Industrial units in FATA region are small scale industrial units that are working without any formal governance mechanism. Statistics of the Office of the Directorate of Industries show that approximately 1,082 private sector industrial units in the FATA are functional. This includes; 120 in Bajaur Agency, 200 in Darra Adam Khel (FR Kohat), 237 in rest of FR Kohat, 207 in Khyber, 28 in Kurram, 130 in Mohmand, 24 in Orakzai, 16 in South Waziristan and 89 in other FRs. Industries for stone processing, textile weaving, firearms making and ghee manufacturing units have been established in Kurram Agency.

#### 4.1.1 **Crafts and Service Industry**

Sadda has a number of highly skilled artisans and craftsmen specially blacksmiths, carpenters, furniture makers, electricians and mechanics. Small workshops accommodating small industrial activities like manufacturing of steel grills, doors, wooden furniture, making of agricultural implements and parts exist in Parachinar and Sadda Towns. Some refugees (TDPs) have been engaged in transport business in Kurram Agency area. They work as public transport operators and move individuals and goods from Agency to areas of Thall, Kohat and Peshawar using trucks and tractor based lorry.

An important cottage industry of Kurram Agency is preparation of mats and baskets made from Mazri plant. Sericulture is also an important cottage industry of Kurram Agency Area which has faced significant decline in last few years.

#### 4.1.2 **Auto re-assembly**

Sadda seem to have specialized in a peculiar auto-reassembly industry. A typical model of “Toyota Corolla hatch back” is very popular in Kurram Agency for use as taxis. The cars are bought in Afghanistan, dismembered there and transported to Sadda in “knocked down” condition including chassis and body cut in halves.

There are at least three large workshops in Sadda, where these dismembered cars are re-assembled, welded and painted and come out as perfectly finished cars. These are non-custom

paid cars and not legally allowed to run in areas outside the Kurram Agency. This business has provided employment to a significant number of skilled and semi-skilled labours.

#### **4.2. Need Assessment**

The absence of industries in Sadda is a barrier in the economic development, as presently Kurram Agency has less number of industrial units, compared to other Agencies. One of the reasons for this may be lack of developed land for small industries. Sadda needs to have a dedicated zone for development of small scale industrial units. In reference to Stakeholder's Workshop held on August 25-27, 2015, we can designate it as "Workshops Area".

- All small scale industry like iron work, furniture making, ghee processing etc should be promoted.
- Government should introduce the technician level diploma courses for the locals to produce skilled labour.
- Small scale Industries for stone processing should mark up with the rules to be the part of international community and to upgrade import of different stones.
- Industry for the agro base products can boost the overall economy with proper processing, packaging, storage facilities.

#### **4.3. Strategy Formulation**

In order to increase the employment opportunities, industrial areas or Special Economic Zones are needed. To be successful, they require proper infrastructure and utilities; availability of financial credit; business facilitation and provision of incentives to attract private investment. To ensure that these industrial areas are properly utilized, they should only be developed after detailed feasibility studies have been carried out. The key point here is that land should be made available in response to assessed demand. Building material industries would also be needed as construction sector has to respond to the increased activity in different sectors of the economy.

The following are some incentive and support measures that may encourage industrial development in Sadda town:

- Provision of developed land on easy terms.
- Provision of credit from banks on soft terms.
- Facilitation of small entrepreneurship in agro based small industries, poultry, livestock, readymade textile products etc.
- Soapstone industries need to be established with advance methods of extraction and also the use of waste material with different slab making products.

- Wood industry to be promoted to enhance the value addition.
- Skill development and the vocational training to increase the employment ability of labour.
- Small industries for low-tech electronics and for value addition on wood and soapstone.
- Meat and poultry processing including establishment of a modern slaughter house.

#### 4.4. **Immediate Action Plan**

- FATA Secretariat should sponsor a feasibility study for planning and developing a small scale industrial estate in Sadda to boost up the employment and economy. The area may be declared as special economic zone.
- Existing workshops and craftsmen should be shifted outside the bazaar to the industrial estate and provided subsidized solar panels to increase their productivity and incomes.
- Industrial development bank and micro finance agencies should gear up to provide finances for the establishment of industries in the planned estate.
- Agro bases industries should be promoted to increase farmers' incomes.
- Development of infrastructure for the Small Scale Industrial Estate is phases.
- Cottage Industry (hand embroidery, handmade items or in which local female has specialized skill).

#### 4.5. **Long Term Plan**

- Liaison with Private Sector, Trade Bodies and Trade Associations to ensure buy-in of the industrial estate.
- Provide credit and other incentives for industrialists.
- Declare tax holiday for industrial establishment in Kurram Agency.
- Improve transportation network of haulage of raw materials and finished products.
- In the long term following industries may be considered:
  - Wood Industry / Timber Trading
  - Stone processing
  - Textile weaving
  - Firearms manufacture
  - Ghee manufacturing

## 5. TRADE AND COMMERCE

### 5.1. Existing Situation

Parachinar and Sadda Towns are the main centres of commerce for trading goods like timber, dry fruits, and locally made small arms. Timber is obtained from main forests in this region and exported to various markets. Dry fruits and locally made small arms are also main export items of the region. Trade markets are mainly located in Parachinar and Sadda. Sadda is the second largest market in Kurram Agency after Parachinar.



#### 5.1.1 Retail Markets

Markets in Kurram Agency area are decentralized and accommodate activities like trading and distribution. Fruits, vegetables, meat and general consumer's goods are the main trading items of Kurram agency area. In Sadda, major markets are located on both sides of Thall-Parachinar Road doing thriving business. Mostly consumer's goods, domestic appliances and electrical/electronic items are traded here. Daily business hours in this market start from morning and end at a little after dusk.

According to local traders, monthly 20,000-25,000 chickens are consumed locally, however no poultry farm is available in Sadda. A poultry farm could be suggested keeping in view the consumption of the chicken. There are 40 welder shops, 200 tailor shops and 50 carpenters whose livelihood directly suffers due to unavailability of electricity. Shops are mostly taken on rent. The average monthly rent ranges between Rs 3,000 to 7,000 per shop.

#### 5.1.2 Export and Import

Sadda is located on main trade route to Afghanistan and thus has substantial scope of expanding import and export activities. At present the trade activities with Afghanistan are unregulated without a support system from the authorities. The government should facilitate the Afghan trade with the provision of infrastructure and physical facilities to bring more economic prosperity in the area and generate employment opportunities for the local population.

Timber trade is an important trade activity of this area. Main timber markets in this area are located in Burki and Kharlachi towns. Wood in these markets is imported from Afghanistan.

Kurram Agency grants license for this import, however, a large amount of wood is smuggled from Afghanistan.

Dogar in Central Kurram is the trading place for smuggled goods like electronic appliances, cosmetics, tires and arms. This market has been frequently visited by residents of Upper and Lower Kurram area.

### **Exported Items**

The main export products of this area are potato and tomatoes which are largely exported to Kohat, Peshawar, Rawalpindi, and Lahore. Kurram Agency lacks infrastructure/ provisions for cold storage and packaging of these goods, therefore farmers are forced to sell the produce at the peak of the season and are not able to get best prices. Thus both the export volumes and incomes are reduced.

### **Import Items**

Grapes and other seasonal fruits are the mains imports to Kurram Agency area from across the border. Household goods of daily use are imported from large towns in FATA and KPK.

#### **5.1.3 Banks**

Branches of following Commercial Banks of Pakistan are operating in Sadda Town:

- Habib Bank Limited
- Allied Bank Limited

No data on banks' volume of transactions is available but the business and remittances are sizable to support the bank services.

#### **5.1.4 Post Offices**

The main Post Office is located in Parachinar town. This head office leads 20 different branches in the entire region. There is one sub post office located in Sadda town which operate four small branches in different parts of Sadda town. Sadda town's post office also operates four sub branches in Alizai area. Courier services are operated by Pakistan Post Offices and private companies like TCS.

## 5.2. Need Assessment

Sadda is on a main transit route for trade from Pakistan to Afghanistan. Different trade and commerce bodies especially “The Kohat Chamber of Commerce and Industry” KTCCI has demanded of the government to establish an import-export zone in Sadda for boosting trade activities in region. This activity will increase the commercial and employment opportunities in the under-developed region. Sadda has the strong commercial base in Import and export goods like timber, vegetables, dry fruits, and livestock to Afghanistan.

- Lack of storage godowns and capacity for the cold storage for fruits and dry fruits is affecting the shelf life of agriculture products.
- Infrastructure deficiencies, specially farm to market roads, are impeding the trade.
- Conformity to quality and standards is important for exports.

Commerce can become a major sector for economic growth of Sadda town and source of employment. Locals have excellent record of trading across the international gateways through mountain passes. It would be beneficial to give advisory and micro financing services to entrepreneurs, traders and small vendors for wholesale and retail trade.

Some specific needs in this sector are:

- Improvement of inter- and intra-regional connectivity and transportation network.
- Improvement of physical facilities in commercial areas.
- Provision of new wholesale market area for new city development.
- Identify suitable land for the construction workshops to assemble and repair vehicles parts.
- Formation of a joint committee between the Political Administration and traders.

## 5.3. Policy for Trade and Commerce

- Establishment of Technology Up-gradation Fund for trade and commerce.
- Establishment of Zones for Agricultural Products and Fisheries.
- Establishment of Special Export Zones.
- Development of Industrial Estates.
- Opening Land Route Trade with Afghanistan.
- Formation of responsible authority for trade and commerce activities.

#### 5.4. **Immediate Action Plan**

- Improvement of physical infrastructure specially drainage in the market area.
- Tariff rationalization and reduction of traffic congestion with the provision of parking and regularization of taxis and loading vehicles.
- Options to explore for regularizing the illegal trade activities like 'Open Border Trade'.
- Business image building of the Region.
- HR export related skills development courses and programs.
- Pursuing Value Addition through capacity building and capability enhancement of exporters.
- Reducing cost of doing business.
- Quality & Standards management to reinforce confidence in 'Made in Pakistan' Products.
- Social, environmental & security compliance in trade.
- Promoting supply chain and investment climate that helps develop the private sector.
- Addressing issues related to fair trade and compliance with international trade regime.

#### 5.5. **Long Term Plan**

- In the long term shifting of whole sale markets and workshops to designated areas in the Spatial Plan.
- Promote basic physical and financial infrastructure to foster trade and investment.
- Set up a network on information sharing on commercial opportunities in Afghanistan including opportunities for trade in goods and services.
- Put in place dispute settlement mechanism for trade and investment.
- Critical need for the regional air service connectivity for the promotion of trade within the country and to other countries of the World.
- Establishment of bonded ware houses for the regional and international exporters and importers.
- Sector wise specific studies to identify opportunities for trade.
- Series of trade exhibition for goods and services exploring and investment through Afghanistan.

## 6. MINERAL DEVELOPMENT

### 6.1. Existing Situation

There are five types of minerals present in Kurram Agency Area, i.e.

- i. Soap stones
- ii. Marble
- iii. Magnetite
- iv. Coal
- v. Industrially feasible dolomite deposit

Soap stone is the most commonly found mineral in this area. The mining area of soapstone lays in extreme eastern part of Koh-e-Safaid known as Daradar Valley. The soapstone associated with dolomite is an important mineral commodity of this area. The dolomitic limestone formation is re-crystallization, it also embodies litho logical variation, and there are likely chances that deposits of marble also exist in this area. Marble deposits are also present in surrounding areas of Zuhra and Gandao.

#### 6.1.1 Soapstone Reserves

Daradar Valley is 28 km away north-east of Parachinar town and 70 km from Sadda. As per statistics of Pakistan Mineral Development Corporation (PMDC) the estimated resource potential of total mineral deposits embedded in this site is 2.3 million tones. Though soapstone is present in many parts of the valley, however Daradar Valley reserve is the largest. The lenses of soapstone range 10 feet in thickness and their horizontal extent varies between 300-400 meters along with vertical length of 400-500 meters. According to PMDC, the soapstone deposits excavated from this site are the best in quality as compared to other soapstone deposits found in Pakistan. It is also compatible with international quality standards. Its brightness ranges between 92 to 98 per cent and it is found in lumps formulated in white powder form.

The soapstone mining activity in this area was seriously affected by army operations against militants. This turbulence has also halted a PMDC project designed to boost mining potential of the area.

Presences of deposits of several precious stones are also confirmed by many surveyors of the area. These deposits include semi-precious stones, emerald, ruby, topaz, aquamarine, tourmaline and granite. The market value of these deposits is not estimated yet. According to



Mineral Wing<sup>40</sup> of Pakistan Mineral Development Corporation (PMDC), mineral deposits of coal, copper, zinc, soapstone, etc are present in myriad quantity in Kurram Agency area. However no serious effort in exploring these deposits has been done yet by PMDC or the private entrepreneurs.

Private mineral investigators have also indicated the presence of large deposits of gypsum and rock salt near north-western area of FATA embedded in an area of 100 square miles. In southeast part of region, small quantities of rock salt are mined in Bahadur Khel area. Chalcopyrite is also scattered in sandstone form near same village. A small deposit of manganese has also been found near Thall along the Kurram River.

## 6.2. Need Assessment

- Government should introduce the private investors in minerals extraction.
- Promote basic physical and financial infrastructure to promote mineral extraction.
- Introduce skill programs for unskilled labour.
- Upgrade skills of already employed men and women through on-the-job training, along with literacy programs for overall improvement in the output.
- Integrate skills development with technical education.
- Promote a gender balance in training programs.

## 6.3. Immediate Action Plan and Long Term Plan

- PMDC should facilitate and finance mining and industrial processing of soapstone, rock salt and marble to international standards.
- Availability of infrastructure and subsidy would promote the exploration of minerals (C&W).
- Reform the legal framework for mining activities in the region. This reform shall encompass regulatory reforms of leasing, dispute resolution mechanisms and reform of the legal frameworks.
- Improve the productivity of mines through the adoption of modern methods to improve the quality of products and reduce wastage.
- Introduction of new technologies through joint ventures on public and private partnership.
- Improve the quality of the human resources, through intensive training, especially for blasting and use of modern methods.
- Involvement of all stakeholders for sustainable mining activity and minimizing environmental degradation.

<sup>40</sup> Refer Annexure - E for organizational setup of Minerals Department

- Maintain a healthy workforce through improved safety and provision of emergency evacuation in cases of accidents.
- Develop market oriented and area/sector specific skills in men and women to be employed (locally, nationally and internationally); and be able to start, run and grow enterprises.
- Identify potential investors to promote public-private partnerships.

## 7. TOURISM

### 7.1. Existing Situation

In recent years, the potential of Kurram Agency related to tourism has been adversely affected due to the conflict. Parachinar has been the summer capital of Mughal Emperors and also a hill station for people from Peshawar as it is relatively cool in the summer.

In Lower Kurram, Alizai and Lakka Tiga Fort are scenic places rich in natural beauty with green hills and mountains. Sadda has several other interesting tourist attractions around it within a travelling distance of two hours. However there is nothing within Sadda town to attract tourist and add to its income and employment.

Some of the famous places of interest to visit are:

- Koh-e-Safaid
- Malana Dam
- Zeran Dam
- Alizai
- Shalozan Valley
- Kharlachi Fort
- Lakka Tiga Fort

#### 7.1.1 **Tourist Accommodation**

Unfortunately there is little tourist accommodation available except a few governments owned rest houses namely:

1. Circuit House (first class accommodation next to the Governor House)
2. Chapri Rest House (approx 9,941 feet high built by British)
3. Malana Dam Rest House (very basic place)

The area offers great potential for tourism as it has all elements that would attract tourists such as: scenic beauty, good climate, easy access and good connectivity. A durable peace could be the only hurdle in large scale expansion of tourism. However, sooner or later, the security situation will improve and flights to Parachinar may be operated. This, when happens, will be good for tourism but Sadda needs to be ready for it and should develop basic tourism infrastructure. The locals may be encouraged to build accommodation for rent in terms of

serviced apartments, hostels and budget hotels on their own lands according to zoning restrictions and offering them as part of tourist packages.

## **7.2. Need Assessment**

The tribal arts and crafts, historical places and the natural beauty of the area have a potential for the development of tourism. As tourism will be the additional source of income, it is necessary to facilitate and promote tourism activities at Sadda. The additional investment will be targeted in developing tourist facilities and services in the potential areas of the Sadda. The short term plan will be focused on the development of infrastructure which should encourage the private sector to develop accommodation and amusement facilities. This concept is particularly relevant to assess whether investments in culture and hospitality genuinely respond to the impulses coming from the market.

## **7.3. Strategy Formulation**

The consultant suggested strategies for tourism as a paradigm shift from no tourism to seasonal tourism:

- Enhance tourism activities, increase tourist arrivals, and make tourism an instrument for generating employment, alleviating poverty, and increasing foreign exchange earnings.
- Promote affordable, accessible and enjoyable domestic tourism with cultural and sports festivals.
- Enhance coordination between public and private sectors and upgrade resources to ensure desired standards of quality service.
- Provide liberal credit financing and incentive to start tourism infrastructure.
- Training of tourist guides and tour operators.

### **7.3.1 Source of Investment**

Private sector investment is proposed in creation of tourist facilities with the public sector investment in the development of infrastructure facilities. An emphasis will be placed on provision of physical infrastructure at places of touristic interest complemented by environmental improvement programmes.

### **7.3.2 Policy Formulation**

Formulation of a comprehensive and realistic tourism policy is required that will support tourism as an industry and create credibility. The private sector will be involved for tourism

development through lease/rent agreements. PTDC will concentrate its activities in the marketing, promotion, and development of tourism.

### 7.3.3 Improvement of Touristic Facilities

Training in tourism services will be improved in collaboration with international tourism and hotel management institutes. The involvement of Pakistan embassies / missions abroad for tourism promotion will be enhanced specially for the promotion of soft image of the country.

## 7.4. Immediate Action Plan

On immediate basis following tourism promotion strategies are proposed:

- Private sector should be encouraged develop tourist accommodation in Sadda and scenic locations around it, with restaurants and projects for family amusement.
- Security action plan to control law and order situation during events.
- MC should develop Gardens, family parks and arrange festivals to attract more tourists.
- Festivals to be introduced on a regular basis to encourage gatherings for short periods.
- Arranging Tourist Safaris such as mountain safaris and trekking tours.

## 7.5. Long Term Plan

In long run new area for tourism should explore:

- Identification of new tourism spots, activities, destinations.
  - Provision of domestic and international cultural events.
  - Basic activities camps to be established on nodal locations for youth groups at economical rates.
- Construction of self contained new resorts by Private sector.
- Revitalizing KPK Tourism Corporation to actively pursue Sadda and surrounding areas as commercial tourist resort and arrange group/package tours.

## **SOCIAL DEVELOPMENT**

Social sector development includes investment in the human capital and improvement in the quality of life. This includes development in:

- Housing
- Health
- Education and Literacy
- Sports and Recreation
- Culture and Heritage

## 8. HOUSING

### 8.1. Existing Situation

The detail data of 1998 Housing Census is available only for Kurram Agency, but there is little information regarding further breakdown at village or town level. As per 1998 census, most of the houses in the Kurram Agency were made of clay and found in clusters in villages as well as in towns. A house generally consisted of two or three rooms with a verandah. People usually lived in joint family system. In 1998 there were 2,297 housing units in urban areas of the Kurram Agency having household size of 10.95 persons, with the following characteristics:

- 30.1% houses were pacca, 3.7% semi pacca while 66.2% were katcha
- 46.6% houses had access to portable water, 57.7% had toilet inside while 96% had the electricity
- 94.8% of housing units were using wood as cooking fuel
- On average room density was 2.9 persons per room or 3.6 rooms per housing unit
- 83% houses were owned, 6.8% were rented and 10.2% were rent free
- 82.1% houses were more than 10 years old

According to 1998 Census, Sadda had around 1,474 housing units with average household size of 11.5 persons. These units had the following household characteristics:

- 22.2% houses were pacca, 3.8% semi pacca while 74% were katcha
- 21.1% had access to potable water, 38.3% had toilet inside the house while 93.6% had the electricity

#### 8.1.1 Present Housing Conditions

At present there are more than ten residential colonies in the town, almost all are legal. No informal housing has been found in the town, although kacha houses exist in less privileged areas within the Sadda MC. During the Consultant's visit, it was observed that almost all government residences and new colonies are in good condition in terms of utilities and facilities. Most of the old colonies are served with required utilities and facilities, but they are not in satisfactory condition and need rehabilitation.

The quality and construction of the houses had improved with the prosperity brought by the people working outside the Agency in Pakistan and abroad.

### 8.1.2 Household Survey

Consultants had conducted a sample household survey to analyze the present demographic characteristics and housing condition in the town. A small sample of 98 households in three different localities was conducted through door to door interviews.



These localities included intermix of planned and unplanned residential neighborhoods, namely:

1. Old Town
2. Tareek Village
3. Pir Qayum Village

A detailed questionnaire approved by the Client was used for interviewing the residents. The interviewees were cooperative and felt elated that they were being part of future planning process. The survey was also useful as it provided good information about the present housing conditions.<sup>41</sup>

Analysis of field data provided the following snap shot in December 2014:

- Both joint and separate family systems are present but the joint family system is still predominant.
- Of the households who responded, around three fourth were living in the family owned houses, while remaining were in rented accommodation.
- One third of the houses were pucca and semi pucca, while the remaining two third were katcha (pacca houses includes both traditional and modern types).
- Out of the total housing stock, few were constructed in last two decades, while most of were more than twenty years old.
- Most of the houses have small lot sizes, around one third houses are in between 180-300 square yards.
- One or two rooms houses are very rare as majority of houses have 3 to 5 rooms.

<sup>41</sup> The interviewers were reluctant to give any information about the female members of the family such as the total number, age or educational attainment, therefore the survey was rendered useless as far as population, family size and age-sex structure is concerned



- A large majority of population is permanent resident since generations and only one in ten households is a new settler in the town.
- In the last two decades, most of migration took place from Afghanistan and rural areas of the agency and FATA in search of better livelihood, services and facilities.
- On the other hand, two fifth households have at least one person working outside Kurram Agency or abroad specially in Middle East.
- Around half of the houses have both kitchen and toilet facilities, while less than half of the remaining people have only toilets inside their houses.
- Out of the houses having toilets inside the house; three fourth have drained toilets (flush system) and the remaining have dry toilets.
- Most of population uses wood for both cooking and heating purposes whereas the rest use LPG.

The colony / neighborhood wise details of present housing conditions are attached in Annexure-F.

### 8.1.3 Housing Gap Analysis

The information on actual physical house counts is not available. In order to assess the present housing availability in the Sadda MC, two verifications has been made by the Consultants:

1. **Present Population:** The total present population is estimated as 55,000<sup>42</sup>. Dividing the total population by household size of 11.5 persons, some 4,800 dwelling units are expected to be present in the Sadda.
2. **House Count:** GIS analysis has been used to count houses from the satellite imagery. There are approximately 2,413 house structures in Sadda. But as observed during the Consultants Survey, ground plus one floor are commonly found. The imagery provides only the top view of the area and shows attached houses as one structure only therefore an average of two dwelling units per house has been assumed. On this basis the present housing stock is expected to be around 4,800 dwelling units.

As there are no shelterless people or Katchi abadies, the present number of dwelling units meet the need of the population if a large household size of 11.5 is acceptable. However, large household size itself can be an indication of housing shortage but in this case joint family is a social necessity.

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<sup>42</sup> For detail refer section 6.7.1 Present Population of Sadda MC

## 8.2. Need Assessment

Housing/shelter is one of the most important basic human needs. Quantitatively the present housing stock in Sadda seems to be more than the adequate, while qualitatively the room congestion due to large household size and high room occupancy may be indicates housing dearth. The large household size is partly due to the tribal way of life, and partly is a result of housing shortage, but high room occupancy is clearly indicating lack of housing.

On an optimistic note applying the household size of 9.3 of FATA as per 1998 census, 5,200 new households will be added in the next 20 years. The land requirements for the housing of additional population upto 2034 will be about 260 acres; worked out on an average of 10 plots per/acre with plot size ranging from 240 to 500 sq.yds and gross density of two households per housing unit.

The actual housing demand may be even higher if urbanization and associated changes in social structure result in smaller household size, which is a usual phenomenon observed the world over. The vacant land available is sufficient to meet this housing demand and there should be no need to use the agricultural land outside the MCs boundaries until 2034. The replacement of dilapidated and katcha housing stock is not taken into account as these type of housing will be improved/reconstructed on the same land with the inter play of market forces.

**Table 12: Need Assessment of Housing**

Need Assessment	Households	HH size	Population
Present Supply (2014)	4,800	11.5	55,000
Future Need (2034)	10,000	9.3	94,000

Note: 9.3 is the HH size of FATA as per 1998 Census

## 8.3. Strategy Formulation

With the rehabilitation of existing housing clusters providing basic facilities, phased development of housing schemes would be taken up to meet the future housing demand. Land acquisition may be a problem but land can be made available by pooling of land by landowners.

#### **8.4. Immediate Action Plan**

The housing supply for future needs can be met through various means.

- Preparation of a townships / housing scheme by the public sector (local body) on land developed through public-private participation. The private owner will provide land as equity and will get certain number of developed plots in proportion to land given by him.
- Encourage a cooperative of land owners to pool land for housing scheme and assist them in Town Planning and Engineering Design.
- Allow landowners to develop housing or other schemes on their own land as per structure plan zoning under strict monitoring.
- Allow increase in permissible heights where feasible in the existing areas to increase the housing stock.
- Provide housing finance for construction of individual houses.
- Preparation of building byelaws and Town Planning regulations.
- Capacity building for MC/LG to monitor and control the urban development and buildings as per Structure Plan Zoning.

#### **8.5. Long Term Plan**

- In the long term several scattered housing clusters existing in Sadda will be consolidated into compact housing neighborhood, with the required facilities and utilities as per national standards (NRM).
- Housing Policy should be prepared to ensure absorption of new housing rural migrants to the urban hubs with provision of suitable housing for every income group including the lowest income group.
- The Political Administration, Provincial Government and Donor Agencies should coordinate to provide minimum shelters for the new entrants to avoid formation of squatter settlements.

## 9. HEALTH FACILITIES

### 9.1 Existing Situation

Sadda has Tehsil Headquarter Hospital (equivalent to Taluka Headquarter Hospital in the settled areas). Tehsil Headquarter Hospital Sadda is situated in the north west of the town on the main Doggar Road, where other public institutions are also situated.

In health sector Lower Kurram is well served as compared to other agencies in FATA. Both THQ Hospitals (Sadda & Alizai) are managed by Additional Agency Surgeon and local health department.

Important hospitals & dispensaries providing medical facilities in Lower Kurram are given below:

**Table 13: Health Facilities Available in Lower Kurram 2014**<sup>43</sup>

Sr. No.	Name Of Health Facility	Number in 2014
1	Tehsil Head Quarter Hospitals (Sadda & Alizai)	02
2	Basic Health Unit (Peripheries of Sadda)	11
3	Civil Dispensaries	21
4	Private Hospitals (Sadda)	04
	<b>Total</b>	<b>38</b>

At present, 38 health facilities of different types are present in Lower Kurram. The shortage of staff, medicines and funds for building maintenance are endemic problems in the health sector. The satisfaction level of general public is low. As a consequence four medical facilities have been established in the private sector to meet the requirements of discerning patients.

#### 9.1.1 Tehsil Headquarter Hospital, Sadda

The THQ<sup>44</sup> Hospital Sadda is a 160 bed facility spread over an area of 188 kanals (23.5 acres). Currently 15 doctors are present at THQ, whereas the sanctioned strength of doctors for the hospital is 38; twenty three vacancies of specialists are lying vacant.

Daily visitation of patients at THQ Hospital Sadda is about 400 including both male and female patients. The Hospital lacks specialist doctors, particularly general surgeons, cardiologist,

<sup>43</sup> Civil Surgeon Office

<sup>44</sup> Refer Annexure - G for Medical Staff Information

children specialist, surgical, gynecology, orthopedic, ENT and radiology specialist. The shortage of paramedic staff, laboratories and other technical equipments is major issue for THQ Hospital. The observations as described by patients and doctors are as follows:

- The local as well as patients from the surrounding areas are facing problems in health sector. Unavailability of water, medicines, laboratory equipment, medical staff, and electricity are the major issues in Tehsil Headquarter Hospital.
- Rehabilitation of Gyne ward and provision of basic health facilities in labor room are required.
- The waiting rooms in hospital are required to be constructed.
- Accommodation facilities for doctors are required.

#### 9.1.2 Laboratories

Laboratories are available in THQ Hospital Sadda but they are not fully operational. Shortage of electricity, equipments and chemicals are the major issues.

#### 9.1.3 Drug Supplies

THQ Hospital Sadda is short of medicines supply. Almost 90% of patients have to purchase medicines from the local market. Presences of sub standard medicines in local markets add to the patient's trouble.

#### 9.1.4 Hospital / Bed Ratio

According to official sources, there are currently 160 beds in THQ Hospital Sadda. The present bed ratio is two beds for every 688 population of Sadda, however the hospital caters to a large population of surrounding areas.

### 9.2 Need Assessment

In general shortage of power, technical staff and laboratory equipments are creating lot of problems. Survey results revealed that improper services and shortage of life saving drugs/medicines, equipments and their maintenance is the most pressing problem in Sadda. Absence of incinerators results in inappropriate disposal of hazardous waste which need to be resolved.

There are currently 160 beds in THQ Hospital Sadda. The present bed ratio is two beds for every 688 population of Sadda. This ratio is exclusive of private hospitals and medical centers and

already exceeding the NRM medium term target of 2.0 beds per 1,000 population for Pakistan. Thus population beyond Sadda MC could be served by resolving the issues:

- Persisting shortage doctors and paramedics.
- Short supply of medicines, chemicals and consumables.
- Low O&M of medical, surgical and diagnostic equipment.
- Errant power supply, some equipment cannot to be operated on intermittent supply.
- Patients travel to hospital from far-off areas but waiting facilities in the hospital area non-existent.

By 2034 the target is to achieve 2 beds per 1000 population to serve the surrounding population of Sadda. Therefore in twenty years span additional 30 beds will be required to meet the criteria.

The table below shows the present need and future demand:

**Table 14: Need Assessment of Health Facilities**

Need Assessment	Population	Bed Ratio /1000 population	No of Beds
Presently Available	55,000	2.91	160
Presently Need	55,000	2.00	110
Future Demand (2034)	94,000	2.00	190

### 9.3 Strategy Formulation

Sadda is already focal point for secondary health service delivery. With THQ Hospital Sadda, it has potential of strengthening these facilities with the appointment of specialist, improvements of diagnostics and surgical services, provision of medicines and physical facilities. Sadda is in a strategic position to provide health services regularly to Lower and Central Kurram and this is actually happening at present. It can even have the possibility of mobile ambulances for carrying emergencies to facilitate at THQ Hospital.

#### 9.3.1 **Mobile Health Care Services**

Mobile health care services could be introduced to reduce family expenses on the primary health facilities by the poor and underprivileged population in the far flung areas. This will also

improve the performance of emergency response bodies during the floods and extreme weather conditions.

### 9.3.2 Change Over to Solar Power

Due to electricity issue, it is advised to switch the equipments to solar power. The provision of solar technology to all equipments may be expensive. Since this investment has a long term benefits therefore it is suggested to prioritize life saving equipments and their usage first.

## 9.4 Immediate Action Plan

The immediate target is to strengthen the current facilities, infrastructural improvement and provide the necessary back-up support in peripheries to improve basic health care and family planning services.

Other than the civil works, the THQ Hospital Sadda should be made properly functional with the fulfillment of the following:

- Increase the human resource capacity with the recruitment of specialist and other health workers as per the vacant positions and need.
- Provision of suitable incentives for medical and paramedical staff to fill the vacant positions.
- Both administrative and medical staff should be given training workshops to improve the management system.
- Induction of health awareness, training, vaccination and other campaigns at community level.
- Ensuring supply of important drugs from the hospital.
- Construction of waiting areas for both male and female visitors with allied facilities i.e. toilets, drinking water, pharmacy and taxi stand.
- Installation and O&M of incinerator in THQ Hospital Sadda.
- Measures to be taken to get utmost advantage of incinerator by serving other health facilities as well.
- Use of solar power for life saving equipments (as a pilot project).

Renovation of other medical facilities including BHU's within the town and at peripheries should be made. While for the un-served far-flung areas, Mobile health care services would be preferred.

### 9.5 Long Term Plan

- In the long term future need of 30 beds are suggested to be fulfilled with the addition of specialized ward of Mother and Child Care.
- THQ Hospital Sadda facilities may be upgraded and make it a focal health service provider in the southern region of Kurram Agency.



## 10. EDUCATIONAL INSTITUTIONS

### 10.1 Existing Situation

Literacy rate in FATA is generally low as compared to other regions of Pakistan. The literacy ratio in the Kurram Agency had increased by 6.2 percent during the period 1981 to 1998. In FATA the literacy ratio for Boys was 33.3 % as against 4.5 % for Girls in 1998, while in Lower Kurram literacy ratio for Boys was 47.13% against 7.73% for Girls.

#### 10.1.1 Present Educational Institutions and Enrollment

The existing situation in education sector in Sadda is much better than that in other agencies of FATA. Enrollment of Girls in Kurram Agency Area particularly in Lower Kurram Agency recently improved impressively. The table shows the present educational institutions and enrollment in government institution in the Sadda:<sup>45</sup>

**Table 15: Present Education Institutions and Enrollment Record**

Sr. No.	Education Type	Schools	Class Rooms	Enrollment	Teachers
1	Primary Schools (Boys)	05	11	1,697	19
2	Primary Schools (Girls)	05	11	1,822	13
3	Middle Schools (Boys)	02	17	1,049	21
4	High School (Boys)	02	50	1,763	41
5	High School (Girls)	01	11	681	14
6	Degree College (Boys)	01	10	480	15
7	Degree College (Girls)	01	11	305	14
8	Vocational Institute (Girls)	01	06	32	03
	<b>Total</b>	<b>18</b>	<b>127</b>	<b>7,829</b>	<b>140</b>

#### 10.1.2 Condition of School Buildings

##### Primary Schools

Most structures of primary schools in Sadda are old. Schools do not have basic facilities like water, electricity and toilets. Also primary schools do not have any furniture and children sit on mats.

<sup>45</sup> Data provided by Agency Education Department, Kurram Agency

**I. Girls Primary Schools**

The present number of girls primary schools is five with total enrollment of 1,822. Total number of class rooms in five schools is 11; with a capacity of 40 students per room. Current number of students in each class rooms on average is 166 students. Thirteen teachers are performing their jobs in girls primary schools. Thus teacher student ratio is 1:140.

**II. Boys Primary Schools**

The present number of boys' enrollment in primary schools is 1,697. Five boys' primary schools are available in Sadda town, having a total of 11 class rooms with a capacity of 40 students per room. Average number of students per class rooms is 155. Currently 19 teachers are performing their jobs in primary schools. Teacher student ratio is 1:90.

**Middle School**

The present number of boys' enrollment in Middle schools is 1,049. Two Middle schools are available in Sadda town, having a total of 17 class rooms with a capacity of 40 students per room. Average number of students per class rooms is 62. Currently 21 teachers are performing their jobs in primary schools. Teacher student ratio is 1: 50.

**High Schools****I. Girls High Schools**

The present enrollment of girls at high school level in Sadda town is 681. One Girls high school is functional in Sadda town. The total number of class rooms is 11. The present number of students in class rooms on average is 62, whereas the original capacity of classroom is not more than 40. Currently 14 teachers are performing their jobs in Girls High schools. Teacher student ratio for Girls High School is 1:48.

**II. Boys High Schools**

The present enrollment of boys at high school level in Sadda town is 1,763. Two boys high school are functional in Sadda town. The total number of class rooms is 50. The average number of students in class rooms is 35. Currently 41 teachers are performing their jobs in Boys High schools. Teacher student ratio for Boys High Schools is 1:43.

### 10.1.3 Higher Education

#### I. Govt. Boys Degree College

The present enrollment of boys in college is 480. One boy's college is functional, where total numbers of class room is 10, having capacity of 40 students per room. The average number of students in class rooms is 48. Currently 15 teachers are performing their jobs in Degree College. Teacher student ratio is 1:32. In comparison to other educational facilities in Sadda, college level education is much better. Building structures, furniture, toilets, parks and playground are in good condition.

#### II. Govt. Girls Degree College

The present enrollment of Girls in college is 305. One Girls college is functional, where total numbers of class room is 11, having capacity of 40 students per room. The average number of students in class rooms is 62. Currently 14 teachers are performing their jobs in Degree College. Teacher student ratio is 1:48. In comparison to other educational facilities in Sadda, college level education is much better. Building structures, furniture, toilets, parks and playground are in good condition.

#### III. Girls Vocational Institute

The present enrollment of Girls in vocational institute is 32. One Vocational Institute is functional, where total numbers of class room is 6, having capacity of 40 students per room. The average number of students in class rooms is 5. Currently 3 teachers are performing their jobs in Vocational Institute. Teacher student ratio is 1:11.

### 10.2 Need Assessment

Sadda has the highest level of enrollment in all educational institutions in Kurram Agency after Parachinar. Most schools have congestion and physical facilities like, water, electricity and toilets are missing. The congestion in class rooms and high student teacher ratio is also a problem which shows a gap in high demand and low supply of facilities. In order just to address the present congestion, 127 new class rooms are required to be added to bring the class room occupancy to the desired level of 30-40 students in one class.

The best part about Sadda is that the girls school going ratio is high. Beside this sufficient number of educational institutions and high literacy rate enhance its importance as an educational hub. However, school buildings are in poor condition like unavailability of water, electricity, furniture, toilets and playgrounds and shortage of classrooms. Comparatively higher education institutions are in good condition with the provision of basic services, like water supply, sanitation, parks and playgrounds.

Due to unsatisfactory condition of services in public schools, the demand of private schools in town is increasing day by day. The society itself is very keen and showed their willingness towards educating future generation specially girls. If the educational requirement would not be fulfilled it could increase the rate of unemployment and crime.

Present number of boys and girls students in Sadda town is 7,829 studying in 18 different schools and colleges. It appears that on average the present occupancy is 70 students per class room at schools while 30 students per class room at colleges. As per standard, it is suggested to achieve the ratio of 30 students per classroom in primary to higher secondary schools and 40 for colleges. Available number of class rooms for primary, middle and higher secondary schools are 100, while there is a gap of 134 classrooms to achieve ratio of 30 students per class. The required need can be fulfilled by providing new classrooms in existing school buildings or providing new school buildings with play grounds, toilets and other facilities. For colleges the present situation is different as at present 27 classrooms are above the present enrollment need of 20 classrooms, applying standard ratio of 40 students per classroom.

**Table 16: Class Rooms Required for Present Enrollment**

Sr. No.	School & College	Class Rooms Present	Class Room Needed	Total Class Rooms	Students Enrollment
1	Girls Primary	11	50	61	1,822
2	Boys Primary	11	46	57	1,697
3	Middle	17	18	35	1,049
4	Boys High	50	9	59	1,763
5	Girls High	11	12	23	681
	<b>Schools</b>	<b>100</b>	<b>134</b>	<b>234</b>	<b>7,012</b>
6	Boys College	10	2	12	480
7	Girls College	11	-3	8	305
8	Vocational	6	-5	1	32
	<b>Colleges</b>	<b>27</b>	<b>-7</b>	<b>20</b>	<b>817</b>
<b>TOTAL (School &amp; College)</b>		<b>127</b>	<b>127</b>	<b>254</b>	<b>7,829</b>

The present enrollment at schools is 38% and at colleges it is 9%. For future the targeted enrolment will be approx doubled. In order to achieve the target of 76% enrollment for school and 18% for colleges, there would be a need of 550 and 50 additional classrooms for schools

and colleges respectively. This need is recommended to be gradually fulfilled during the span of 20 years, by both government and private sector.<sup>46</sup>

### **10.3 Strategy Formulation**

Education is Sadda's another magnetic force for the local and regional population. The recommended strategy is to establish a collaborative mechanism among the local education department and communities to improve education service delivery and fulfill the demand of neighboring areas as the "Regional Education Hub".

### **10.4 Immediate action plan**

On immediate bases following plan are suggested to full fill present demand:

- Rehabilitation and renovation of existing schools and colleges with the provision of toilets, electricity, drinking water, playgrounds and furniture.
- Construction of additional classrooms for present need in existing schools or new buildings.
- Establishment of Teachers training programme to understand the modern teaching methods.
- Up Gradation of Degree Colleges into Post Graduate Colleges.

### **10.5 Long term plan**

Sadda has potential for becoming Centre of Excellence for higher education for Lower and Central Kurram. Construction of new school and college buildings are also suggested to accommodate additional classrooms for future need.

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<sup>46</sup> Number of classrooms required in next twenty years has been worked out on the basis of 1998 census, as there has been no other updated and reliable source exist, for detail refer Annexure - I Population Structure of Sadda

## 11. RECREATIONAL

### 11.1 Existing Situation

#### 11.1.1 Public Parks

Sadda has interesting topography and gets very green in spring and winter. Population is in clusters with vast open areas in between. Even through the density in the old town and clusters is high, the overall density is low. Therefore the population has sufficient space for passive recreation. However the formal parks and gardens are needed.

#### 11.1.2 Sports Facilities

The town appears to be well served in terms of sports facilities. Town has two sports grounds. Large sports ground for football has been built on Dogar Road in between F.C Compound and Government Model School and the other is in Pir Qayum Village on Thall Sadda Road near Army check post.

**Table 17: Sports Facilities<sup>47</sup>**

S. No.	Name	Location	Connecting Area
1	Football Ground	Cantonment Area Road	F.C Compound and Government Model School
2	Sports Ground	Thall Parachinar Road	Army check post and Pir Qayum Village

Sadda has nothing to offer in terms of entertainment for children and families such as zoo, family parks, amusement park, cinemas, community halls, mela/fair grounds etc.

### 11.2 Need Assessment

Sadda has some sports facilities, but has no family or ladies park where female population can freely enjoy open air. Sadda also needs entertainment for children and families such as zoo, amusement parks, community halls, mela/fair grounds, library and cultural complex etc.

### 11.3 Strategy Formulation

The society is in extreme need to have a social outdoor life, for the personality growth of youth. These leisure time activities make youth reluctant to engage in negative activities Secondly half

<sup>47</sup> Data Provided by Planning Officer Kurram Agency

of the population, which is female group, should be able to breathe in open air with in a secure environment.

#### **11.4 Immediate Action Plan**

Under the supervision of Municipality, occasional sports and recreational festivals are suggested to be planned on immediate basis, for this the recreational places are required to be renovated and constructed as well.

The proposals are as follows:

- Development of neighborhood family parks.
- Rehabilitation and up gradation of existing sports facilities.
- City garden along TPR (near Ajab Khan Chowk).

#### **11.5 Long Term Plan**

In the long term, recreational areas of the town are expected to bring population from outside the Sadda as well. For this the large scale recreational zones would be suggested:

- Comprehensive Sports Complex including associated facilities.
- Development of an amusement park at a city scale.
- Theme park associated with the city garden.
- Development of more city level gardens.

These areas will accommodate Agency level sports tournaments and seasonal tourism.

## 12. RELIGIOUS PLACES AND GRAVEYARDS

### 12.1 Existing Situation

#### 12.1.1 Religious Places

Religion is at the core of life of local population and religious sentiments have been at the root cause of all sectarian conflicts. About 80% of the population belongs to Sunni's and the Shia communities who originally lived in large numbers and owned some land have migrated to Parachinar during the conflict. There is only one large land area dedicated for Eid Gah located at Masozo Road opposite to APA lower and central Kurram office. A very large area (170 kanals) has recently been allotted for 'Tablighi Markaz' in Sadda near APA Colony. The other important mosque and religious buildings are as follows:

**Table 18: Religious Facilities**

S. No.	Name	Location with Description
1	Bilal Mosque	Sadda Bazar Near Sadda bus Stand at Nadra Office and Post Office
2	Sadeequ-e-Akbar (The Tall Mosque)	Mid of the Main Sadda opposite to Akbar Khan Road
3	Chowk Mosque	Near Municipal Committee Office

#### 12.1.2 Graveyards

Sadda has three graveyards on the outskirts of town separated from residential areas. Most of the graveyards have large area except the one is having small area of land in mid of Pir Qayum village.

Important graveyards are listed below:

- Pir Qayum Graveyard
- Sateen Graveyard
- Shaheen Graveyard



## 12.2 Strategy Formulation

The town should have non-marginalizing policy for equal opportunities in every sector for all people to avail. Some of the strategies, which could be helpful in controlling sectarian violence, are as follows:-

- There could be a local provision to declare promoting sectarian hatred and violence a crime by awarding punishment.
- In the syllabi taught in different educational institutions, particularly in schools, all such materials which promote hatred and biases on the basis of religion, sect, ethnicity and culture must be removed from textbooks and other sources of reading.
- The state apparatus should be seen to be even handed and in fact material promoting harmony and religious tolerance should be included.
- must be neutral as far as dealing with Shia and Sunni conflict is concerned. State should not favor any sectarian group.
- The media, both print and electronic, must be instructed to do responsible reporting on Sectarian matters.

## 12.3 Immediate Action Plan

As the immediate action plan the following action should be taken:

- Up gradation of Madaras to Conventional Schools<sup>48</sup>.
- Rehabilitation of graveyards.
- Carry out inter faith tolerance workshops.

## 12.4 Long Term Plan

In the long term plan the following measures could be taken:

- Future in-fill housing and societies should have defined religious places.
- Religious schools and colleges should offer higher degree<sup>49</sup>.

<sup>48</sup> As per the Law "Pakistan Madrasah Education (Establishment and Affiliation of Model Dini Madaris) Board Ordinance 2001", promulgated in 2001 by the Federal Government of Pakistan

<sup>49</sup> Equivalence Committee of Higher Education Commission of Pakistan recognizes Degree of Madrasa Equivalent to M.A Arabics / Islamic Studies of Public Universities

<http://www.hec.gov.pk/InsideHEC/Divisions/QALI/DegreeAttestationEquivalence/EquivalenceDegreeIssuance/Pages/Default.aspx>

## INFRASTRUCTURAL DEVELOPMENT

Sadda's topography is such that the town has scattered clusters with open areas in between. Due to lack of compact development, laying of infrastructure network is difficult and more costly.

The Sadda population is expected to grow from 55,000 at present to 94,000 in the next twenty years up to 2034. There will be high or low growth will depend on different factors. For the planning of infrastructure usually higher (optimistic) figures are taken by planners, as the under provision of infrastructure services create serious problems, whereas slight over provision would mean the planned services would be adequate for longer period.

The need assessment has been carried out for a projected population of 94,000 on the basis of 20 years growth projections. For need assessment we have to follow NRM published by Planning Commission. Wherever a range of service standards are indicated in NRM, the figures most suitable to Kurram Agency's Sadda conditions have been selected. However, the NRM is not very specific to tribal rural areas or the rural areas on the threshold of being urbanized. In such cases, Consultant's own experience and standards used in other developing countries have been used. Therefore need assessment is based on the following parameters:

- Establishment of Baseline Indicators
- Stakeholders Views
- Demand vs Need Analysis
- Needs based on NRM with professional judgment

Infrastructure sector development includes:

- Transportation
- Telecommunication
- Water Supply
- Sewerage and Drainage
- Solid Waste Disposal
- Energy

## 13. TRANSPORTATION

### 13.1 Existing Situation

The Town of Sadda is connected with the region through several land routes. Parachinar Airport located at a distance of around 36 kilometers with 50 minutes drive, via Sadda-Parachinar Road, can also serve Sadda if flights are resumed. PIA flights which were stopped in 2007 have yet to be resumed.

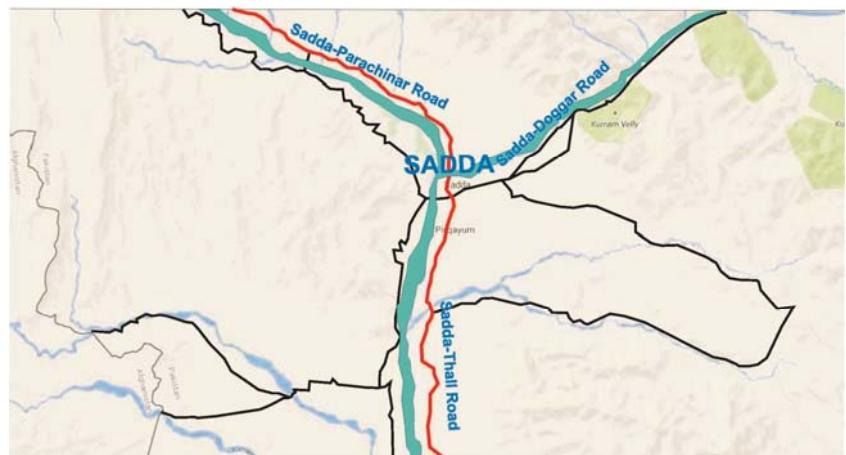
#### 13.1.1 International Links

The Lower Kurram has one of the most direct ancient routes to Afghanistan. This route connects Alizai to the Khost province of Afghanistan (at distance of about 18 kilometers). Regarding Sadda Town, this ancient route is more than 40 kilometers to Afghanistan; taking off from Ajab Khan Chowk, passing over the Kochi Bridge, Alizai Town and Khardand area, it reaches Khost Town.

The closest Sadda-Afghanistan route is via Shurko Border Road; by crossing Kochi Bridge, Lakka Tiga Mountains, Lakka Tiga Fort, then Jaji Maidan in the province of Khost, Afghanistan. Shurko Border Road is 23 kilometers long having 3.65 meter metalled portion.

#### 13.1.2 Regional Links

In MC Sadda, presently there are about four regional roads covering 149 kilometers of lengths. Most of these roads are black topped with generally narrow width of 3.65 to 6 meters. But several un-ramped stony ravines interruptions have been observed. These roads connect town of Sadda with



Afghanistan, Upper, Central and Lower Kurram areas.

Sadda has a strong physical connectivity in all directions but somehow has weak links with the west. This could be the case due to natural barriers i.e. Charmoghar Hills and Lakka Tiga Mountains.

**Thall Parachinar Road:**

Thall Parachinar Road is 74 kilometers long and 6 meter wide metalled surface starting from Thall and terminating at Parachinar. This road is passing through the Sadda Town. Within the town, the road takes a local character with commercial activities on both sides of the road, making it hardly passable for trunk traffic. Near low stratum or cultivable land it is prone to flooding in heavy rains which block its connectivity even for the light vehicles. Apart from these, physical and human constraints are not allowing to enhance its capacity by widening.



In Sadda Town, Thall Paracahinar Road is in north-south direction. The north section going towards Parachinar is known as Sadda Parachinar Road, while segment towards south is known as Thall Sadda Road.

**Link to Central Kurram:**

Sadda Town is connected with the Central Kurram via Cantonment Area Road. Further this road connects to Murghan and Dogar area. The connectivity between Lower and Central Kurram has been improved with construction of new road 'Sadda Murghan'. The Sadda Murghan road has been built by the Tribal Areas Development Project, in order to increase the accessibility in the southern side of Central Kurram. With the improvement in law and order situation in Central Kurram, Sadda will also be accessible with shorter routes from Khyber and Orakzai Agency and Peshawar.

**Dogar Road:**

Dogar Road connects Sadda with important settlement Dogar in the Central Kurram. This road starts at Sateen and Shaheen Village in north eastern direction heading towards Badama. It is about 28 kilometers long with 6 meter wide ROW, mostly unmetalled. This road plays a significant role for trading activities between Sadda and Dogar. As per Communication and Works Department, Dogar Road is planned to be metalled totally.

## Sadda Murghan Road

Sadda Murghan Road is 24 kilometers long 3.65 meter wide metalled road. This road is branching off from Cantonment Area Road at Shaheen Village in southeast direction. It also act as a link for commercial activities in Sadda with southern side of Central Kurram.

### 13.1.3 Local Road Network

Most of the regional and local roads intersect at the Ajab Khan Chowk, which is the busiest intersection of the Sadda. The important local roads in the town are namely;

- Cantonment Area Road
- Karkhano Road
- Masozo Has Road
- Tindo Road
- Tablighi Markaz Road
- Akbar Khan Road
- Mian Razi Road

#### **Cantonment Area Road:**

Cantonment Area Road is virtual east-west spine of Sadda Town. This road starts from Ajab Khan Chowk, run east passing the Cantonment Area, Sateen and Shaheen Village going onwards to Dogar. This is the widest road in Sadda having 7.3 meters of metalled portion and 3 kilometers in length. Almost all the important health, educational and public landuses are located on this road including; Tehsil Headquarter Hospital, Govt. Degree College, Stadium, Grid Station, APA Office, Kurram Scout Compound.

#### **Akbar Khan Road:**

Akbar Khan Road is very narrow and congested road, passing through the old town area. There is mostly residential land use on both side of this road. This road is in urgent need of alternate route since there is no space available for its widening.

#### 13.1.4 Bus Terminals

The main bus stand locally known as Flying Coach Terminal is located on main Sadda Parachinar Road along the commercial area. This bus stand has the facilities of waiting room both for males and females, toilets, shops, restaurant. Different markets and trading activities are located adjacent (on both side) and opposite the terminal. Beside the bus stand there is a Taxi Stand along the same road serving the local as well as out of town passengers.



#### 13.1.5 Road Conditions

During the Consultant's visit, most of the local roads inside the Sadda Town are found metalled but in unsatisfactory condition. Also in Focal Group Discussion, residents mentioned some roads need to be improved as these are unmetalled and narrow with no footpaths. Specially roads which connect farms with the market are not in good condition, causing problems for farmers in accessing the desired market.



#### 13.1.6 Transport Vehicles

Both public as well as private (own transport) vehicles are present in the town. The public vehicles include; Pick up, Hiace and Station Wagons (commonly known as Ghawagay); while private vehicles mostly comprise of motorcycles and cars. For paratransit, taxis are also available. Tractors and trolleys are used for transportation of goods and people. For schools and colleges public transport facility is inadequate while private transport is expensive.



There are approximately 12,000 Non Custom Paid (NCP) vehicles which are registered by Local Political Agent's office. This local registration number allows these vehicles to move within the Kurram Agency only.



### 13.1.7 Traffic Pattern

The Consultants were required to assess “what forms of traffic are likely to be, in what quantity and what road space are necessary to cater for traffic movement and parking”<sup>50</sup>. The consultants had mobilized team consisting of four enumerators and a supervisor, to carryout traffic counts on major problematic junction. However for security reasons, Consultants were cautioned by the local residents to avoid long exposures on roads. An extensive reconnaissance survey was carried out to assess the general traffic pattern and problem areas. The most critical areas were then short listed to take traffic counts over a twelve hour period.

The traffic volume was observed during Traffic Count Survey at an important route connecting Sadda to Thall. The station was placed on the Thall Sadda Road adjacent to PSO, filling station.

**Thall – Sadda Road near PSO Pump**

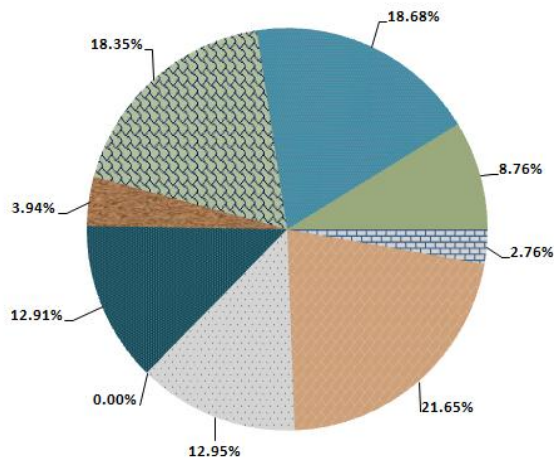


Throughout the day about 353 motorcycles, 1,384 cars, 414 mazda, 825 wagons, 126 tractor trolleys and 929 two to six axle vehicles were counted, but during the night traffic decreased considerably to 54 motorcycles, 214 cars, 105 mazda, 104 wagons, 28 tractor trolleys and 203 heavy (two to six axle) vehicles.

<sup>50</sup> As mentioned in Terms of Reference

Figure 9: Thall -Sadda Road Near PSO Pump, Sadda City- Day Shift

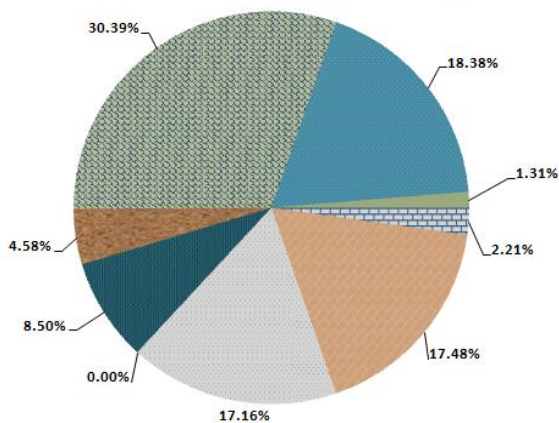
Thall -Sadda Road Near PSO Pump,Sadda City (Day Shift)



THALL-SADDA ROAD (DAY SHIFT)				
	Type	TVC	PCU	%
	Motor Cycle	353	176.5	2.76
	Motor Car	1384	1384	21.65
	Light Truck/ Mazda	414	828	12.95
	Large Buses	0	0	0.00
	Hiace/ Pickup/ Wagon	825	825	12.91
	Tractor/Trolley	126	252	3.94
	2 Axle	391	1173	18.35
	3 Axle	398	1194	18.68
	6 Axle	140	560	8.76

Figure 10: Thall -Sadda Road near PSO Pump, Sadda City- Night Shift

Thall -Sadda Road Near PSO Pump,Sadda City (Night Shift)



THALL-SADDA ROAD (NIGHT SHIFT)				
	Type	TVC	PCU	%
	Motor Cycle	54	27	2.21
	Motor Car	214	214	17.48
	Light Truck/ Mazda	105	210	17.16
	Large Buses	0	0	0.00
	Hiace/ Pickup/ Wagon	104	104	8.50
	Tractor/Trolley	28	56	4.58
	2 Axle	124	372	30.39
	3 Axle	75	225	18.38
	6 Axle	4	16	1.31



### 13.1.8 Parking

Traffic congestion occurs on the TPR and is the heaviest during the mornings. This also disrupts the through traffic on the road. There are seven vehicle/bus stands for parking, which are regularly given on lease by the administration. However, taxis do not follow traffic management instruction of the administration and park their vehicles at road sides that increase traffic problems. Beside these, there is no general car parking facility within the market for both shopkeepers and customers. Road side parking is common near public offices, bazaars and transport terminals.

### 13.1.9 Fueling Station

At present there is a lone petrol filling station of PSO located on the Thall Sadda Road. There is no filling station inside the town.

### 13.1.10 Operation and Maintenance System

The Municipal Committee is responsible for the operation and maintenance of smaller roads, footpaths, and bus and truck terminals<sup>51</sup>. The operation and maintenance of the secondary and primary roads has been the responsibility of Communication and Works Department (Roads) Sadda<sup>52</sup>. The department is headed by Executive Engineer supported by two engineers and subordinate staff. The operation and maintenance budget comes from FATA Secretariat through the Political Agent. There is a vast difference in funds allotted in the ADP and those actually released. For example in ADP 2013-2014, the actual release of funds was about one third of what was allocated.

Schemes	Budget	Release
Ongoing Schemes	294.0 Million	98.5 Million
New schemes	115.0 Million	47.8 Million

<sup>51</sup> As mentioned in the letter no PD/TARUCCI/MCs/1-1/2010 dated on 25th November, 2010 of Administration and Coordination Department, FATA Secretariat, Peshawar

<sup>52</sup> Refer Annexure - E for Organizational Setup of C&W Department

## **13.2 Need Assessment**

Sadda has a satisfactory network of local and regional roads. Most of the regional roads are metalled while local roads are unmetalled and need to be repaired. Local buses are almost absent but public transport taxi system named “Ghawaghai” is effective. Ill maintained transport terminals are presents at different locations. Poor maintenance, insufficient ROW and on street parking are causing traffic congestion problems. The betterment of transportation services could enhance national and international trading activities and employment opportunities.

Some of the pressing problems are:

- Some major and local roads need rehabilitation, designation of right of way, road marking of landscaping.
- Roads connecting farms to the markets need asphaltting / repairs.
- The parking facility especially in the commercial areas is inadequate, causing unnecessary congestion on the road. Specific car parks may be developed.
- The locally named paratransit “Ghawaghai” need to be regularized.
- There is a need to devise a traffic management plan, in order to reduce the traffic congestion over the market area in the town centre.
- Vehicle/ bus stands need to be taken outside the bazaar area to reduce the traffic congestion.
- Footpaths for pedestrian friendly environment need to be built specially near public areas like markets, schools, hospitals and parks.
- Good quality school and college transportation facility need to be made available on economical rates.

## **13.3 Strategy Formulation**

### **13.3.1 Rehabilitation of Road Network**

For the major regional roads the suggested improvements are to designate right of way, marking the ROW and protecting against encroachment, lane marking and landscaping. Besides these, there are secondary roads and inner streets which need to be paved as discussed in the table of Housing Conditions.

### 13.3.2 Explore Alternate Routes

Explore alternate routes to relieve congestions in problem areas. Relocate some of the high traffic generating function in the less congested areas. However on a larger scale, a bypass road is required to take through traffic outside the bazaar area, without entering into the main town.

### 13.3.3 Rehabilitation of Terminals

Additional services to be providing in the bus stands to ensure the minimum facilities are available to passengers:

- Waiting areas
- Separate male and female toilets
- Drinking water

### 13.3.4 Regularization of Ghawaghai

A rudimentary public transport, based on pickups and Ghawaghai are already in existence. However, a shuttle bus service may be needed in future for transportation of students to schools. In addition, steps should be taken for registration of Ghawaghai and phasing-out the over provision.

### 13.3.5 Introduce Public Transport System

In order to make the city sustainable, there is a need to enhance its accessibility for everyone. Bus service is more economical mode for the people to fulfill their daily travelling requirements.

### 13.3.6 Traffic Management Program

- Widening Roads with the removal of encroachments, specially by the shopkeepers from major distributor roads.
- Designated parking stands for pickups and Ghawaghai.
- Specified spaces for charged parking system.
- Rescheduling for loading and unloading of goods vehicles.
- Enforcement of traffic rules.

### 13.3.7 Pedestrian Friendly Streets

Segregate the pedestrian traffic from the vehicular traffic for the safety of pedestrians at least in the bazaar area and around schools.

- Provision of footpaths, safety and street furniture
- Paving of circulation area in old bazaars

### 13.4 Immediate Action Plan

- Notify the official ROW of major roads, specially TPR, to control encroachment on the road.
- Management of flow of traffic in the city centre and designation of parking places.
- Construction of foot paths, road markings, tree planting and solar lights on major roads.
- Construction of new roads proposed by C&W Departments.
- Construction of new roads linking Cantonment Area Road with parallel proposed road, to open up areas for Future Main Commercial Center and Small Scale Industrial Area.
- The existing urban roads suggested by the Consultants to be rehabilitated on priority basis in Sadda as mentioned below:<sup>53</sup>
  - Thall Parachinar Road
  - Dogar Road
  - Sadda Murghan Road
  - Shurko Border Road
  - Cantonment Area Road
  - Cant Bypass Road
  - Karkhano Road
  - Tindo Road
  - Akbar Khan Road
  - Masozo Has Road

In addition to the construction and rehabilitation of above mentioned roads, first phase of Sadda Bypass is highly recommended to be built on first priority. This portion of Sadda Bypass is originating from the north-west of the Khurmana Bridge and running along the river bank reconnects with the TPR south of existing Mehmood's market. This would relief the TPR from the traffic congestion by bypassing regional traffic without entering in the old commercial area.

<sup>53</sup> These are not in the order of the priority; the concern department will decide the priority as per availability of funds.

### **13.5 Long Term Plan**

Sadda Bypass proposal is recommended to complete its second phase as a long term plan for 2034. Sadda Bypass should extend to the FC check post near Pir Qayoom through which all the heavy traffic including Afghan trade traffic will bypass the old town and cantonment area. Beside the bypass two major roads are proposed in the long run in east west direction to connect main centre with the sub centre and open alternate route to Central Kurram. The control of development should be exercised along TPR and other major routes in order to avoid densification along the road.

## **14. TELECOMMUNICATION NETWORK**

### **14.1 Existing Situation**

Communication network in Sadda is primarily based on the PTCL and cellular phones. For mobile communication most of the people use Mobilink, which is popular as the quality of service is good. The other operators' signals are received on roaming from across the Afghan border. There are few user of internet which is mostly used by business and the Government offices. PTCL exchange office is near Grid Station on Dogar Road for the overall coverage in Sadda town.

PTCL landline network covers the following areas:

- Sakhi Ahmad Shah Thall Road to Menaar Kali
- Sateen Area
- Badama Area
- Tendow Area
- Sadda City Area

### **14.2 Need Assessment**

The landline telecommunication network is available in the town and further programs for up gradation of PTCL will expand the coverage area. One cellular network is present in town its efficiency is declining due to congestion. There is a need for the introduction of new cellular network.

### **14.3 Strategy Formulation**

In order to transform Sadda into a modern city, smart telecommunication network is a necessary requirement. Not only landline and cellular network, it is an age of wireless which required Wi-Fi connectivity for daily communication. Smart communication network is now a prerequisite for any touristic destination, educational hub and trade zone.

### **14.4 Immediate Action Plan**

On immediate basis the following telecommunication plans should be undertaken:

- Rehabilitation and Expansion of PTCL Network with value added services.
- Introduction of new Cellular Networks with strong network coverage.
- Encourage private cable companies for the provision of internet, Wi-Fi and cable services.

#### **14.5 Long Term Plan**

The long term plan for telecommunication is hard to predict as in the field of telecom new technology is replacing the old one on daily basis. The most expected long term plan would be as follow:

- More PTCL exchanges to be installed for better area wise coverage.
- Placement of Fiber optics lines for the better coverage of internet facility.
- Establish the ICT (Information and communication technologies) infrastructure.

## 15. WATER SUPPLY

### 15.1 Existing Situation

Safe and clean water supply is a basic human need and a sure protection against several water borne diseases. Sadda has limited surface water resources. The major source of water is therefore underground water which is found at the depth of 300 to 500 feet below the surface. Not only it is difficult and expensive to sink tube wells so deep, the power supply is also erratic, therefore pumping of water is also intermittent.



#### 15.1.1 Surface Water

There is no surface water source in Sadda except for the people living near the Khurmana River, as surface water is difficult to draw from Kurram River due to low water level. The Water is brought to surface water storage reservoirs through gravity and then supplied to the surrounding area through gravity flow. Unfortunately, the water from the storage reservoirs is supplied without any filtration or chemical treatment.

#### 15.1.2 Tube Wells (Underground Water)

Public Health Engineering Department is responsible for construction of tube wells, which are later handed over to Municipal Committee for operation and maintenance. In all there are 9 tube wells in Sadda for domestic water supply.<sup>54</sup>

##### Tube Wells with Over Head Tanks:

Six tube wells located at Degree College, Vocational College, Governor Public School, Main Sadda Hospital, Degree College for Girls, C&W Office, FR Colony have overhead water tanks each having different storage capacity in gallons as shown in table below.

##### Tube Wells with Surface Tanks:

Three tube wells located at Chowni Kalli, Pir Qayum Main Road and Pir Qayum Park have on-ground reservoirs having 100,000, 10,000 and 20,000 gallons capacity respectively. Water from these tube wells is supplied to the lower areas through gravity. APA Colony tube well (near

<sup>54</sup> Refer Annexure - H for Water Supply Tables



Chowni) with a reservoir of 100,000 gallon capacity is the main tube well serving the general public of the Sadda town. Another tube well also located at APA Colony, supplies water through direct pumping at the discharge rate of 5000 gallons per hour.

### 15.1.3 Present Supply<sup>55</sup>

The total water supply from all tube wells; is approximately 215,000 gallons per day; 65,000 gallons from six overhead tanks and 150,000 gallons from surface tanks and direct pumping. Dividing this supply over the estimated present population of 55,000, the average per capita per day availability is less than 4 gallons. Mostly areas in the main town area and the Tareek Sadda have no water supply. At present only about 45% of the population is covered by the water supply network, the per capita consumption of those having water supply is about 8.7 gallons. Remaining 55 % population which is not connected with the network, fetch water in buckets from the neighbor or public stand post or surface water channels.

### 15.1.4 Quality of Water<sup>56</sup>

The problem with the direct use of ground water is that the quality of water cannot be monitored at the household level. The bacteriological analysis of water has been carried out by the Consultants for samples from surface sources, through the Pakistan Council of Scientific & Industrial Research Laboratories, Peshawar. On the basis of standard method, results for the total coliform and fecal coliform bacteria are found above the acceptable range. Therefore, it is concluded that surface water is not appropriate for direct use and need treatment before reaching consumers.

### 15.1.5 Operation and Maintenance System

PHED<sup>57</sup> is responsible for the installation of tube wells which are handed over to Municipal Committee for the operation and maintenance. Municipality will never have sufficient funds for the O&M of the tube wells after meeting their other urgent obligations unless they adopt an efficient system of collecting water charges. Currently Municipal Committee is responsible for O&M of majority tube wells through local communities. It is therefore suggested that communities should be encouraged to take the responsibility of O&M of tube wells.

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<sup>55</sup> Refer Annexure - H for Water Supply Tables

<sup>56</sup> Ibid

<sup>57</sup> Refer Annexure - E for Organizational Setup of Public Health Department

## 15.2 Need Assessment

Present mechanism of water supply from tube wells is serving almost half of the population. Water supply is disrupted due to electricity load shedding and low ground water level. At present, the area has low capacity reservoirs but their storage capacity is extendable. Badly maintained system and absence of water treatment plant could cause health issues for the residents in future.

At present the supply of water is greatly affected by the power supply. The solution to water shortage partly lies in assuring the sustained supply of power. There is therefore a very strong case of providing solar power to tube wells.

Water demand for the urban areas has two dimensions:

- Present gap in demand and supply
- Demand for water for the future population in the next 20 years

Presently only 215,000 gallon @ 8.7 gpcd is supplied to only 45% of the population of Sadda out of total populations of 55,000. Water supply at 8.7 gpcd to the 100% population will need approx 478,000 gallon, showing a deficit of 263,000 gallon.

It has been assumed that the water demand in Kurram Agency will remain low until flush toilets are installed and used in most houses. For the future water demand, keeping in view the local conditions minimum supply standard of 15 gpcd (as per NRM) is adopted. The water demand for the year 2034 is estimated to be 1.4 million gallons per day, which will include the total domestic and municipal water demand. Thus in the period of twenty years future additional demand will be 932,000 gallons @ 15gpcd.

**Table 19: Need Assessment for Water Supply**

Need Assessment	Population	GPCD	Supply MGD
Present Supply (2014)	45% of present population is served	8.7	215,000
Present Need (2014)	55,000	8.7	478,000
Present Gap (2014)	Remaining 55% need to be served	8.7	263,000
Future Need (2034)	94,000	15.0	1,410,000
Future Additional Need (2034)	Future population with rising consumption to be served	15.0	932,000

**Note:**

8.7 gpcd is the present daily supply per capita for the population connected with the network

15 gpcd is the minimum demand as per NRM

The above mentioned demand includes the requirements of hospitals, educational institutes, offices and commercial areas. It has been assumed that the arboricultural water demand would be fulfilled by treated waste water. While the fire fighting demand would be accomplished by temporary diversion from other uses. Other than these uses, future industrial areas on full development may need 650,000<sup>58</sup> gallons per day for proposed industrial area of 100 acres.

### 15.3 Strategy Formulation

Water is a basic need of life for everyone. The overall water strategy is to provide water to the entire population and eventually to meet gradually rising consumption level. The suggested strategies to resolve the issue of water supply are as follows:

#### 15.3.1 **Water Source**

Both surface and sub surface water are potential source of future water supply. Tube wells to tap underground resources are being sunk indiscriminately without any care for draw-down effect. A detailed study is required to measure recharge of the aquifer. Tube wells may not be able to provide sustained water supply for a long time. Although it seems that for the present and near future the major source of supply will remain the underground water, pumped to overhead tanks and supplied through a localized piped network. Measures will need to be taken to augment surface water resources in the long run. The percolation wells or infiltration galleries could also be the solution to reduce the pumping cost

#### 15.3.2 **Water Sector Studies**

Number of detailed water sector studies should be carried for Sadda are as follow:

- The potential and sustainability of underground water resources.
- Feasibility of constructing check dams and recharge dams on the upper reaches of streams north of Sadda, to create water reservoirs for recharge of aquifer and supply of surface water through canals.
- Investigating the geological conditions for infiltration galleries or percolation wells.
- Possibility of small hydropower plants.
- Sinking of tube wells in the river bed.

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<sup>58</sup> Calculated as per NRM Industrial water demand of 15 gallon per 100 sq ft ( less mechanical industries)

### 15.3.3 Integrated Small Schemes

Integrated small schemes with a pipe network to serve the surrounding colonies are more appropriate rather than making one large scheme to supply the whole Sadda MC under a single network. The size of these schemes depends upon daily water consumption, tube well pumping capacity, storage tank space and duration of power supply. On average in these schemes a sound working tube well will serve the population of 2000-3000<sup>59</sup>. The local experience shows that community operated tube wells are more efficiently run. This may be officially encouraged and communities showing interest should be provided funds on priority basis.

### 15.3.4 Rehabilitation of Old Schemes

The existing tube wells and reservoirs will be rehabilitated on the following basis:

- Rehabilitation of old schemes through solarization as electricity is rarely available.
- Subsidized water tanker should be provided for the areas which cannot be connected with the network.
- Replacement of rusted water distribution pipe network especially within the old town.
- Preferred use of modern plastic pipe material (PVC, UPVC, PE, PP) instead of conventional pipe.
- Treatment of water supplied from surface sources.
- Availability of spare parts, fittings, pipes for future repairs.
- Enhance storage capacity of service reservoirs for gravity system.

### 15.3.5 Construction of Check Dams or Recharge Dams

Based on the findings of water sector study suggested above, schemes for constructing check dams or recharge dams upstream for Sadda should be prepared and implemented. These dams will collect water from snow melt, rains, rivers and streams to provide storage over extended periods.

### 15.3.6 Irrigation Water

With the increase in the population, demand for agricultural use will also increase requiring augmentation of water supply for irrigation. Besides, creating more surface water reservoirs, the reuse of primary treated sewage affluent may be encouraged for irrigation purpose.

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<sup>59</sup> Assumption: 15 gpcd, 3000-4000 pumping capacity, 20,000 to 30,000 storage tank, 12hrs power supply

### 15.3.7 Installation of Solar Tube Wells

There is an urgent need to augment water supply with solar tube wells. It is suggested to convert operational tube wells to solar operated tube wells to increase supply of water. All the future tube wells are suggested to be solar energy based. These solar tube wells will not only increase the water quantity by longer operation, but will also save the conventional energy for other purposes. For long duration of cloudy and rainy weather an alternate power solution is required to be explored, which should be compatible with solar energy system.

### 15.4 Immediate Action Plan

At present half of the population is served with a daily supply of 8.7 gallons/capita. The first priority will be to cover the entire population with the same criteria. It is proposed to enhance the capacity of tube wells to serve additional areas. This capacity could be increase by overcoming electricity problem and use of solar energy.

This intention could be achieved in the immediate plan with the following proposals:

- i. Rehabilitation of operational tube wells, and construction of surface tanks and overheads.
- ii. Conversion of existing tube wells from conventional to solar energy.
- iii. Installation of five new solar tube wells at different locations.
- iv. Working hours of all tube wells will be 12 hrs (average) with the backing support of standby connections.
- v. Extension in water supply network of existing tube wells will be made to serve the nearby settlements / clusters / houses.

The targeted result expected from the immediate action plan is shown below:

**Table 20: Targeted Result Expected From the Immediate Action Plan**

Supply System / Source	Existing Capacity gallons	Action	Increased Capacity gallons	Additional Areas Served
Tube Wells with Surface Tanks (existing)	150,000	Rehabilitation with increase in storage capacity	225,000	Intensify presently served areas
Tube Wells with OH Tanks (existing)	65,000	Rehabilitation with solar energy; augmentation	98,000	Intensify presently served areas
New Solar Tube Wells	-	Installation of five solar tube wells	155,000	Old Town, Tareek Sadda, Shaheen and Sateen Village
<b>Total</b>	<b>215,000</b>		<b>478,000</b>	

To boost the industrial setup two more solar tube wells are projected at the proposed industrial site. These tube wells will fulfill the initial demand of 60,000 gallons out of estimated demand of 560,000 gallons, to help start up of the industrial estate. Feasibility study for small dams in the upper reaches of Khurmana River for creating reservoirs for urban water supply and irrigation is also suggested to be conducted at immediate basis.

### **15.5 Long Term Plan**

In long term it is recommended to increase per capita supply gradually to attain 15 gpcd by 2034. Even though 15 gpcd is the minimum quantity standard for urban area but as per life style of Kurram Agency it seems adequate. The target will be to serve the entire population needs @ 15 gpcd by supplying 1.4 mg per day. In order to fulfill this total future requirement 932,000 gallon additional water supply will be needed to be arranged by 2034. In future piped water supply system for 100% population will be the target.

The strategy would be to install localized piped network of tube wells in the planned housing schemes first and gradually cover the whole population in five year plans on phase wise approach. These schemes are recommended to be designed and implemented under the PHED and will be handed over to Municipality for O&M through local community as per current practice.

The following are also recommended to be taken in long term:

- Based on the feasibility study, construction of small dams.
- Ensure safe water supply and provide water treatment plants specially for surface water sources.
- Vigorously pursue rain water harvesting at the public and private level.

## 16. SEWERAGE AND DRAINAGE SYSTEM

### 16.1 Existing Situation

In Sadda, there is a combined system of sewerage and storm water drainage. Sadda is served by a combination of open drains and covered collector drains. Most of the urban area is served with open C.C. drains including the military and public administration area. The sub-urban colonies have katcha drains or the waste water is just discharged on the streets.

#### 16.1.1 Existing Drains

During field visit it was observed that the drains in some areas were properly covered while in other areas they were open. Concrete lined U- shape open drains covered half of the town area. Total length of the drain system for the Sadda is approx 1200 meters. The profile of open drains is inadequate and they often get choked with debris. The bazaar area is a low lying area and gets easily flooded with rain water due to choked drains<sup>60</sup>. This cause local flooding which could be improved by frequent cleaning of blockages.



#### 16.1.2 Final Waste Water Discharge

At present waste water is discharged into drains and finally disposed off without treatment. The discharge of household waste water is about 14% in agriculture fields, 38% in the streets and 11% in septic tanks<sup>61</sup>. Finally, the rest of the waste water goes to different tributaries of Kurram and Khurmana River.

<sup>60</sup> Data provided by Municipal Committee Sadda

<sup>61</sup> Field survey data of Sadda different localities



### 16.1.3 Operation and Maintenance System

All new schemes of sewerage and drainage are built by Public Health Engineering Department. The maintenance of the drains is the responsibility of Municipality Committee. Municipality Committee, with its meager resources, is not able to maintain drains with the result that these drains remain choked with debris, plastic bags, and empty bottles etc<sup>62</sup>.

## 16.2 Need Assessment

Sewerage and Drainage in Sadda is the biggest problem and from administration to common citizens, every one considers waste water and storm water drainage a matter of the highest priority. Due to absence of regular cleaning mechanism, the population is at a high risk of epidemic diseases, environment nuisance and water contamination. The lack of proper drainage not only causes extreme inconvenience to residents after heavy rainfall and seasonal floods, but the standing water causes damage to the infrastructure, which is already in poor condition.

The main problems in maintenance of drains are:

- Lack of funds for maintenance and repairing
- Large financial liabilities of MC for salaries and payments
- Shortage of primary workers

Waste water discharge at present is estimated as 150,000<sup>63</sup> gallons per day with drain length of 1,200<sup>64</sup> meters, covering less than 50%<sup>65</sup> of developed area of the town. The waste water discharge will increase with the rise in water supply. It is estimated that at 100% coverage of existing population by water supply, waste water discharge will be about 330,000 gallon per day. In order to drain rest of 180,000 gallons more than 1,200 meters of drains will be required.

As per the requirement of additional population in next 20 years more drains will be required to cater for additional waste water discharge of 650,000 gallons per day. By the end of 2034, there should be drains with total length of 7,000 meter spread all over the town to accommodate total waste water discharge of one million gallons per day.

<sup>62</sup> Data provided by Municipal committee Sadda

<sup>63</sup> Waste water discharge is calculated @ 70% of water supply quantity

<sup>64</sup> Data provided by Municipal Committee Sadda

<sup>65</sup> Ibid



**Table 21: Need Assessment for Sewerage & Drainage System**

Need Assessment	Waste Water Discharge million gallon	<sup>66</sup> Drain Length meters	Area Served
Present Drains (2014)	0.15	1,200	Less than 50% developed area covered with drains
Present Need (2014)	0.33 <sup>67</sup>	2,400	Entire developed area will be covered with drains
Present Gap (2014)	0.18	1,200	Remaining developed area need to be covered with drains
Future Need (2034)	0.99 <sup>68</sup>	7,000	Entire future developed area will be covered by the drains
Future Additional Need (2034)	0.65	4,600	Drains to cover in newly developed areas for additional population

It is estimated that for the project population of 94,000 in 2034, the water consumption will be 15 gpcd, 70% or one mgd of which will return as waste water. A proper sewerage system for the whole town will have to be designed. It will be pity to let this water go waste when there is so much demand of irrigation water. Given the financial and technical constraints in the installation of a modern treatment plant, the low technology treatment (oxidation pond) may be provided and the water may be reused in agricultural fields down streams.

### 16.3 Strategy Formulation

The suggested future strategic approaches to resolve sewerage and drainage issue are as follow:

#### 16.3.1 Rehabilitation of Existing Drains

The existing drains either covered or open need desilting which is costly and cumbersome and they occupying large spaces in the roads and streets. Open drains can be accepted only in the old town area due to narrow lanes and also as temporary solution in rest of the area, while there is no alternative to the underground sewers in the whole of the town, in the long run.

#### 16.3.2 Septic Tanks

The treatment of sewage via septic tanks is still in practice in the town. The output of septic tanks i.e. liquid and sludge will be utilized in waste water treatment plant and production of bio

<sup>66</sup> It is a rough estimation based on data provided by\_MC

<sup>67</sup> This waste water discharge is the 70% of estimated present demand of water supply as per section 15.2

<sup>68</sup> This waste water discharge is the 70% of estimated future demand of water supply as per section 15.2

gas respectively. The provision of septic tanks will avoid the untreated waste water discharge into the streets, fields and river.

### **16.3.3 Waste Water Treatment Process**

As a policy of conservation of water, all waste water collected through the drains, should be treated and reused as irrigation water. Decentralized low-tech wastewater treatment plants will be more useful for Sadda keeping in view the local technical and financial capacity. The treated wastewater should be used for agricultural purposes. The idea is also to reuse the effluent downstream of the plant, but the reuse of effluent is not recommended for the crops which can be eaten raw.

### **16.4 Immediate Action Plan**

In the immediate plan all developed area would be covered with open drains with the total estimated length of more than 1,200 meters. These drains on immediate basis will serves both sewerage and drainage. All drains are suggested to be connected with their nearby (downstream) waste water treatment plants to provide treatment to use final discharge for irrigation purpose.

A detailed waste water study is suggested to be carried out to assess the town's requirements and disposal strategies like sewage treatment plants, oxidation ponds etc.

### **16.5 Long Term Plan**

The Consultants recommend the whole town should be covered with appropriate underground sewerage system in phases and waste water treatment plants should be provided to reuse treated effluent for agriculture.

## 17. SOLID WASTE MANAGEMENT

### 17.1 Existing Situation

#### 17.1.1 Garbage Disposal

Overall solid waste management in Sadda is quite disappointing. Eighty percent of the residents interviewed by Consultants mentioned that they throw their garbage on the streets outside their houses. The garbage is also dumped in the open places. As the streets are not swept regularly, most of this garbage finds its way into the open drains and chokes them. In one fourth of the town, community based arrangement has been made and the community pays to sweepers for garbage collection and its disposal.



#### 17.1.2 Hazardous Waste

Sadda's town despite having a Tehsil Headquarter Hospital has no hazardous waste management system and hospital waste is also dumped like normal garbage. Dumping of garbage in open area is harmful for both human and animals. The THQ Hospital should install incinerator to minimize risk to the population from hazardous waste.

#### 17.1.3 Operation and Maintenance System

Sadda Municipal Committee is responsible for collection and disposal of solid waste. The MC has neither placed garbage bins nor there are any arrangement for the door to door collection of solid waste. The MC's poor financial health is cited as reason for the lack of proper sanitation. The MC staff, particularly the sanitation staff has not been paid salaries for months; therefore they do not feel obligated to come to duty. MC's revenues have lately improved with the opening of Afghan Trade as import/export fee generates revenues to the extent of Rs.56.5 million (in 2014), however the MC will get only a part of it. The MC's other source of revenue is its share in the general sales tax collected by FATA administration.

**Table 22: Annual Revenue of Sadda**

Sr. No.	Source of Income	Amount/Year
1	Import / Export (Transit trade to Afghanistan, Road tax from trucks to Afghanistan)	56,500,000
2	Income from Slaughter house approximately	600,000
3	Income from Land mutation approximately	600,000
4	Property Rent's income from 20 shops approximately	400,000
<b>TOTAL</b>		<b>58,100,000</b>

## 17.2 Need Assessment

Irregular solid waste collection of the town is causing choked drains, informal dumping and environmental nuisance. MC has financial issues to solve these problems. People are having awareness of solid waste management but still throwing litter on streets and outside their houses, due to lack of rubbish bins.

**Table 23: Need Assessment for Solid Waste Management**

Need Assessment	Generation Rate (kg per capita)	Population	Solid Waste (kg per day)	Landfill Site Area (acres)
Present Waste (2014)	0.25	55,000	14,000	0.7
Future Waste (2034)	0.50	94,000	47,000	1.2

**Note:**

0.25 kg pcd is assumed as present waste generation rate

0.5 kg pcd is the least standard for solid waste generation per capita per day (NRM)

Landfill site area based on 0.5 acres per 10,000 population and with 4 layers (NRM)

By assuming current solid waste generation at the rate of 0.25<sup>69</sup> kg per capita per day, it is estimated that at present town population of 55,000 generates about 14 tonnes solid waste per day (5,000 tonnes per year). This require approx 0.7 acres landfill site (0.5 acre per year per 10,000 population as per NRM)<sup>70</sup> at present to accommodate disposal in four layers. While by 2034, there is a need of approx 1.2 acres landfill site for disposal of 47 tonnes per day (17,000 tonnes per year) waste disposal in four layers.

<sup>69</sup> No information on generation rates is available for FATA and this figure is an estimate based on the findings of studies elsewhere in Pakistan.

<sup>70</sup> Refer National Reference Manual: Section 8.4.6, Table 8.10 on page no. 243

### **17.3 Strategy Formulation**

An area-based approach could be used to solid waste and drainage improvements, with the two being improved as part of an integrated program, implemented area by area. Suggested strategies for solid waste management in the Sadda MC are:

#### **17.3.1 Collection Bins to Dumping Sites**

Waste collection and disposal needs to be arranged by the MC. The MC should install garbage bins and collect the garbage through tractor trolleys and small bob-cat like tractors at regular intervals. Due to purpose built manufacture design the bob-cat tractors will not be misused as compared to conventional tractors. In the long term waste collection, sorting, recycling and disposals at land fill sites could be profitably outsourced by the Municipal Committee, as waste has become a source of revenue.

#### **17.3.2 Landfill Sites**

Locations for landfill sites will need to be identified, which would be preferably at the periphery of the municipal limits, accessible by outer roads and away from any residential area. Further the selection landfill site should be based on proper soil investigation and ground water study. The area requirement has been worked out with an assumption that waste will be spread in four layers to reduce the area substantially, as it is also in accordance with good landfill practice. Even if disposal is to an improved dump site, it should be possible to deposit a second layer after every five years on the same site.

#### **17.3.3 Bio Gas**

An alternate strategy for solid waste disposal could be the transformation of solid waste into gas. The constraint with the strategy is that it will work more efficiently with organic waste specially waste generated from live stocks. With the rise of cattle farming in the future this technology would become feasible.

#### **17.3.4 4Rs (reduce – reuse – recycle – replace)**

Waste removed from houses is expected to be mainly organic with very little plastic, glass and/or paper etc. Experience elsewhere shows that the percentage of recyclable waste tends to increase greatly with improvement in family incomes and standards of life. There will be need to study the waste composition which would vary with the passage of time. It is recommended that sorting of waste materials; especially glass, plastics, papers and metals etc. and selling out

of the recovered recyclable materials should be undertaken. This would not only reduce its quantity, but also generate resources.

#### 17.3.5 Incinerators

The hazardous waste is also generated in the town from hospitals and mechanical workshops. According to best practices, hospital waste need incinerators which are currently non-existent. Although currently, hospital is not generating any radioactive waste but still biological and chemical waste should be incinerated. THQ Hospital being the main health facility of Sadda could take the operation and maintenance responsibility of incinerator.

#### 17.4 Immediate Action Plan

In the immediate term, the collection and disposal of solid waste should be managed by the MC. MC should employ additional sanitary workers and equipments as per requirements; arrange funds for POL and O&M of the equipments; and to clear liabilities for salaries and payment of vendors.

In case MC does not succeed to fulfill these requirements due to limited financial resources, community-based approach is suggested on a pilot basis in strong community neighborhoods. The solid waste collected could also efficiently dealt with by the communities themselves; however they should be given some incentives to do so. Regarding hazardous waste mobile incinerator is suggested to be stationed at THQ Hospital which can provide services to other health institutes as well.

The following initiatives would be taken:

- MC should place rubbish bins at suitable locations and households should be encouraged to dispose their waste in the rubbish bins.
- CBOs may be involved in the solid waste collection but the disposal will have to be arranged by MC.
- MC should allocate sufficient funds for the purchase of necessary equipment and engagement of sanitary workers.
- MC should allocate funds for the acquisition and development of dumping site in phases.

The following studies are suggested regarding accomplishment of modern methods of solid waste collection in future:

- Waste composition study for sorting
- Site selection for sanitary landfill site
- Production of bio-gas from organic waste

### **17.5 Long Term Plan**

In the long term, under the top supervision of MC, the collection and disposal of solid waste could be outsourced to the specialized waste management companies, who would collect and recycle waste at a profit. Thus, the MC will be relieved of any financial burden on this account. The contractor would introduce 4R Solid Waste Management System (reduce-reuse-recycle-reject) and could also explore the concept of moveable containers (skips) at designated transfer points. Similarly, designation of Sanitary Landfill Site with special attention for present hospitals and future industrial wastes should also be a long term plan.

Incinerator should be installed by Health Department/Civil Surgeon to dispose of hazardous solid waste from government as well as private hospitals at an appropriate fee.

## 18. ENERGY

### 18.1 Existing Situation

#### 18.1.1 Electricity Network

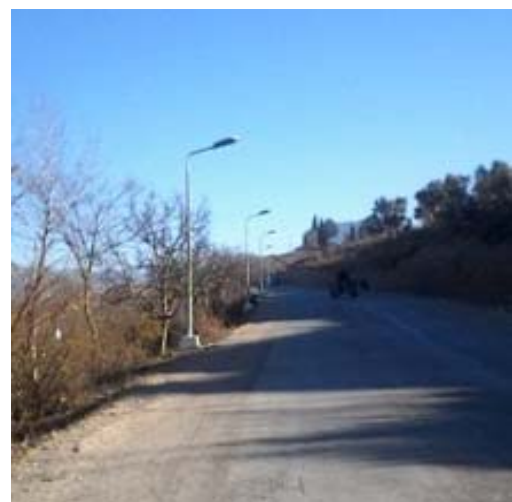
WAPDA is the electricity supplier for tribal areas while TESCO<sup>71</sup> is the distribution company responsible for operation, maintenance and billings. Thall grid station is the only source of electricity supply. There are 6,633 connections in the town, including commercial connections, through 363 transformers. There is a large gap in the demand and supply of electricity in the town. Therefore, daily load shedding of 16-20 hours is resorted to. Generally people don't pay electricity bills but in rare cases people pay Rs.100 per connection. Due to load shedding of electricity, Sadda residents are facing serious problems as long duration of load shedding is adversely affecting commercial and business activities.



#### 18.1.2 Street Lighting

- **Conventional Street Lights**

There are 160 numbers of conventional streets lights in the town. The type of these lights is high pressure sodium/mercury lights. Different types of poles have been used for streets lights including lattice, steel and concrete. Streets lights are available on most major roads but many are damaged and non functional, reflecting poor maintenance. The effectiveness of streets lights is minimal because of long hours of load shedding; therefore there is general demand for installation of solar powered street lights.



<sup>71</sup> Refer Annexure - E for organizational setup of TESCO



**Table 24: Conventional Street Lights**

Sr. No.	Location	Numbers	Road Length (km)
1	From Pir Qayum Town to Khurmana Bridge on main Parachinar Sadda road	100	2.6
2	From Government Technical college to Sadda Town committee chowk	60	1.5

- **Solar Street Lights**

Six solar lights have been installed on different location of town namely:

- Near Sub Jail
- Jail Road Chowk
- Dogar Chowk
- Near Kacheri Gate
- Near Post Office
- Near Hashmat Market

Solar energy is becoming popular for street lights and tube wells. There are several equipment suppliers in the town and requisite skills for operation and maintenance are being developed gradually. Other sources of energy such as localized small hydro power plants and wind energy do not seem to have investigated properly. There is no alternate energy experiment tested or implemented by the Government to overcome the electric power shortage for the whole Kurram Agency or to encourage and facilitate the community based development of alternate energy projects such as self-financed small hydro power, solar or biogas plants. The feasibility of generating hydro power from Khurmana River needs to be under taken on priority basis.

### 18.1.3 Gas

There is no supply of natural gas in Sadda. LPG cylinders are available but with a limited use. The Consultants survey indicated that in 98% cases people use wood as a fuel for cooking and heating purposes, whereas the other 2% use LPG along with wood.

## 18.2 Need Assessment

### 18.2.1 Electricity

Overall the town is well provided by the electricity network but due to shortage of power supply the town suffers from the major load shedding, which is badly affecting water supply, agricultural production and all market and industrial related work fields.

There is no information about the present supply of electricity, while the present demand is of 19 MW. Although number of connections are covering entire town but large gap in the demand and supply causes daily load shedding of 16-20 hours. Total power demand of 19 MW is estimated on the basis of 4KW<sup>72</sup> per HH<sup>73</sup> for 55,000 population or 4,800 HH. By the end of 2034 energy demand will be 40 MW for 94,000 population in 10,000 HH @ 4KW per HH. Therefore it is suggested that in next twenty years additional 21 MW are required.

**Table 25: Need Assessment for Electricity at Sadda**

Need Assessment	Population	No of HH	Supply MW
Present Need	55,000	4,800	19
Future Need	94,000	10,000	40

### 18.2.2 Street Lights

Conventional streets lights are not so effective due to long hours of load shedding; therefore there is general demand for installation of solar powered street lights. In future solar lights are suggested to be installed but also there is a need to create capacity for repair and maintenance.

While the existing 160 conventional lights should be converted to solar lights and additional solar lights should be installed.

<sup>72</sup> Standard mentioned in the NRM for single phase domestic, institutional and commercial connections

<sup>73</sup> As per 1998 census household size in Sadda MC is 11.5

Name of the roads requiring solar street lighting:

- Thall Parachinar Road
- Dogar Road
- Sadda Murghan Road Road
- Shurko Border Road
- Cantonment Area Road
- Cant Bypass Road
- Karkhano Road
- Tindo Road
- Akbar Khan Road
- Mian Razi Road

### 18.2.3 Gas

Since there is almost no gas supply, the use of LPG is getting popular but the high cost is affecting the majority of people, major burden is still on the wood. Studies for alternate solutions are required for kitchen fuel supply. The dependence on wood has to be reduced to save the forest resources. The government should consider subsidizing LPG cylinders.

## 18.3 Strategy Formulation

Energy is the main life line of the Sadda town though which all activities is associated. The energy strategy is to shift its paradigm from conventional to new technologies. From the experience solar energy is the most economical and efficient solution to the energy crisis. The energy strategy is to move towards economical and renewable solutions. For this private investment could also be utilized.

## 18.4 Immediate Action Plan

On immediate basis the following measures are suggested to be taken to cover the present energy gap:

- Conversion of conventional street lights to solar technology
- Installation of additional Solar Street Lights
- Promote use of LED<sup>74</sup> lights and bulbs instead of high pressure sodium/mercury lights
- Install small KW's power generation solar plants for public buildings, hospitals, schools and commercial areas
- Establish solar farms to supply solar power on the existing distribution network.

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<sup>74</sup> LED stands for: Light emitting diode

- Feasibility study of Khurmana River of generating hydro-electric power
- Feasibility studies for alternate energy solution;
  - wind turbines
  - bio-electricity

#### 18.4.1 Long Term Plan

The long term requirement would be fulfilled with the installation of new grid station and by exploring the dynamics of alternate energy solutions:

- Small hydro power generation plants to be installed
- Bio-electricity can be produce by the sewerage disposal
- A well proven technology of wind, small turbines to serve scattered and small houses to be encouraged

A public awareness campaign may be launched for energy conservation.

# **PART – V**

## **IMPLEMENTATION**

## 1. IMPLEMENTATION

The implementation of the Structure Plan and detailed projects emerging from the Planning Consultancy and Engineering Consultancy should ultimately be the responsibility of the respective Municipal Committees (MCs). Although MCs have been formed and functional; but even after their formation, they require time to acquire enough capacity to implement the plan and manage urban development. In the interim period, till such time that the MCs come of age, several possibilities have been considered for the implementation of development plans. These are outlined below:

### 1.1 Through Line Departments

In a status-quo situation, relevant line department directorates such as Education, Health, Communication and Works, Public Health Engineering, Agriculture, Irrigation and Local Government and Rural Development etc., would select projects from the Structure Plan; prepare their project PC-I; get allocations from the FATA Annual Development Plan (ADP) and execute the projects through their field presence. At the FATA Secretariat level, P&D Department will coordinate and monitor the progress of several departments, the utilization of funds by them and the results being achieved. The Steering Committee for TARUCCI PMU can be the forum that assumes this overarching coordination and monitoring role. At the local level, Political Agent and Additional PA will provide a strong platform for coordination and monitoring of progress.

However, experience shows that inter-sectoral rivalries and issues in flow of information from the field is usually a problem and progress under this option, can be difficult to ensure coordination or anticipated results.

### 1.2 Through Multi-Sectoral Organizations

The situation in the FATA has reached a situation where the inhabitants have waited too long for rehabilitation and progress promised to them. Specially in the Kurram Agency due to sectarian conflicts and military operations, more destruction had occurred with little effort towards new development. Thus all eyes are on the Structure Plans for MC Parachinar and Sadda, which should not be allowed to fizzle out into bureaucratic processes and sectoral wrangling for funds.

It is therefore necessary, that a multi-sectoral organization with capacity to plan and execute projects should be responsible for implementation of the program, and later transfer the completed projects to MC for operation and maintenance. Small scale projects and recurrence

of similar activities (installation of tube wells) could also be executed by the MC depending on the capacity. There may be three options in this regard:

- Option-A: FATA Development Authority (FDA)
- Option-B: New special purpose agency e.g Sadda (or Kurram) Development Authority
- Option-C: A specially created cell in TARUCCI, PMU

#### 1.2.1 **Option-A: FATA Development Authority (FDA)**

In the wake of post 9/11 crises, FDA has been established as a specialized development organization in 2006. The goals and aims of FDA are general and related to the FATA region as a whole. Having a large mandate for the whole of FATA, their interest and concentration on Sadda may be diluted. Moreover, so far there is very little experience in urban planning and execution of urban development projects in FATA due to lack of capacity. Moreover due to its nature FDA will not be able to focus fully on urban development.

#### 1.2.2 **Option-B: New special purpose authority “Sadda (or Kurram) Development Authority”**

A special urban development organization such as Sadda Development Authority maybe created to implement the development plan for Sadda which may later on become the development wing of the Municipal Committee. The Draft Local Government Legislation has included all the necessary urban development functions in the proposed responsibilities of the MCs.

Sadda Development Authority is not a viable option in the short run as it would be difficult to find suitable professionals willing to be stationed in Sadda; and secondly, the initial overheads for creating the new organization may be high.

#### 1.2.3 **Option-C: A specially created cell in TARUCCI, PMU**

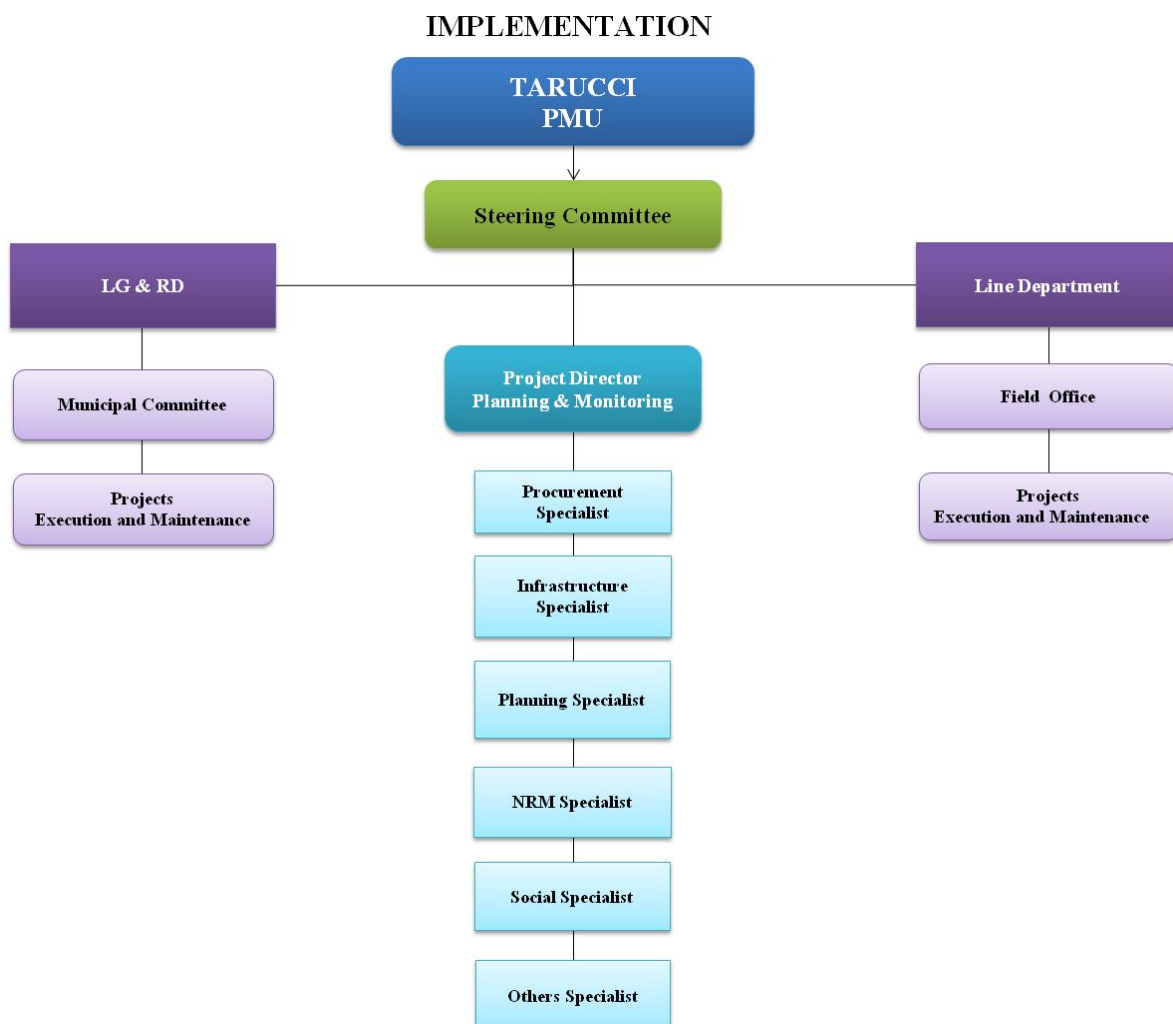
TARUCCI, PMU also has no past experience in urban development and will also need to acquire capacity. However, it is a special purpose entity created for TARUCCI and its officers have the advantage of having gone through the preparation of FUCP and the planning process. They have thus acquired sufficient understanding and commitment for seeing the plan proposals implemented in the true spirit.

TPMU can thus be responsible for overall coordination, internal/external processing of all approvals and monitoring for the development of the urban management framework under FUCP, of which the Structure Plan is a part, as well as implementation of municipal sub-projects. It can also provide support to the Directorate of LG&RD, which is the parent directorate of the MCs, for procurement of works. It can assume the responsibility for outsourcing third party audits and evaluations as required during the project implementation.

The Directorate of LG&RD, as the parent directorate of all local governments including the MCs, should be responsible for implementation and supervision of investments in municipal infrastructure and services in Sadda, Kurram, as proposed in this Structure Plan.

This approach will ensure that the capacity built during implementation does not dissipate with the conclusion of FUCP and is sustainable and available for future initiatives under the TARUCCI Program. Moreover, this arrangement will utilize and strengthen existing structures for governance instead of setting up ad-hoc agencies outside the existing setups.

Option C is therefore recommended for implementation.





The Municipal Committee, Sadda is responsible for operation and maintenance of municipal infrastructure and services in Sadda, with key staffing already available. It is expected to gradually take over the operations and maintenance of all sectors within the jurisdiction of MC Sadda. Later MC will have the capacity to undertake capital investment initiatives starting from small scale projects and replication of projects done by higher authorities. In the meantime, entities like TPMU and the Directorate of LG&RD can continue to initiate projects.

In the meantime it is critical that the Structure Plan is widely viewed as a legal instrument and that is only possible if the plan is formally approved for implementation by an appropriate authority in Sadda, Kurram Agency. The plan approval and acceptance process generally involves public review and approval of the plan as a legal document. Once the plan and its various recommendations are approved, this can be put to full operation by the Municipal Committee, within the purview of Local Bodies Law. The MC will exercise its control through by-laws and regulations adopted by it under the Law.

The Structure Plan provides broad guidelines as to the direction and mix of development. The MC will initiate projects itself or grant planning permission to the private builders in line with the land use zoning shown in the plan. MC will also have a role to oversee and coordinate activities of other line departments with special reference to infrastructure (for example to avoid repetitive digging of roads by different departments). This will require that the various departments are given clear guidance on the need to work within the parameters provided by the plan. The essence of the Structure Plan proposals is that neither the Municipality nor the FATA Secretariat will have the financial resources to carry out all the development works in one go; therefore the fulfillment of needs will have to be matched with the availability of funds. That raises the question of priorities and financial and physical phasing.

In order to raise financial resources of MC, it is imperative to focus towards revenue generation activities within the jurisdiction of MC. The major factor which should be considered is the transformation of informal local revenue generation to formal local economy. Currently, this informal income is going directly in the individual pockets and not benefiting the common people. If these are collected by MC personnel under certain rule and regulation, useful results will be visible in terms of maintained roads and parks, functional tube wells and drains and proper collection and disposal of solid waste. Thus, MC could generate funds from the following services:

- 1) Entrance check post
- 2) Levy on goods transportation
- 3) Property rent
- 4) Charged parking
- 5) Solid waste collection charges
- 6) Registration of Ghawaghai
- 7) Holding of fairs and festivals
- 8) Fee from bus stands
- 9) Fee for building plan approvals
- 10) Fine on encroachers

## 2. URBAN MANAGEMENT FRAMEWORK, SADDA (FATA)

Urban Management is multi-disciplinary and complex process where change is brought by combined action of various individuals, Governments Departments, local bodies and a host of socio-political forces, more often not working in the same direction, than in harmony.

The Urban Management Framework should therefore provide for integrated action in coordination with all the stakeholders, with decision making at appropriate level and monitoring by the local representatives.

The main features would be:

- Devolution : Decision making at the appropriate level which in this case is municipal committee.
- Coordination : Integration of action among public sector organizations both vertically among different levels of Government and horizontally between various sectors of development.
- Participation : Complex urban problem cannot be solved by single government body. Problem solving is a shared responsibility of all stakeholders. It is particularly important to involve citizens, private organizations and communities.
- Sustainability : The prime objective of Urban Management should be environmental sustainability that is: meeting the needs of the present without compromising the ability of the future generations to meet their own needs; efficient use of natural resources; and minimizing waste and pollution.
- Good Governance: Urban management system should be based on the principles of good governance i.e.
  - i. Accountability
  - ii. Transparency
  - iii. Participation
  - iv. Accessibility

In good governance, the system needs to be structurally transparent, financially accountable, accessible information and promote public participation

- **Community Mobilization**                      Community mobilization is to encourage individuals for achieving collective goals based on priority need through organized mechanism
- **Consensus Building**                      Consensus building is a very useful tool in balancing the priorities of different stakeholders
- **Market Sensitive**                      Urban development should adhere to market mechanism and should encourage market forces to play their active part. However, interventions will be required in case of market failure due to faulty distributions or inefficient pricing.

## 2.1 **Key Players in Urban Management**

Urban management will be the main responsibility of the Municipal Committees. However, it may be kept in mind that within the MC limits, there will be several Government Departments, public sector agencies, non-government and voluntary organizations, private investors, builders and individuals that will be actively involved in contributing to the growth and development of Sadda. While MCs would be required to develop by-laws & regulations to approve projects, they will practically have little influence over the government departments and public agencies, to have them conform to MC controls. FATA Secretariat, P&D Department and AI&C Department, being the funds providers and coordinators for the projects of government departments should have role to assist the MCs in regulating development projects by insisting on MC approval before releasing funds. In case of FATA the possibility exists with TPMU, to achieve effective coordination, because the structures will be new and there is a chance to propose effective coordination and overall control mechanisms from the start. The role of each of them is elaborated below:

## 2.2 **FATA Secretariat**

FATA Secretariat is the apex body for governance and development of FATA under the guidance of the Governor of Khyber Pakhtunkhwa. A Steering Committee already exists to coordinate and monitor the TARUCCI projects with line departments.

Following are main responsibilities that come under FATA Secretariat:

- Policy Making for overall development direction
- Budgetary support through Annual Plans/ ADP
- Vertical / Horizontal Coordination

As several agencies will be involved in the development within the urban areas or peri-urban areas, the integration of development activity is required both vertically in different levels of governments and horizontally among various sectors such roads / highways, buildings, health, education irrigation, flood protection, disaster management etc.

### **2.3 Planning and Development Department**

It is responsible for overall planning and approval of development projects. The Planning and Development Department is under the umbrella of FATA Secretariat. In Urban development context, the main activities of this department will be:

- Prioritization and inclusion of projects in Annual Development Plan
- Project Appraisal and Approval
- Fund Allocation
- Coordination for development activities of line departments

In this regard it will assign and grant the approval of the projects on the basis of PC-I forms/feasibility studies including financial, technical and social aspects and will also assign the allocated funds for the ongoing and upcoming projects on the priority basis.

### **2.4 Line Departments**

The FATA Line Departments in health, education, irrigation, agriculture, C&W, forest etc., will continue to prepare and execute projects relating to their own fields in Sadda. It will be important that all development efforts should be integrated to avoid departmental rivalries and conflict of interests. This coordination will be brought at two levels, Planning and Development Department (Project Approval/Fund Release) and Steering Committee for TARUCCI for horizontal coordination.

### **2.5 PMU for TARUCCI**

The ultimate responsibility of urban planning and development will rest with local bodies. However since local bodies are being introduced in FATA area for the first time they are expected to take some time to mature and be capable of fulfilling their responsibilities. In the meantime, they will suffer from lack of experience, shortage of trained manpower and overall organizational capacity to prepare plan and implement them.

In the interim period Local bodies will need assistance from TPMU in:

- Preparation of structure plan for the local bodies.
- Framework for approval of plans including stakeholders' input and plan adoption.

- Training and capacity building, including training workshops for the councilors.
- Provision of standard planning and building control legislation.

Capacity building workshops and training programs for the enhancement of existing capability and introducing new techniques are highly recommended. TARUCCI or similar organization with a different name may continue to act as an advisory body to provide technical support to local bodies.

## **2.6 Municipal Committee/ Local Government Department**

The Government has announced the creation of local bodies in urban areas of FATA and draft Act is under approval, which will allow the creation of municipal committees and election of members (councilors) of the municipalities.

The municipalities will be in charge of Urban Management within the MC limits. This will ensure stakeholders' commitment for planning/execution of urban plans. The MC will have the main task of:

- Urban Planning
- Planning and Architectural Control
- Urban Project preparation and execution
- Collection and Management of Local Funds
- Operation and maintenance of urban services

The following departmental heads will be required:

- **Regulation**

Municipal Officer (Regulation) who shall supervise sections dealing with regulation and licensing, management of municipal properties, facilities and enforcement of municipal laws, rules and bye-laws. This department will supervise the ongoing and completed projects through land use control and building byelaws / regulation.

- **Infrastructure and Services**

Municipal Officer (Infrastructure and Services) to supervise sections dealing with public health, water supply, sewerage, drainage, sanitation, public safety, municipal roads, streets and street lighting, fire fighting, park services.

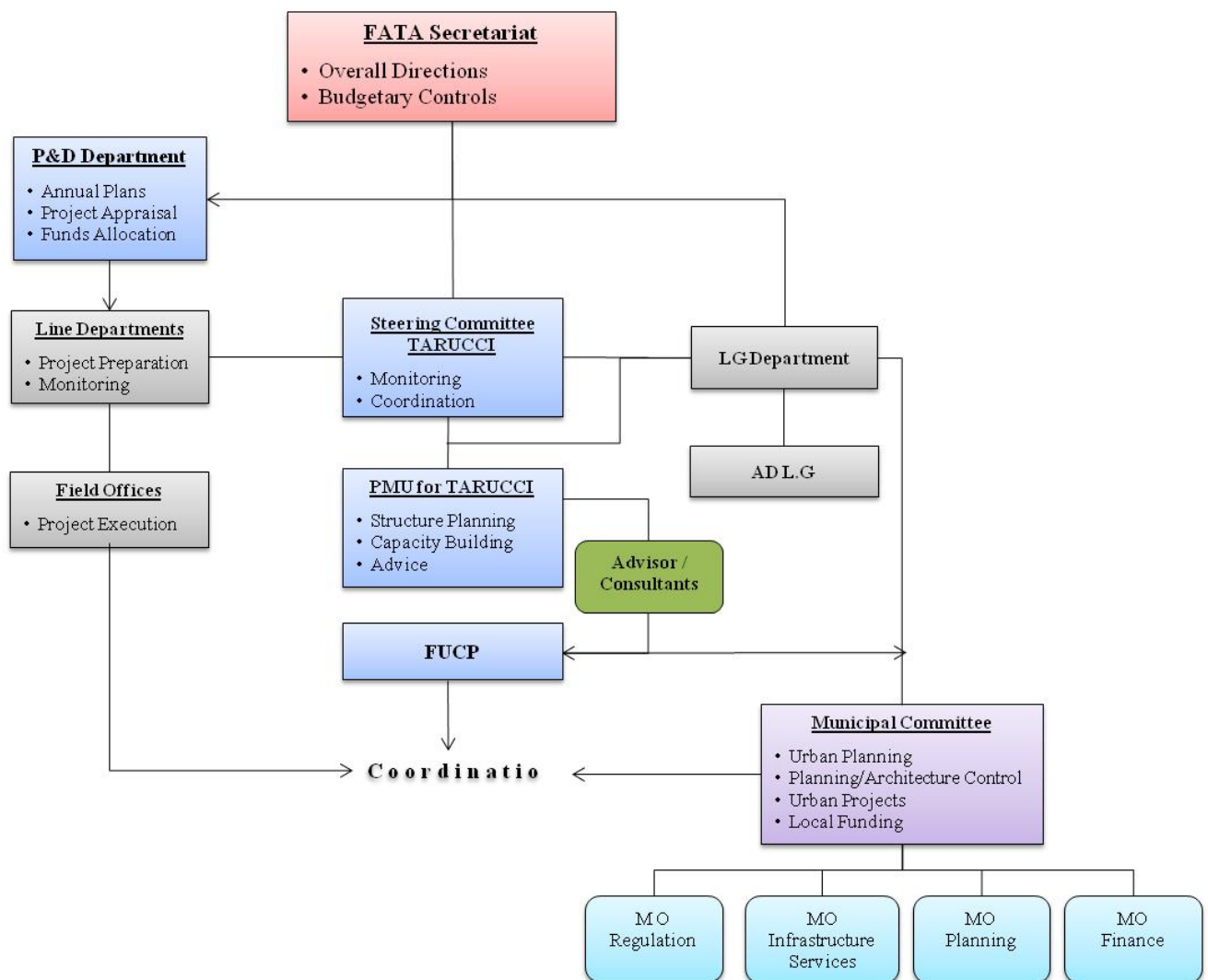
- **Planning**

Municipal Officer (Planning) to supervise sections dealing with master planning, Site Development, land use and building control, coordination of development plans, Arboriculture and Horticulture

• **Finance**

Municipal Officer (Finance) to supervise sections dealing with revenues budget, accounts and audit. It will be important that job descriptions of these offices and their subordinates should be carefully prepared and their selections for the job to be as per job descriptions.

**URBAN MANAGEMENT FRAMEWORK**



### **3. PRIORITY PROJECTS**

Priority Investment indicated in the immediate action plan has been derived from the following sources:

- Priorities indicated by the administration (Political Agent /Assistant Political Agent's Office)
- Urgency expressed by the stakeholders in Focal Group Discussions.
- Requirements assessed by the officials of the local departments (C&W, PHED, Health, Education, and Municipality).
- Consultants own evaluation of urgent needs.
- Public Sector ADP already approved.

Table 26: Priority Projects<sup>75</sup>

S.No	Project Name	Implementation Partners
<b>ECONOMIC DEVELOPMENT PROJECTS</b>		
<b>Agriculture</b>		
1	Rehabilitation of Old Nurseries and Orchards	Agriculture Department
2	Agriculture Extension Services	Agriculture Extension Department
3	Construction of Warehouses for Dry Fruits, Vegetables, Fruits and Grains	Agriculture Department
4	Study Methods for Agricultural Advancement	Agriculture Department
5	Facilitation for Cooperative Farming and marketing	Agriculture Extension Department
6	Pilot Project for Irrigation Solar Tube Wells	Irrigation Department
<b>Forestry</b>		
1	Reforestation to Protect Eco System	Forestry Department
<b>Livestock, Fisheries and Poultry</b>		
1	Feasibility of Dairy Farming	Livestock and Dairy Development Department
2	Establishment of Poultry Farms	Livestock and Dairy Development Department
3	Initiate On-Farm Veterinary Services	Livestock and Dairy Development Department
<b>Industrial</b>		
1	Feasibility Study for Small Scale Industrial Area	FATA Development Authority
2	Initiate Infrastructure Development for the Small Scale Industrial Area	FATA Development Authority
3	Shifting of Old Markets and Workshops	PA & MC
4	Old Market Area Infrastructure Improvement Program	PA, MC & C&W
5	Skills Development Training Programs	PA & MC
6	Regularization through Open Border Trade	FATA Development Authority

<sup>75</sup> List of Priority Projects has been prepared in consultation of overall objectives affecting town in the immediate terms. These projects are not in the order of the priority; the concern department will decide the priority as per availability of funds.



S.No	Project Name	Implementation Partners
<b>Tourism</b>		
2	Construction of Resorts and Hotels	PA & C&W
3	Arrangements for Festivals and Fairs	PA & MC
<b>SOCIAL DEVELOPMENT PROJECTS</b>		
<b>Housing</b>		
1	Preparation of Building Byelaws and Regulations	PA & MC
2	Housing Finance for Construction / Renovation	PA, MC & Micro Financing Institutes
<b>Health</b>		
1	Renovation of Tehsil Headquarter Hospital	Heath Department
2	Pilot Project of Solar Power for Life Saving Equipments	Heath Department
3	Incentives for Medical and Paramedical Staff	Heath Department
4	Installation of Incinerator in THQ Hospital	Heath Department
5	Induction of Health Awareness	Heath Department
<b>Education</b>		
1	Establishment of Teachers Training Program	Education Department, C&W
2	Renovation of Existing Schools and Colleges with the provision of basic utilities and services	Education Department, C&W
3	Construction of Additional Classrooms in existing schools or New Buildings	Education Department, C&W
4	Up-gradation of Degree Colleges into Post Graduate Colleges	Education Department, C&W
5	Installation of Computer Labs in all Schools and College	Education Department, C&W
<b>Recreation</b>		
1	Development of City Garden	PA, MC & C&W
2	Development of Neighborhood Family Parks	PA, MC & C&W
3	Rehabilitation and Up Gradation of existing playgrounds	PA, MC & C&W
<b>Religious and Graveyards</b>		
1	Up gradation of Madaras to Conventional Schools	Education Department, C&W
2	Rehabilitation of Graveyards	PA, MC & C&W

S.No	Project Name	Implementation Partners
<b>INFRASTRUCTURAL DEVELOPMENT PROJECTS</b>		
<b>Transportation</b>		
1	Construction of Sadda Bypass Phase-1	MC, Highways & C&W
2	Rehabilitation of Existing Urban Roads	MC & C&W
3	Construction of New Proposed Roads	Highways & C&W
<b>Telecommunication</b>		
	Rehabilitation and Expansion of PTCL Network with Value Added Services	PTCL
<b>Water Supply</b>		
1	Installation of New Solar Tube Wells	PA & PHED
2	Rehabilitation and Solarization of Existing Tube Wells	PA, TESCO/ WAPDA & PHED
3	Feasibility study for Small Dams for Recharging Aquifer	PA & PHED
4	Installation of Filtration Plants	PHED
<b>Sewerage and Drainage</b>		
1	Rehabilitation of Existing Drains	MC,PHED
2	Construction of Drains in built up area	PHED
3	Waste Water Study for Disposal	PHED
4	Waste Water Treatment for Irrigation	Irrigation Department & PHED
<b>Solid Waste Management</b>		
1	Equipments for Solid Waste Collection	MC & PHED
2	Development of Dumping Site	MC & PHED
3	Study Composition of Solid Waste	MC & PHED
<b>Energy</b>		
1	Installation of New Solar Street Lights	MC & TESCO/ WAPDA
2	Solarization and Rehabilitation of Existing Street Lights	MC & TESCO/ WAPDA
3	Feasibility Study of Khurmana River of Generating Hydro-Electric Power	PHED & TESCO/ WAPDA
4	Feasibility Study for Alternative Energy Projects (Bio Gas and Wind energy)	TESCO/ WAPDA
5	Establishment of Solar Farms	TESCO/ WAPDA
6	Installation of Small KW's Power Generation Solar Plants	TESCO/ WAPDA

## **KURRAM AGENCY ADP PROJECTS 2014-2015**

Table 27 : List of ADP Projects

S.No	Name of Schemes	Estimated Cost	Expenditure upto June 13	Estimated Expenditure dg 2013-14	Allocation for 2014-15			T/F Liabilities
					Capital	Revenue	Total	1592.758
<b>ON GOING SCHEMES</b>								
<b>EDUCATION</b>								
1	030462-Establishment of Girls Degree College Alizai, Kurram Agency (GD) (Revised)	96.589	51.613	6.054	34.922	4	38.922	0
2	100158-Upgradation of 03 No.s Middle Schools to Higher Secondary Schools & 01 No High to Higher Secondary in NA-37 & 38. Kurram Agency i. GMS Khar Kali LK , ii. GGMS Malana UK , iii. GMS Tarai Khoidad Khel CK , iv. GGHS Qabadshakhel Zeran.	90.473	22.063	9.581	14.249	2	16.249	42.58
3	110152-Upgradation of 12 Primary Schools to Middle Schools , Kurram Agency (GPS=Parao LK , Sarpakh #3 , SaidAli Mela , Jawdara , Jahan China , Sterkali Taba in CK , Machki Kali , Boghdi Yusaf Kili UK , Aka Khel ) & (GGPS=Baz Kali CK, Inzery LK , Dawlat Khel UK & Zangi Kali (Rohullah) CK	84.63	38.268	20	24.362	2	26.362	0
4	110154-Re-opening of Functional Community School in Kurram Agency	95.125	50.914	19.238	0	24.973	24.973	0
5	110155-Rehabilitation and Improvement in Existing Educational Institutions in Kurram Agency	12.692	0	8.66	3.532	0.5	4.032	0
6	120196-Regularization of 08 Community Schools in Kurram Agency	43.973	0	12.9	30.473	0.6	31.073	0
7	120197-Up-gradation of 06 Primary Schools to Middle Status in Kurram Agency	56.135	0	20.2	22.513	2	24.513	11.422
8	120198-Up-gradation of 02 Middle Schools & 01 High School to Higher Secondary Status in Kurram Agency	68.183	0	22.7	43.073	2.41	45.483	0
9	120201-Improvement , Rehabilitation & Provision of Missing facilities in existing Educational facilities of Kurram Agency	31.407	0	18.8	11.007	1.6	12.607	0
<b>TOTAL</b>		<b>579.207</b>	<b>162.858</b>	<b>138.133</b>	<b>184.131</b>	<b>40.083</b>	<b>224.214</b>	<b>54.002</b>

S.No	Name of Schemes	Estimated Cost	Expenditure upto June 13	Estimated Expenditure dg 2013-14	Allocation for 2014-15			T/F Liabilities
					Capital	Revenue	Total	1592.758
<b>EDUCATION</b>								
1	140001-Re-construction of 13 Damaged Educational Institutions in Kurram Agency	102	0	0	34	0	34	
2	Existing 30 Educational Institutions of Kurram Agency	81	0	0	26	1	27	54
3	140003-Up-gradation of 16 Educational Institutions (12 PS to MS + 2 MS to HS + 2 HS to HSS) in Kurram Agency.	171	0	0	57	0	57	114
	<b>TOTAL</b>	<b>354</b>	<b>0</b>	<b>0</b>	<b>117</b>	<b>1</b>	<b>118</b>	<b>236</b>
<b>ON GOING SCHEMES</b>								
<b>HEALTH</b>								
1	050004-Opening of 07 Civil Dispensaries in Kurram Agency	37.993	30.338	7.654	0	8.008	8.008	-8.007
2	100160-Establishment of 04 Nos CHC in NA-37 & 38 Kurram Agency i. CHC Bilyamin, Luqman Khel , Tara Mela , Rah-e-Rashid.	33.125	14.538	6	12.587	0	12.587	0
	<b>TOTAL</b>	<b>71.118</b>	<b>68</b>	<b>13.654</b>	<b>12.587</b>	<b>8.008</b>	<b>20.595</b>	<b>-8.007</b>
<b>NEW SCHEMES</b>								
<b>HEALTH</b>								
1	140004-Up-gradation of Civil Dispensaries to CHCs in Kurram Agency	39	0	0	13	0	13	26
	<b>TOTAL</b>	<b>39</b>	<b>0</b>	<b>0</b>	<b>13</b>	<b>0</b>	<b>13</b>	<b>26</b>

S.No	Name of Schemes	Estimated Cost	Expenditure upto June 13	Estimated Expenditure dg 2013-14	Allocation for 2014-15			T/F Liabilities
					Capital	Revenue	Total	1592.758
<b>ON GOING SCHEMES</b>								
<b>PUBLIC HEALTH ENGINEERING</b>								
1	100166-Provision of DWSS to 08 Nos villages in NA-37 & 38 in Kurram Agency : Akbar jan colony shanai sehra , Luqman Khel , burki , Mirmast kali LK , Shamkanri , Star kali, Jalamzokot Zeran , Tindo Afridi Kalai CK. (Revised)	74.484	15.518	19	17.499	0	17.499	22.467
2	110015-Provision of 08 DWSS in NA-37 & 38 in Kurram Agency i. Toori Market UK , ii. Liaqatabad Colony UK, iii. Sateen LK , iv. Katkani Damamy CK , v. Mirza Ali Shudo Piala LK , vi. Massozai CK , vii. Sangrobi & Gulishang CK , viii. Hidayatullah Colony UK.	79.372	17.431	34.897	27.044	0	27.044	0
3	120208-Provision of DWSS to 09 Villages in Kurram Agency	50.99	9.556	25.6	15.834	0	15.834	0
4	120209-Provision of DWSS to Sectarian & Militancy Affected Villages of Kurram Agency	54.506	9.9	18.705	5	0	5	20.901
5	130190-Construction & Rehabilitation of Solar Based , Gravity based DWSS in Kurram Agency	73.226	0	8.3	18.862	0	11.862	53.064
<b>TOTAL</b>		<b>332.578</b>	<b>52.405</b>	<b>106.502</b>	<b>84.239</b>	<b>0</b>	<b>77.239</b>	<b>96.432</b>
<b>NEW SCHEMES</b>								
<b>PUBLIC HEALTH ENGINEERING</b>								
1	140006-Construction of 07 Gravity based DWSS in Kurram Agency	45	0	0	15	0	15	30
2	140007-Construction of 07 Solar Based DWSS in Kurram Agency	69	0	0	23	0	23	46
3	140008-Rehabilitation and Solarization of 04 DWSS in Kurram Agency	21	0	0	7	0	7	14
<b>TOTAL</b>		<b>135</b>	<b>0</b>	<b>0</b>	<b>45</b>	<b>0</b>	<b>45</b>	<b>90</b>

S.No	Name of Schemes	Estimated Cost	Expenditure upto June 13	Estimated Expenditure dg 2013-14	Allocation for 2014-15			T/F Liabilities
					Capital	Revenue	Total	1592.758
	<b>ON GOING SCHEMES</b>							
	<b>COMMUNICATION</b>							
1	060091-Widening and Black Topping of Road from Makhrani to Surpakha via Gogani Ph = II , 10 km Kurram Agency.	115.009	102.639	0	12.37	0	12.37	0
2	080069-Construction of 10 km Black topped Road in various villages in Kurram Agency	133.276	23.133	91.297	18.846	0	18.846	0
3	080071-Construction of 6 km Black topped Roads in Kurram Agency. (Nawi Kali 2 km , Kach to Malana Dam in Upper Kurram 2 km , Khawa Kali. Sarkhawi Darin Central Kurram 2 km ) (Revised).	89.55	64.806	9	15.744	0	15.744	0
4	100163-Construction of 06 km Road in NA-38 Kurram Agency i. Pastawoni to Tara-Mela via Mandara Phase-1 (3 km) ii. Shagld Road from Mistri Koroona (1 km) iii. Mast to Nurgus ( 1 km ) iv. Shagld Road from bukhara to Kabar Kali ( 1 km ) CK	131.025	75.003	20	36.022	0	36.022	0
5	100176-Construction of B/T Roads from Pastawoni to Tara Mela via Mandara 8 km ( Phase-II) 3km , ( NA-38) Kurram Agency	59.988	41.433	3	15.555	0	15.555	0
6	110315-Construction of 4 km BTR in Kurram Agency. i. BT to Vill. Kas Bilyamin 1 km , ii. Makai to Chapri P-II (1 km) , iii. Luqman Khel to Kach 1 km , iv. Remaining Portion of Khapochai Abdullah killi nasti kot Road, Dal Sadara & Ramaki killi & Kotkai 1 km .	71.5	10.976	45	15.524	0	15.524	0
7	120213-Rehabilitation of 28 km Existing Roads in Kurram Agency	75.836	20.921	31.3	23.615	0	23.615	0
	<b>TOTAL</b>	<b>676.184</b>	<b>338.911</b>	<b>199.597</b>	<b>137.676</b>	<b>0</b>	<b>137.676</b>	<b>0</b>

S.No.	Name of Schemes	Estimated Cost	Expenditure upto June 13	Estimated Expenditure dg 2013-14	Allocation for 2014-15			T/F Liabilities
					Capital	Revenue	Total	1592.758
<b>NEW SCHEMES</b>								
<b>COMMUNICATION</b>								
1	140009-Improvement & Black topping of 5 km Road from ghakhe to Watakai in Kurram Agency	81	0	0	27	0	27	54
2	140010-Widening & Black Topping of 3 km Chinerak Torawray Road from 46 km to 48 km in Phase-4 in Kurram Agency	75	0	0	25	0	25	50
	<b>TOTAL</b>	<b>156</b>	<b>0</b>	<b>0</b>	<b>52</b>	<b>0</b>	<b>52</b>	<b>104</b>
<b>NEW SCHEMES</b>								
<b>POWER</b>								
1	140013-Rehabilitation of Power Supply Infrastructure in Areas of IDPs Return, Kurram Agency	15	0	0	5	0	5	10
	<b>TOTAL</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>5</b>	<b>10</b>
<b>ON GOING SCHEMES</b>								
<b>AGRICULTURE</b>								
1	060040-Establishment of Seed Cum Demonstration Farm in Kurram Agency ( Revised)	33.175	29.473	0	0	3.702	3.702	0
2	130198-Establishment of Walnut Nurseries in Central Kurram and Introduction of High Density Orchards Plantation of Varieties of Dwarf Apple, Almond and Walnuts in Kurram Agency	12	0	2.35	0	9.65	9.65	0
	<b>TOTAL</b>	<b>45.175</b>	<b>29.473</b>	<b>2.35</b>	<b>0</b>	<b>13.352</b>	<b>13.352</b>	<b>0</b>



S.No.	Name of Schemes	Estimated Cost	Expenditure upto June 13	Estimated Expenditure dg 2013-14	Allocation for 2014-15			T/F Liabilities
					Capital	Revenue	Total	1592.758
<b>NEW SCHEMES</b>								
<b>AGRICULTURE</b>								
1	140014-Waste Land Development in Kurram Agency	9	0	0	0	3	3	6
<b>TOTAL</b>		<b>9</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>3</b>	<b>6</b>
<b>ON GOING SCHEMES</b>								
<b>LIVESTOCK &amp; DAIRY</b>								
1	050011-Opening of 10 A.I. Centers and Diagnostic Laboratory in Existing buildings in Kurram Agency	25	19.191	3.1333	0	2.676	2.676	0
2	070149-Opening of 8 VDs and 4 AI Centers in Kurram Agency	26	9.514	11.163	0	3.5	3.5	1.823
3	100173-Construction of building for VD, Luqman Khel and starpatai and opening of VCs volley china and yasta CK , Kurram Agency	18.131	5.617	0	3.5	0	3.5	9.014
4	110037-Construction of Building for 3 Nos Existing vety. Dispensaries in Kurram Agency. ( NA-37 = VD Maikai and Gundal CK ( NA-38 = Badama CK )	18.036	2.21	1.196	3.8	0	3.8	10.83
5	110038-Provision of Artificial Insemination services in existing centers in Na-37 & 38 , Kurram Agency	2.8	1.373	0.7	0	0.727	0.727	0
6	120222-Rehabilitation of Veterinary Health Institutions in Kurram Agency	13.226	0	2.522	4.332	0	4.332	6.372
<b>TOTAL</b>		<b>103.193</b>	<b>37.905</b>	<b>18.7143</b>	<b>11.632</b>	<b>6.903</b>	<b>18.535</b>	<b>28.039</b>
<b>ON GOING SCHEMES</b>								
<b>FOREST</b>								
1	090122-Promotion of Non-Timber Products (NTFP) For (NA-37 & 38) in Kurram Agency (Revised)	30.013	12.002	3.732	0	2.531	2.531	11.748
2	120225-Introduction of Fast Growing Tree Species in Kurram Agency	126.307	7.095	8.514	0	19.656	19.656	91.042
3	130202-Afforestation of Different Varieties of Trees in hilly areas of kurram Agency	138.255	0	10	0	17	17	111.255
<b>TOTAL</b>		<b>294.575</b>	<b>19.097</b>	<b>22.246</b>	<b>0</b>	<b>39.187</b>	<b>39.187</b>	<b>214.045</b>

S.No.	Name of Schemes	Estimated Cost	Expenditure upto June 13	Estimated Expenditure dg 2013-14	Allocation for 2014-15			T/F Liabilities
					Capital	Revenue	Total	1592.758
<b>NEW SCHEMES</b>								
<b>FOREST</b>								
1	140016-Promotion of Block Plantation of Deodar & Linear Plantation of Parachinar in Kurram (500 Acre B/Plantation on 40 Avenue KM).	21	0	0	0	7	7	14
<b>TOTAL</b>		<b>21</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>7</b>	<b>14</b>
<b>ON GOING SCHEMES</b>								
<b>FISHERIES</b>								
1	030241-Promotion of Farm fisheries in Kurram Agency (Revised )	23.18	13.556	4.515	2.007	0	2.007	3.102
<b>TOTAL</b>		<b>23.18</b>	<b>13.556</b>	<b>4.515</b>	<b>2.007</b>	<b>0</b>	<b>2.007</b>	<b>3.102</b>
<b>ON GOING SCHEMES</b>								
<b>RURAL DEVELOPMENT</b>								
1	120280-Execution of RWP in Kurram Agency	19.99	0	14.385	5.605	0	5.605	0
<b>TOTAL</b>		<b>19.99</b>	<b>0</b>	<b>14.385</b>	<b>5.605</b>	<b>0</b>	<b>5.605</b>	<b>0</b>
<b>NEW SCHEMES</b>								
<b>RURAL DEVELOPMENT</b>								
1	140017-Execution of Rural Works Program in areas of Dps return in Kurram Agency	15	0	0	5	0	5	10
<b>TOTAL</b>		<b>15</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>5</b>	<b>10</b>
<b>ON GOING SCHEMES</b>								
<b>REGIONAL DEVELOPMENT</b>								
1	120224-Establishment of SPDP Walnut pockets and Walnut Line plantation through solar pumps in Kurram Agency	24.588	9.18	10.86	0	4.548	4.548	0
2	130432-Capacity Building and Strengthening of Additional Political Agents Office, Kurram Agency	9.987	0	0	0	9.987	9.987	0
<b>TOTAL</b>		<b>34.575</b>	<b>9.18</b>	<b>10.86</b>	<b>0</b>	<b>14.535</b>	<b>14.535</b>	<b>0</b>

S.No.	Name of Schemes	Estimated Cost	Expenditure upto June 13	Estimated Expenditure dg 2013-14	Allocation for 2014-15			T/F Liabilities
					Capital	Revenue	Total	1592.758
<b>NEW SCHEMES</b>								
<b>REGIONAL DEVELOPMENT</b>								
1	140345-Rehabilitation/Reconstruction of Damaged facilities for DPs Return in Shalozan tangi , Kurram Agency	135.845	0	0	20.422	0	20.422	115.423
<b>TOTAL</b>		<b>135.845</b>	<b>0</b>	<b>0</b>	<b>20.422</b>	<b>0</b>	<b>20.422</b>	<b>115.423</b>
<b>ON GOING SCHEMES</b>								
<b>IRRIGATION</b>								
1	100170-Construction of 8 Nos Irrigation Channels in NA-37 & 38 in Kurram Agency : Mali Khel , Kach Luqman , Kachkina UK , Pir Qayum Zeran , Badama Mir Bagh , Kundali Durani , Lokhai , Daryabi.	122.509	71.325	27.776	23.408	0	23.408	0
2	100171- Rehabilitation of 8 Irrigation Channels in NA-37 % 38 Kurram Agency: Baba Kirman UK , By Rowaz Alizai LK , Zaranda viala dindar kali nasti kot , Baradara zeran , Mandoori , ahmad shama koz kali , jalo lakai, Tanorak.	96.748	45.182	21.2	30.366	0	30.366	0
3	120228-Construction of 06 Irrigation Channels including Pekar irrigation channels in Kurram Agency	39.61	7.5	15.786	16.324	0	16.324	0
4	120229-Rehabilitationof 06 Irrigation channels in Kurram Agency	29.171	7	12.936	9.235	0	9.235	0
<b>TOTAL</b>		<b>288.038</b>	<b>131.007</b>	<b>77.698</b>	<b>79.333</b>	<b>0</b>	<b>79.333</b>	<b>0</b>
<b>IRRIGATION</b>								
1	140018-Construction of Five Irrigation Channels in Kurram Agency	58.03	0	0	19.344	0	19.344	38.686
2	140019-Rehabilitation of Five Irrigation Channels in Kurram Agency	39	0	0	13	0	13	26
<b>TOTAL</b>		<b>97.03</b>	<b>0</b>	<b>0</b>	<b>32.344</b>	<b>0</b>	<b>32.344</b>	<b>64.686</b>

## **LOWER KURRAM TEHSIL ADP PROJECTS 2014-2015**

LOWER KURRAM TEHSIL ADP PROJECTS 2014-2015								
S.No	PROJECTS NAME	Estimated Cost	Expenditure upto June 13	Estimated Expenditure dg 2013-14	Allocation for 2014-15			T/F Liabilities
					Capital	Revenue	Total	
<b>ON GOING SCHEMES</b>								
<b>EDUCATION</b>								
1	030462-Establishment of Girls Degree College Alizai, Kurram Agency (GD) (Revised)	96.589	51.613	6.054	34.922	4	38.92	0
<b>TOTAL</b>		<b>96.589</b>	<b>51.613</b>	<b>6.054</b>	<b>34.922</b>	<b>4</b>	<b>38.92</b>	<b>0</b>
<b>HEALTH</b>								
1	Removal of Deficiencies in THQ hospital Alizai , Lower Kurram ( NA - 37 )	22.124	5.077	5.589	11.458	0	11.46	0
2	Establishment of Additional Agency Surgeon Office at SaddLower Kurram	16.298	0	11.389	3.604	1.305	4.909	0
<b>TOTAL</b>		<b>38.422</b>	<b>5.077</b>	<b>16.978</b>	<b>15.062</b>	<b>1.305</b>	<b>16.37</b>	<b>0</b>
<b>COMMUNICATION</b>								
1	Construction & Black topping of 8 km road including Sadda by pass and Pekar Tangi Road in Kurram Agency	64.413	0	30	34.413	0	34.41	0
<b>TOTAL</b>		<b>64.413</b>	<b>0</b>	<b>30</b>	<b>34.413</b>	<b>0</b>	<b>34.41</b>	<b>0</b>
<b>LIVESTOCK &amp; DAIRY</b>								
1	Construction of building for Veterinary dispensary at Shah Jee Korona ( Chardiwar ) Lower Kurram Agency	4.848	0	3.143	1.705	0	1.705	0
<b>TOTAL</b>		<b>4.848</b>	<b>0</b>	<b>3.143</b>	<b>1.705</b>	<b>0</b>	<b>1.705</b>	<b>0</b>
<b>NEW SCHEMES</b>								
<b>MINERALS, INDUSTRIES &amp; TECHNICAL EDUCATION. (MITE)</b>								
1	Rehabilitation of Vocational College at Sadda, Kurram Agency	12	0	0	4	0	4	8
<b>TOTAL</b>		<b>12</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>4</b>	<b>8</b>

**Annexure - A**

**LIST OF STAKEHOLDERS**

**LIST OF STAKEHOLDER'S**

<b>S. No.</b>	<b>STAKEHOLDER'S</b>
<b>Community Elders in SADDA</b>	
1	Stakeholder
2	Stakeholder
3	Stakeholder
4	Stakeholder
5	Stakeholder
6	Stakeholder
7	Stakeholder
<b>SHOPKEEPER OF SADDA</b>	
1	Union President
2	Shopkeeper
3	Shopkeeper
4	Shopkeeper
5	Shopkeeper
6	Shopkeeper
7	Shopkeeper
8	Shopkeeper

**Annexure - B**

**SECONDARY INFORMATION**



## COLLECTION OF SECONDARY DATA

The Consultants have collected the secondary information from the following reports and maps:

S. No.	Title	Date	Prepared by
1.	FATA Sustainable Development Plan, (2007–2015).	2007-15	Civil Secretariat, FATA Peshawar; in partnership with The World Conservation Union (IUCN), Pakistan.
2.	FATA Annual Development Programme 2013-2014, FATA Development Authority (FATA DA).	2013-14	FATA Development Authority, Planning and Development Department, Peshawar.
3.	FATA Development Statistics.	2013	Bureau of Statistic FATA Cell, Planning and Development Department, FATA Secretariat, Peshawar.
4.	Monsoon Contingency Plan for FATA.	May, 2012	FATA Disaster Management Authority (FDMA).
5.	Important Agency / F.R. Wise Socio-Economic Indicators of FATA.	2010	Bureau of Statistic FATA Cell, Planning and Development Department, FATA Secretariat, Peshawar.
6.	FATA Agriculture Statistics.	2009-10	Crop Reporting Services Cell in Directorate of Agriculture Extension, FATA.
7.	Cost of Conflict in FATA.	2009	Planning and Development Department, FATA Secretariat, Peshawar.
8.	FATA Development (2000-2015).	July, 2008	Embassy of Pakistan, Economic Division.
9.	Tribal Areas Rural to Urban Centers Conversion Initiative (T.A.R.U.C.C.I)		FATA Secretariat, Peshawar.
10.	Social Sector Agenda and Post Crisis Needs Assessment (PCNA),		Habibullah Khan; Additional Chief Secretary FATA, FATA Secretariat, Peshawar, Pakistan.

11.	A Profile of Kurram Agency, Pakistan Emergency Situational Analysis (PESA).	December, 2012	iMMAP Pakistan, USAID.
12.	Conflict in Kurram Agency.		FATA Research Centre (FRC)
13.	Development Brief of Kurram Agency .	2008-9	Bureau of Statistic FATA Cell, Planning and Development Department, FATA Secretariat, Peshawar.
14.	Socio Economic Profile of Kurram Agency.	May, 1991	Prepared for the Planning and Development Department of NWFP by: Dr. Lynn Carter USAID, Peshawar.
15.	Geology and Structure of the Westernmost Hill Range, Sadda Area, Kurram Agency, North West Pakistan.	April, 2012	Syed Muntazir Abbas; National Centre of Excellence in Geology, University of Peshawar.

**Annexure - C**

**PROJECT TEAM**

## PROJECT TEAM

The following Project Team is enthusiastically working as included in the Technical Proposal of the Consultants:

### Core Team Stationed at Head Office:

S.No	Name	Designation
1.	Masoodul Hassan Jafri	Team Leader / Project Manager
2.	Wasim Hayat	GIS Mapping Specialist
3.	S. M. Tayyab	Transport Planner
4.	Munawar Zaman	Water & Sanitation Specialist
5.	Dr. Tahir Soomro	Planning Advisor
6.	Fariha Zuberi	Urban Planner
7.	Wahaj Ahmed Farooqui	Public Health Engineer
8.	Zeeshan Hassan Yousuf	Highway Engineer
9.	Asadullah Jan	MEP Engineer
10.	Asad Saeed	GIS Technician

### Field Team Stationed at Peshawar / Sadda:

S.No	Name	Designation
1.	Shahid Khan	Project Coordinator
2.	Mr. Fakher-e-Alam Khan	Coordinator - Sadda
3.	Gohar Ali	Social Sector Specialist- Sadda
4.	Engr. Muhammad Azam	Field Engineer
5.	Tariq Ahmed	Enumerator 1
6.	Naveed Khan	Enumerator 2
7.	Muhammad Bilal	Enumerator 3

## MAN MONTH INPUT

<b>A) Key Technical Staff</b>		
<b>Name</b>	<b>Position</b>	<b>Staff Month</b>
Masoodul Hassan Jafri	Town Planner / Project Manager	4.00
Wasim Hayat	GIS Mapping Specialist	4.00
S. M. Tayyab	Transport Planner	3.00
Munawar Zaman	Water & Sanitation Specialist	3.00
Shabbir Ahmad	Social Sector Specialist	3.00
Dr. Tahir Soomro	Planning Advisor	3.00
<b>B) Non-Key Technical and Support Staff</b>		
<b>Position and Name</b>		<b>Staff Month</b>
Survey Team		2.00
Cad Technician		8.00
GIS Technician	Asad Saeed	6.00
Engineers	Fariha Zuberi – Urban Planner	4.00
	Wahaj Ahmed Farooqui – Public Health Engineer	4.00
	Zeeshan Hassan Yousuf - Highway Engineer	4.00
	Asadullah Jan – MEP Engineer	4.00
Secretarial		8.00

**Annexure - D**

**FOCAL GROUP DISCUSSION**

**FOCUS GROUP DISCUSSIONS  
&  
HOUSEHOLD SURVEYS  
WITH STAKE HOLDERS  
IN  
SADDA, KURRAM AGENCY**

**BY THE TEAM OF EA CONSULTING ENGINEERS  
PVT. LTD. & M/s PID AS FULFILLMENT AS  
PART OF PREPARATION  
OF  
SPATIAL PLAN FOR SADDA, KURRAM AGENCY**

**TEAM MEMBERS**

- 1) MASOOD JAFRI (TOWN PLANNER, EA CONSULTING PVT. LTD.)
- 2) FAKHER-E-ALAM KHAN (FIELD DATA COORDINATOR)
- 3) SHAHID ZAMAN KHAN (INFRASTRUCTURE, SOCIAL SECTOR SPECIALIST)
- 4) AMJAD AFRIDI, SHABBIR AHMED (SOCIAL SECTOR SPECIALISTS)
- 5) SAIF UR REHMAN (ENUMERATOR)
- 6) MUHAMMAD NAVEED (ENUMERATOR)
- 7) MUHAMMAD BILAL (ENUMERATOR)
- 8) MOHD. YAQOOB (ENUMERATOR)

## **Households' Survey, Focus Group Discussions And Key Informant Interviews With Stakeholders At Sadda, Kurram Agency.**

As a part of the project activity households' survey, focus group discussions and key informant interviews were carried out with various stakeholders in order to collect local knowledge of the existing situations. To obtain information on their concerns / priorities and get them on board during the whole exercise. Assessment about the following items/things was kept in mind while carrying out the focus group discussions at Sadda, Kurram Agency.

1. Status of Available Resources.
2. Priorities & Needs Identification.
3. Gap between the Present & Required Resources.
4. Suggestions from the Stakeholders in Addressing the Gaps.
5. Willingness for Implementing the plan.
6. Willingness for Taking Responsibilities.

### **HOUSEHOLD SURVEY**

A total of 129 household were surveyed through random sampling technique, for the above mentioned assessment parameters.

- In 6 % of the surveyed household it was observed that toilet and kitchen were not available within the house premises and used a corner of the house for open defecation & made shift kitchen arrangement. In 49% cases people have only toilet whereas in the rest of cases they both have the kitchen and toilet.
- In 98 % cases it was observed that people use wood as a source of fuel for cooking and heating purpose where as in the rest of the cases LPG used as a source of fuel.
- In the sampled households surveyed who have toilets, 75% houses that have flush (drained) toilets whereas the rest of the people have un-drained toilets.
- In the surveyed households it was observed that the drains are not either properly covered & most are open. Only In 22 % cases the house drains are covered & the rest of the cases the drains are open. The final discharge disposal of the drains is mentioned below:
  - 10 % in Agriculture Fields,
  - 62 % in the Street Drain,



- 5 % in Septic Tanks, and
- In rest of cases, Drains are dispose off to the river.
- In 69 % surveyed cases it was observed that no mechanism is available, people throw their garbage outside the house and there is no proper collection of garbage. Whereas in the rest of the cases the households indicated that the garbage is collected by Municipal Authority.
- In 5 % cases it was observed that people use surface water (river, streams and ponds) for household needs which isn't safe for drinking, in 92 % they use water of the open dug wells whereas in the remaining cases they use water of the tube wells.
- 44 % of the households don't have any confidence on government health facilities; therefore they prefer to visit private health practitioners/doctors for possible check up. Moreover, 99 % respondents have indicated that medicines are not available in government hospital.

**The surveyed households identified the following priority demands;**

- Existing health facility is not working properly therefore the people of Sadda need fully functional health facilities (need experience doctors, modern health equipments and want to have free of cost medicines etc).
- inappropriate sewerage system in Sadda, therefore need a proper designs sewerage system . Moreover proper covered / underground drainage system should be constructed throughout the city with sewerage treatment plant .
- Up-gradation of existing education facilities and construction of new schools / colleges etc
- Unemployment is one of the big problems for the people of Sadda therefore new employment opportunities should be created for the local people, as well as to revitalize the existing businesses.
- The current drinking water schemes are not adequate enough for the population of Sadda therefore new schemes should be introduced as well as rehabilitation of old tube wells & solarization of existent tube wells .
- MC should be make more functional / vibrant through allocation of enough funds for provision of community services and ensuring cleanliness
- Street lights should be solarized due to which working hours could be increased as well as would strengthened the sense of security
- Hydel power generation plant should construct at Khurmani River so that generation of electricity may available locally to cater the local consumption.

- for the creation of healthy activities children park and play grounds must be available to the Sadda residents .

## **Focus Group Discussions**

Focus group discussions have been carried out with the following community groups in order to evaluate the needs/ priorities of the community in various sectors and to address their concerns in development of future spatial/ structural plan. Besides, key informant interviews with the political administration and other government line departments of the agency were carried out.

**1. Maliks / Community Elders**

**2. Community Members**

**3. Doctors & Paramedical Staff**

**4. Teachers**

**5. Female Representatives**

**6. Farmers**

**7. Traders & Shopkeepers**

A number of dialogues were conducted with various stake holders in which the general issues and problems were discussed. Also their input was taken in order to understand how they foresee Sadda city to be developed like a fully functional urban center.

Based on the input provided by various stakeholders for various sectors their view points and suggestions are indicated below.

## **1- BUSINESSES/ MARKET**

### *1.1- MARKET INFORMATION OF SADDA*

#### **No of Shops of Sadda Bazaar**

Total no of shops in Sadda Bazaar are approximately 4000.

#### **Ownership Details / Status**

Private ownership of independent Shop keepers and households makes up about 80 % of the whole ownership of Sadda. The rest of the property is being occupied by the administration, hospital, and institutes. There is not much space available in Sadda for possible construction

activity however certain tribes have joint property in the outskirts of Sadda which could be potentially used for market places and business centers in the future.

### *1.2- ANALYSIS OF THE OWNERSHIP OF THE MARKET OF SADDA*

---

Sadda is spread over an area of 3500 acres. Sunni is the main sect that controls 70 to 80 % of Sadda property whereas rest of the property is of either Shia community who have migrated to Parachinar or Shia dominated surrounding areas. It is important to note that administration and law enforcement agencies can occupy any place for their use, e.g. offices. Normally no land compensation is given to land owners; they are only given jobs in the constructed facility. For construction and use of any open space the PA office should be consulted first. Administration can manage and arrange the required places for any developmental activity of the Sadda area which is in the interest of the people of Sadda.

### *1.3-CURRENT STATUS OF THE BUSINESSES AT SADDA*

---

- The shops of the Sadda bazaar are mix kind of shops. Most of the road side land is occupied and people have constructed shops and markets irregularly for more than 30 years.
- Unlike Parachinar Township, still the Township of Sadda seems to an up-graded village.
- In Sadda Bazaar traffic management is a big problem. Loaded vehicle come for Sadda Bazaar cannot be unloaded before 2 pm
- There are 7 vehicle/bus stands which are regularly given on lease by the administration. However taxies do not follow traffic management instruction of the administration and park their vehicles at road sides that increases traffic problems
- There is a fire brigade but normally does not respond quickly in case of any calamity or an emergency situation. Most of the time shopkeepers at their own help try to extinguish the fire but of no avail as in any case the shops burns out in no time.
- Electricity is a big problem as being felt throughout the country. In Sadda bazaar there are 40 welder shops, 200 tailor shops and 50 carpenters who livelihood directly suffers due to unavailability of electricity
- In Sadda Bazaar, open drains are available however its capacity should be increased as well as consistently be cleaned.
- Shops are private however in most cases are rented. The average rent ranges between Rs 3000 to 7000 per shop.

- Shopkeepers regularly submit the electricity bills despite the fact that electricity remain unavailable due to prolonged electric outages (23 out 24 hours per day). Electricity bills are paid in fixed lump sum amount against each type of shops i.e. for welders, tailors and carpenter @Rs 500 per month whereas for other shops @Rs 200 per month.
- In Sadda bazaar there is a piece of land, amounting to 24 canal land (Gharib Shah Baba) which can be utilized for construction of any facility. No other free spaces are available.
- 30 to 50 loaded vehicles per day are unloaded in Sadda however they are not allowed to get unloaded before 2 pm.
- There are no public drinking water supply in the market areas therefore some arrangement should be made
- Security needs to be further strengthened however no immediate threats. Security is dependant on sectarian clashes of Shia and Sunni.
- No car parking facility at markets for shopkeepers and customers
- Some 20000-25000 chickens are consumed locally however no poultry farm is available in Sadda. A poultry farm could be suggested keeping in view the consumption of the chicken.
- Tomato, rice, grains are local products that need to be further strengthened. Kurram Agency produces one of the best breed of tomato which could be preserved as well as a factories can be constructed for extracting tomato paste
- During sectarian violence in the years 2007--- 2012, local businesses suffered drastically.
- During that five years period, businesses were not doing well due to security reasons (sectarian tussles, curfews, emergency situations, operations and others)
- Another related problem is non availability of proper storage facilities within the market therefore each day upto 50 loaded trucks make supply of different market items for meeting the demands of the local population.
- Municipal township committee is not doing a good job, drains remain choked with shopping bags, empty bottles etc. Drains water carrying capacity is also not adequate
- Traffic management is very poor in bazaar, needs better traffic management plan
- Night patrolling by law enforcement agencies should be done in the same capacity as police doing patrolling in settle areas
- Construction of open wide roads is one of the locals demand. By pass road for Sadda City is necessary for better traffic management and government should focus on construction along the new roads.

- Vast outskirts lands available for possible future planning. However currently the trend is that people want to be settled within the city.
- Load shedding is their main problem like other parts of the country especially the business of tailors, welders, grain grinding mills and carpenters suffered a lot.
- Locals are responsible for all sort of electricity repair work like transformers, cables etc.
- Availability of drinking water is also a problem of the main market place.
- Wash Rooms for market is also needed.

#### *1.4-OUTREACH OF THE BUSINESS COMMUNITY OF SADDA*

List of the places and cities where business community of Sadda are going for bringing the items of various kind of usage are the following:

##### **Khyber Pakhtunkhwa**

1)Peshawar,2) Kohat, 3) Hangu

##### **Sindh**

1) Karachi

##### **Punjab**

1)Lahore, 2) Gujranwala, 3) Faisalabad, 4)Rawalpindi,

#### *1.5-SANITATION PROBLEMS AND NEEDS*

- During rains, water stands in Sadda bazaar as most of the time the drains remain chocked
- The main drain/ water irrigation channel from Kharmani river passes through Sadda bazaar. All sewerage and drainage of Sadda City is dependent on this water channel. the head works of this water channel are weak and normally gets washed away during floods. This creates not only a very ugly unhygienic conditions in the Sadda City but agricultural lands are also get affected by it. .
- Though MC have Muslim sweepers however they don't perform their duty well.
- No solid waste arrangements are available. Dust bin are recently installed. MC caters the main city area for waste collection. Waste is dumped into the Kurram river after collection.
- The current real problem for the disposal of solid water is the scarcity of space, because the already in use places have been built by the owners.
- Mobile water tanker for the bazaar is also needed like most other.

- At Sadda, Khurmani River could be used for hydel power generation, as at the junction where the river meets Kurram River as sufficient head can be achieved for electricity generation. Additionally within Sadda City small water heads can be utilized for electricity generation.

*1.6- CONCERN PRIORITIES & DEMAND OR SUGGESTIONS IDENTIFIED RAISED BY THE TRADERS COMMUNITY & SHOPKEEPERS.*

- Interest free loans should be provided to the people for the uplift of devastated businesses.
- The business community was demanding alternate of current electricity arrangements and was ready for the Solar system electricity or hydel power generation plant use and maintenance.
- At least 5-10 washrooms should be constructed in the city. Moreover at least 1 or 2 washrooms should be specifically allocated for females. Local trader association will maintain the wash rooms.
- Vehicle stands should be taken to somewhere else out of the bazaar area so that traffic congestion could be minimized.
- Job opportunities should be created that fix the problem of unemployment.
- There are different kinds of permits for bringing trading/edible items to the agency with a fixed ceiling of items per day per permit; the upper ceiling should be relaxed as demand to supply ratio is high.

## 2-Education Sector

*2.1 -EXISTING FACILITIES IN EDUCATION*

<b>Govt Primary Schools</b>	<b>5</b>
<b>Govt Primary Schools (Girls)</b>	<b>5</b>
<b>Govt Middle Schools</b>	<b>4</b>
<b>Govt High School (Girls)</b>	<b>1</b>
<b>Govt Degree Colleges</b>	<b>1</b>
<b>Govt Degree Colleges (Girls)</b>	<b>1</b>
<b>Vocational Institutes</b>	<b>1</b>
<b>Total</b>	<b>18</b>

### **Government schools and colleges**

- In Sadda there are 10 primary schools (5 for boys and 5 for girls) having total enrollment of 3519. The primary schools are overcrowded as only 22 rooms are available. Moreover there are only 21 washrooms for the strength of 3519, despite the fact that half of them are chocked due to improper water arrangements. There are 3 middle schools, 1 middle high and 1 high school for boys and girls which have enough rooms for the current strength.
- Electricity a big issue.
- Solarization needed for computer lab, and tube wells
- A college bus for transportation is needed.
- Schools and Colleges did not have proper play ground
- Drinking water supply in government schools is not appropriate.
- Drop out from primary to middle is 30%, from middle to high 15%, high school to college 60 %, and from college to university the drop out is 97%. Only 3 % of the students go to university level.
- In all high schools there is a deficiency of 20-30 % in furniture whereas in middle schools the deficiency of furniture is 50%. In primary schools furniture not at all available, 90 % of the students sit on sheets (*Taat*) whereas 10 % on ground
- Demand of new schools is highly felt as the current primary schools are overcrowded. Washroom are needed as well more than half of the existing are chocked due unavailability of water.
- Annual budget is allocated only to Government High schools. The per annum approved budget for heating and cooling of rooms is Rs 2000, maintenance and repair Rs. 10000, and stationary is Rs. 1000. These funds come from APA funds for all of the Govt. facilities and are not sufficient.

*2.2-- CONCERN PRIORITIES & DEMAND IN THE EDUCATION SECTOR ARE MENTIONED BELOW WHICH COME AS RESULT OF THE FOCUS GROUP DISCUSSION WITH THE ELDERS TEACHERS& STUDENTS. .*

- 
- Schools are not enough because of the growing community demands each year (@ 8 % increase in enrollment).
  - More primary schools are required to reduce the pressure from the existing schools.
  - Hard area allowance should be provided to the outside teachers, female as well as male, so that good quality teachers could be attracted for the Sadda area.
  - There is acute water supply issue in colleges/schools that needs to be addressed, so that the environment should be made conducive for education.

- There is a need to strengthen science laboratories as well solarization of science and computer labs
- There is a need of furniture in all government schools
- The allocation of funds should be increased for all type of schools for M&R activities.
- For all schools and colleges, proper transportation facility should be made available

## 3-Health Sector

### *3.1-EXISTING FACILITIES IN HEALTH SECTOR*

#### **Hospitals**

- There is one Tehsil Headquarter Hospital spread over an area of 272 canals (only 40 % area covered by building and the rest of 60 % free space) with a lot of problems and issues, which are mentioned below after consultation with various stake holders as per the following detail.

### *3.2 - CONCERN PRIORITIES & DEMAND IN THE HEALTH SECTOR IS MENTIONED BELOW WHICH COME AS RESULT OF THE FOCUS GROUP DISCUSSION WITH VARIOUS STAKE HOLDERS INCLUDING (COMMUNITY ELDER. DOCTORS, PATIENTS, PARAMEDICAL STAFF AND COMMUNITY MEMBERS)*

- Currently the hospital is of Type D and for Type C building is constructed and soon will be converted to Type C (in type C in addition to type D facilities, four specialist adds, i.e. Eye, ENT, orthopedic, and cardiology)
- The hospital is not in good working conditions as surgical specialist, gynecologist and children specialist post are vacant. Moreover, 8 out of 12 MO posts are also vacant. Generally 20-30 % posts are vacant in the hospital. Most of the staff remain missing and are reluctant to join as they face problems in finding proper accommodation as well as they are not receiving extra benefits/hard area allowances.
- More than half of the washrooms are damaged or choked due to insufficient water.
- The hospital has a tube well and water tank. The tube well most of the time remains non operational.
- All necessary staff/equipments should be provided to make functional all units, especially the labor room for making it functional so that to fulfill the emergency need of the people and save the lives of the people of this area. Moreover proper surgical equipments for functioning a surgical unit should be provided.
- In the hospital laboratory is not fully equipped to perform the necessary tests.



- An NGO is providing Mother and Child Health Services which has been a success in overcoming some gap in MCH services however still there is need of proper MCH facility at government level.
- There were no separate waiting rooms for male and female patients. The washrooms in the health facilities are in poor condition and are choked due to unavailability of water.
- The government hospital did not have proper medicine store
- In government hospital mostly people come for availing services of skin diseases and other for treatment of other general medical problems. Daily OPD patients range between 400 and 450.
- Those who could not be treated in Sadda are being referred to Parachinar, Peshawar and Islamabad for treatment.
- Some equipments were not working due to low voltage or prolonged electricity outages. However the hospital has a generator but due to regular fuel costs the generator remains off, therefore solarization of the hospital is one of the top priorities in health sector.
- There are deficiencies of doctors in Sadda.
- Operation Theatre is not functional.
- The number of staff is very low in the hospital that's why so many units are not functional.

## **4. Municipal and planning perspective issues.**

### *4.1- PARKING FACILITY*

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There is no general car parking facility in Sadda for which there is a high need.

### *4.2-FOOT PATHS AT SADDA BAZAAR*

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Most of the footpaths have not been constructed in bazaar/market placed and need to be built for the development of Sadda.

### *4.3-STREET LIGHTS*

---

Most of the street lights are non functional or damaged. Due to 22-23 hours electricity outages, they are not much useful. Solar street lights are required as an alternative.

### *SLAUGHTER HOUSE*

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Slaughter House is available but not in a proper working condition and there is dire need of a properly maintained slaughter house with all proper sanitation facilities.

## *TOWNSHIP*

The stake holders appreciate the concept of township at Sadda and are ready to support and promote this idea during the implementation phase of TARRUCI.

## **5-Recreational Facilities**

### *5.1-EXISTENCE FACILITIES AT SADDA ARE MENTIONED BELOW*

#### 1) Football Ground

There were no proper grounds for the youth for recreational activities. Only one football ground is available.

### *5.2-CONCERN PRIORITIES & DEMAND IN THE RECREATION SECTOR ARE MENTIONED BELOW WHICH COME AS A RESULT OF THE FOCUS GROUP DISCUSSION.*

- The grounds for the major games should be constructed with basic facilities of gallery, washrooms and dressing change rooms.

## **6-Female Concerns/ priorities and needs**

FGD with females was conducted in Sadda. The details are given below:

### *6.1-EXISTING SITUATION OF THE SADDA*

- The average literacy rate of females is less than 30%.
- The educated females are mostly of high secondary level.
- The average age of marriage is 22 years.
- Mostly females of Sadda prefer being housewives and are reluctant to do jobs, however a limited number of females are in education and health sector.
- Most of the females are in favor of female education.
- There is no recreational facility/park/garden etc especially for female, where they can go for walk and outing in leisure time.

*6.2 - CONCERN PRIORITIES & NEEDS ARE MENTIONED BELOW WHICH COME AS RESULT OF THE FOCUS GROUP DISCUSSION WITH FEMALE GROUPS.*

---

- Vocational center for females
- Female sports complex for indoor games.
- Separate garden/park for ladies.
- Availability of transportation for female students and teachers

## **7- Agriculture & live stock Development.**

A focus group discussion was carried out with agriculture department staff and farmers as a result the following points were come out as the main problems and issues.

*7.1-EXISTING RESOURCES & SITUATION.*

---

- Major source of irrigation water are river water& rainfall.
- Crops normally cultivated are wheat, maize, rice and vegetables.
- The seeds for these corps are not easily available.
- Pesticides, fertilizer & manure are regularly applied to corps but are not easily available.
- Soil testing was not done by any one.
- Farmers do not receive any extension support of the line department
- Khurmani irrigation channel is the main irrigation channel serving Sadda city and the surrounding agricultural fields. However the river training works at the starting point of this irrigation channel are very weak and not properly designed due to which it gets damaged with flood waters resulting in stoppage of water in the channel. River training works should be improved so that it should be able to sustain floods.

*7.2-CONCERN PRIORITIES & NEEDS ARE MENTIONED BELOW WHICH COME AS RESULT OF THE FOCUS GROUP DISCUSSION.*

---

- Water is not enough for the existing agriculture land.
- Poor river training work for the Khurmani Irrigation channel therefore it should be properly constructed at priority.

- Non-availability of Fertilizers, Pesticides, and certified seeds.
- Farmers have no idea about the soil testing while some farmers think that it is too expensive.
- Veterinary/Livestock doctors are not enough to cover the area.
- Roads to the farms are not in good condition which cost them a lot to access the market.
- Irrigation tube well should be installed & Irrigation water channels should be made for irrigation purposes.
- Government store should be established where fertilizers, pesticides and seeds provided to farmers on subsidy.
- Government ensures provision of machinery for soil testing & other activities on low rent for local and poor farmers.
- Crops diseases specialist also require for crops diseases identification and for advising accurate agro-medicines.
- Veterinary/Livestock services should be increased.
- Roads should be constructed to access the market.

Please see the focus group discussions participants details in the attached annexure.

**Annexure – D**

**Meeting with Chief Officer Sadda Town**



**Meeting with APA at APA Residence**





**Meeting with Land Owners from Shia Community**

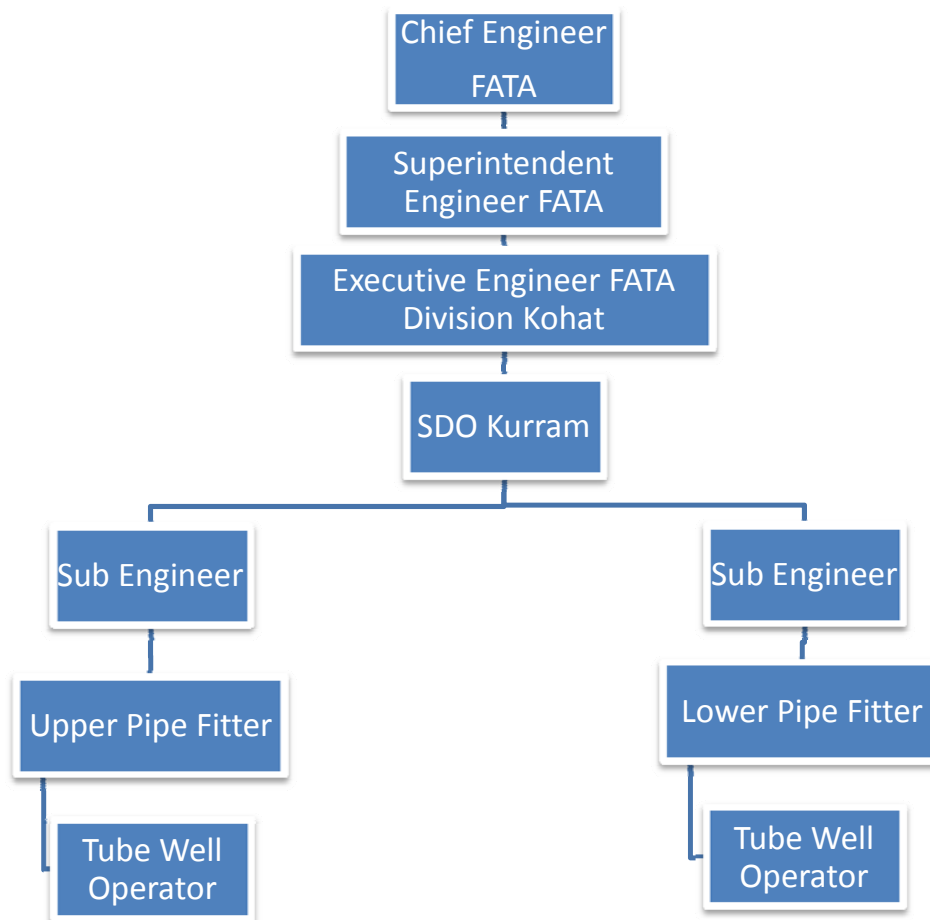


**Annexure - E**

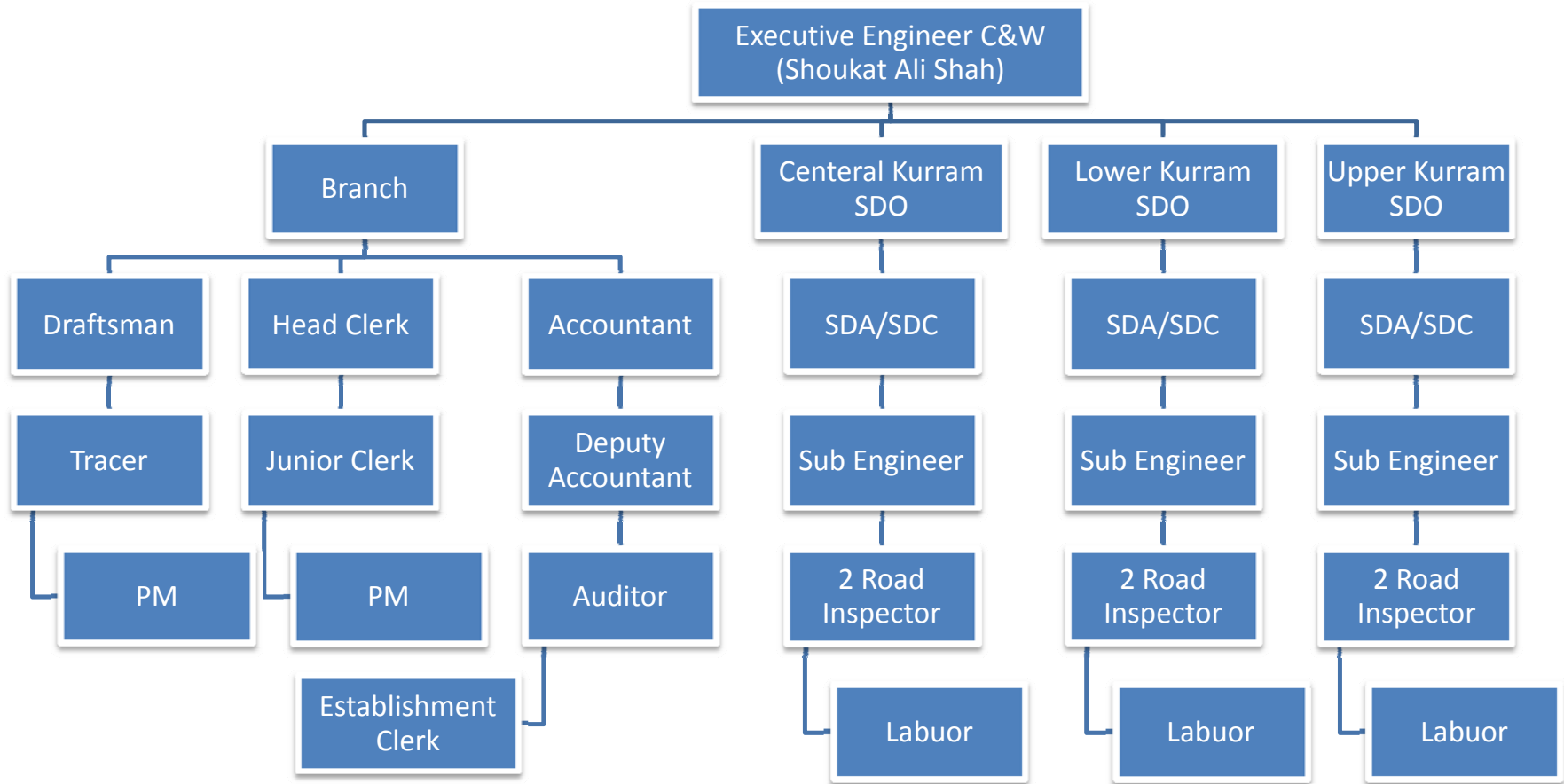
**ORGANIZATIONAL SETUPS**



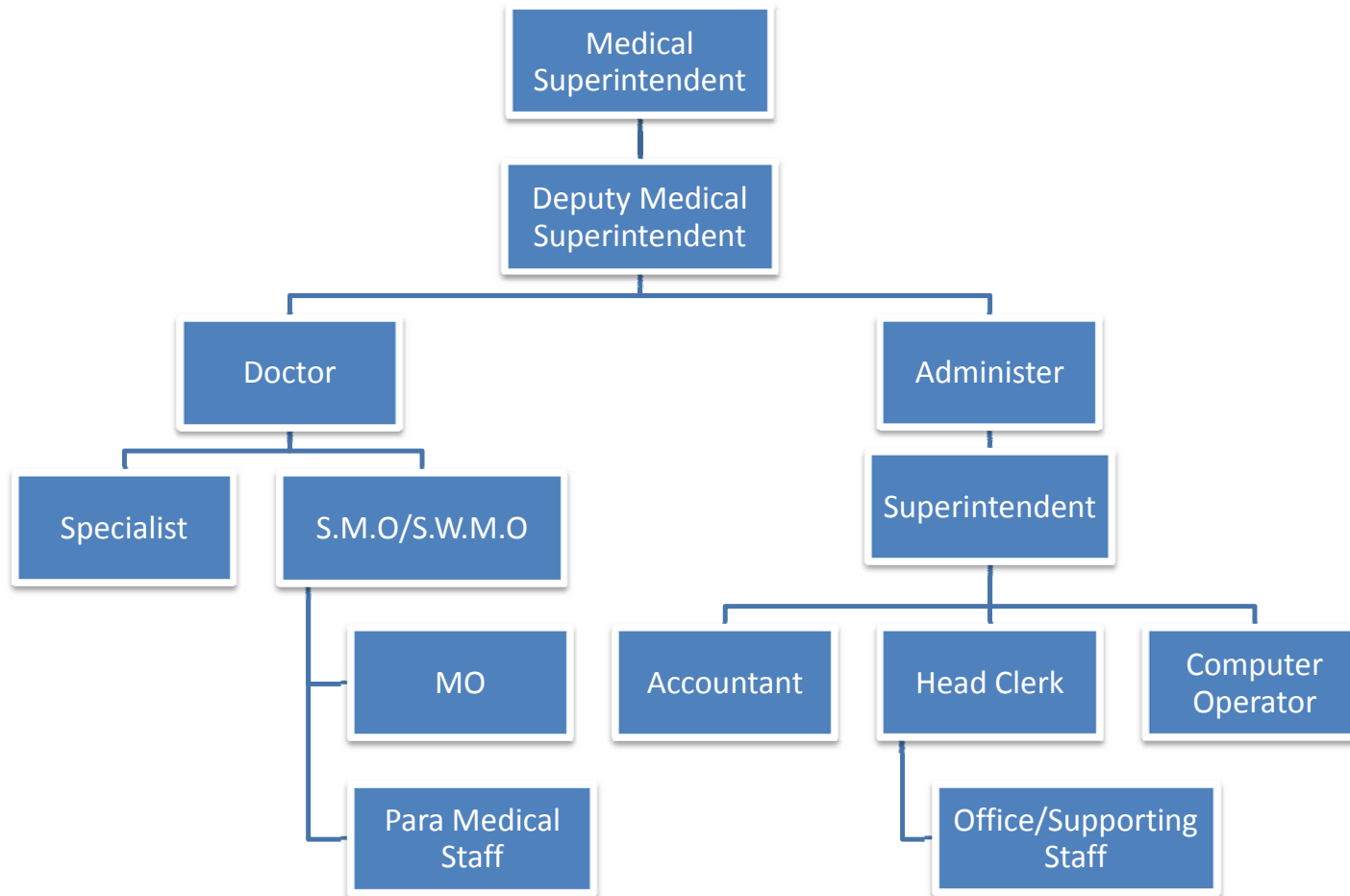
### PUBLIC HEALTH DEPARTMENT



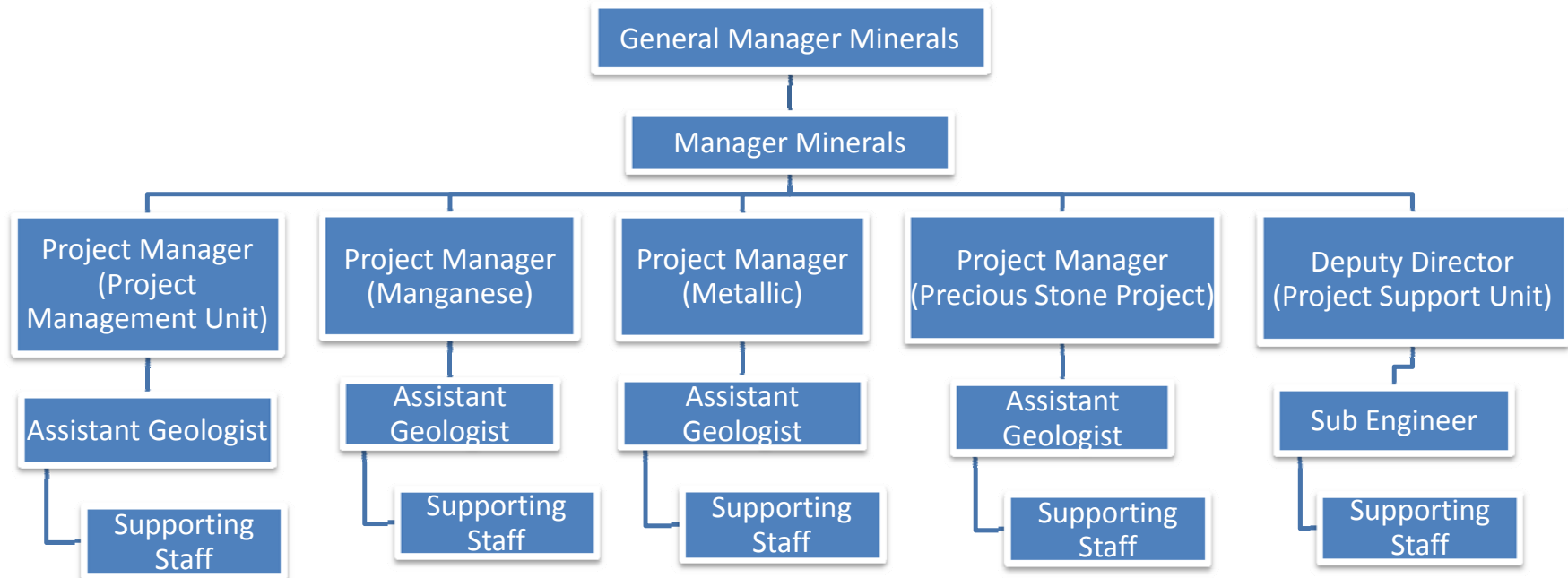
## C&W DEPARTMENT



## A.H.Q HOSPITAL PARACHINAR



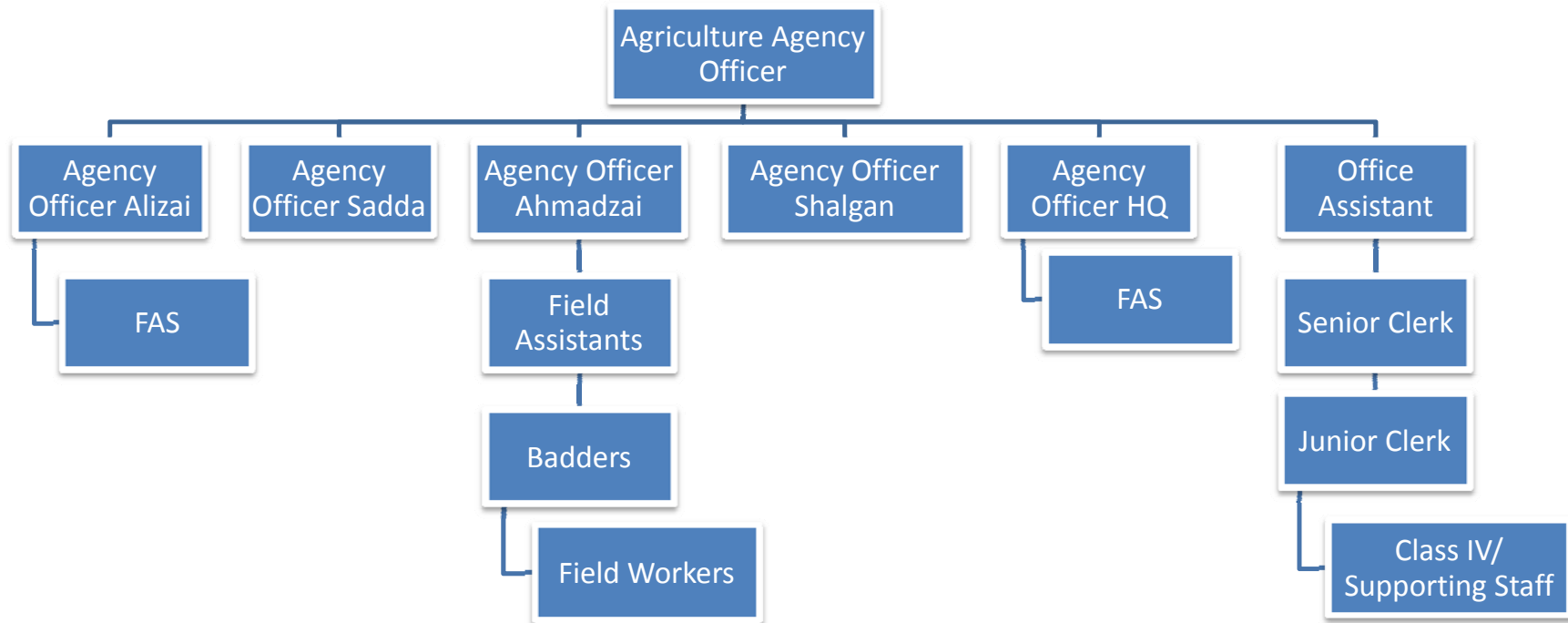
**FATA DEVELOPMENT AUTHORITY (FDA)**  
**MINERALS DEPARTMENT**



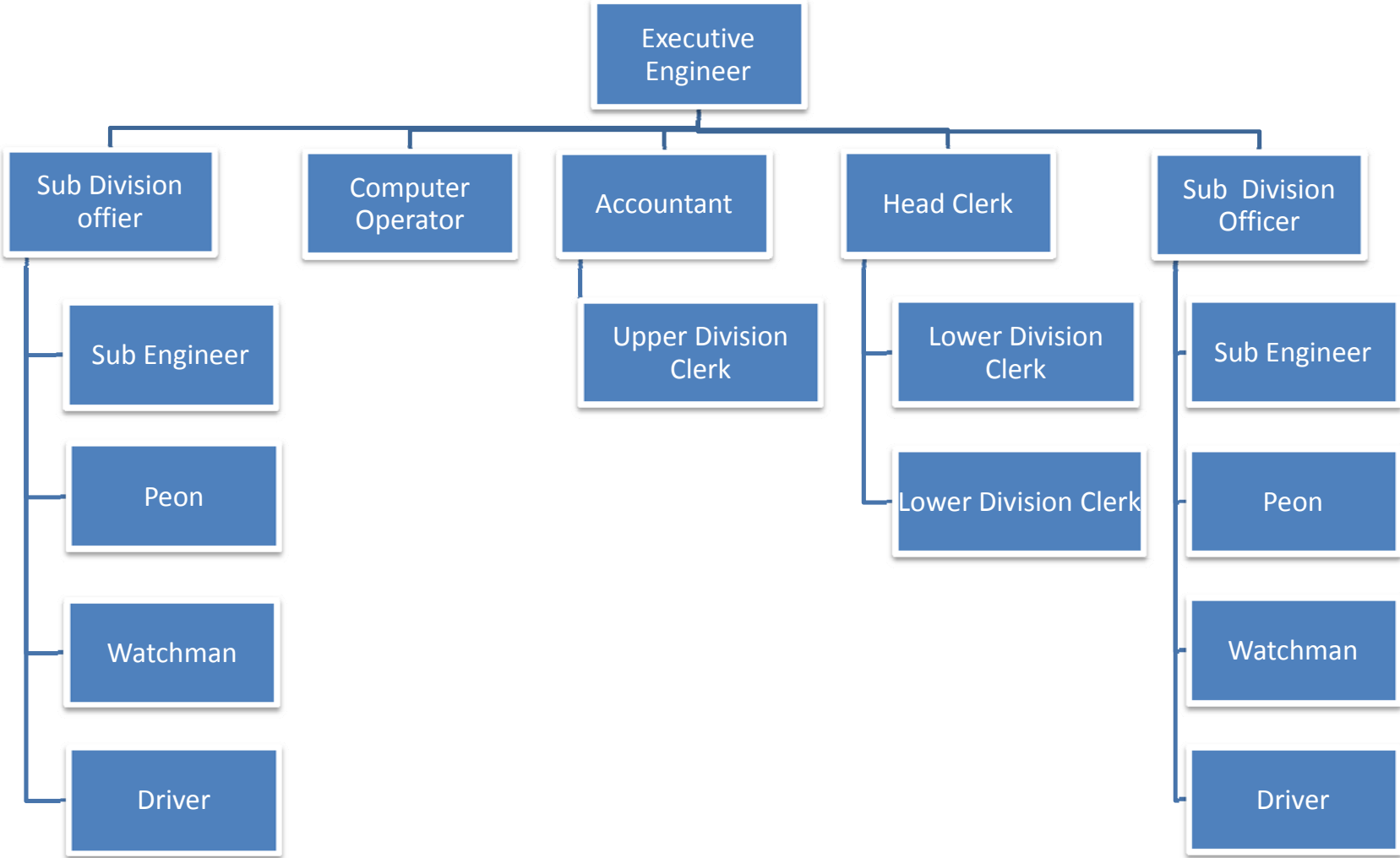
**Supporting Staff**

- Account Officer
- Accountant
- Computer Operator
- Office Assistant
- Naib Qasid
- Security Guard

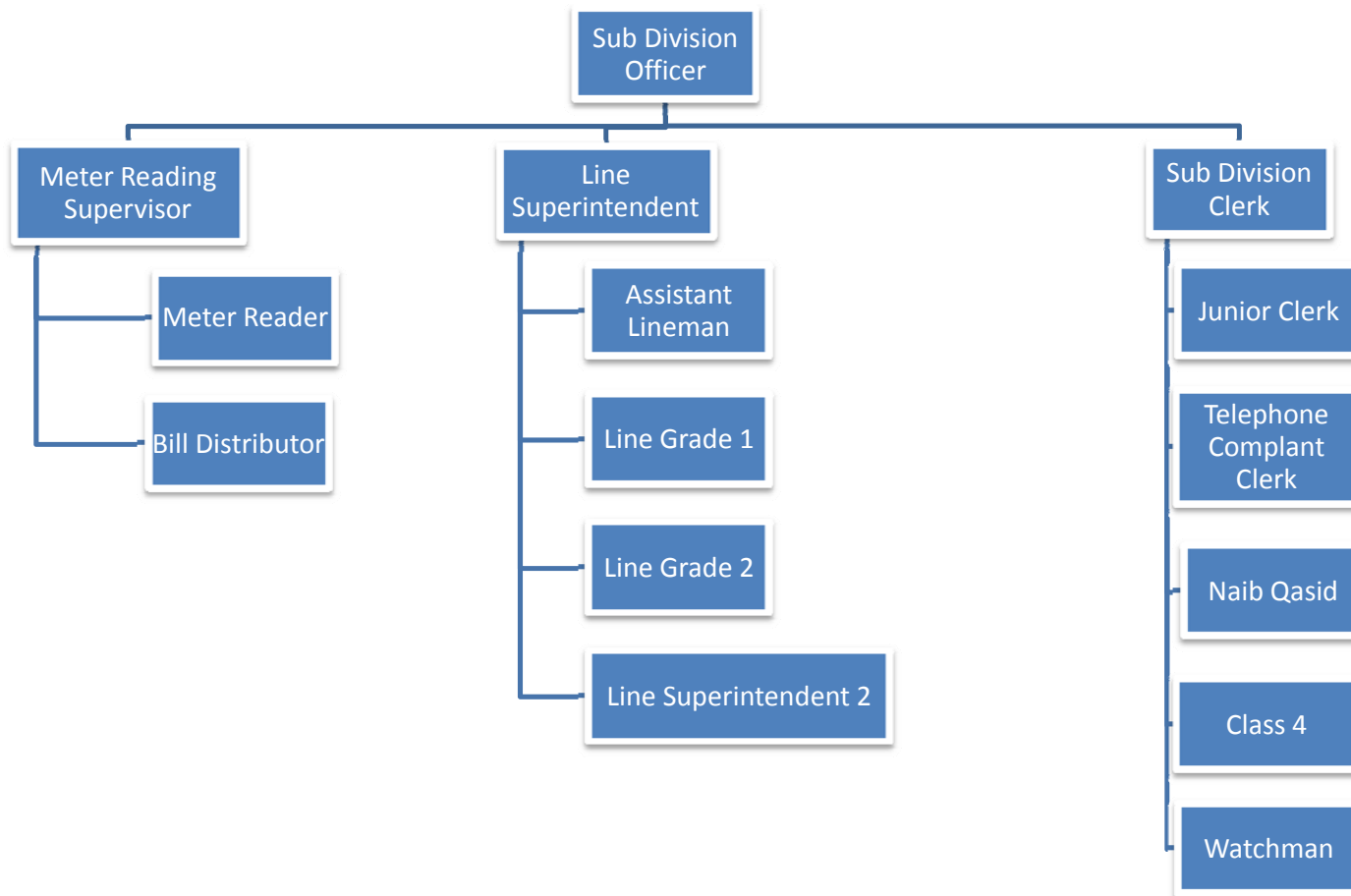
## AGRICULTURE DEPARTMENT



**IRRIGATION DEPARTMENT**



## TESCO PARACHINAR



## FORESTRY DEPARTMENT

Divisional Forest Officer

SDFO UPPER KURRAM		RFO CENTRAL KURRAM		HEAD CLERK	
Deputy Ranger	01	Foresters	09	Senior Clerk	01
Foresters	10	Forest Guards	12	Junior Clerks	02
Forest Guard	29	Drivers	03	Computer Operator	01
Drivers	04	Cleaner	01	NaibQasid	01
Cleaner	01	Budder	01	Watchman	01
NaibQasid	02	NaibQasid	01	Sweeperess	01
Watchman	01				



**Annexure - F**

**HOUSING CONDITIONS**

## Annexure – F

## PRESENT HOUSING CONDITIONS

COLONY NAME	PLANNING	PLOT / HOUSE SIZES	INCOME LEVEL	ROAD NETWORK	UTILITIES AND SERVICES	HOUSES APPROX
<b>Sateen Village</b>	Partially planned	Large to medium size	High to medium income group	Unpaved streets connecting metalled road	Private well, toilets are present but discharge into irrigation channel and electricity served	300
<b>Shaheen Village</b>	Partially planned	Large to medium size	High to medium income group	Unpaved streets connecting metalled road	Private well, toilets are present but discharge into self-dug well and electricity served	50
<b>Tareek Village</b>	Haphazard /Unplanned	Small size	Low income group	Unpaved streets connecting metalled road	Private well, toilets are present but discharge into self-dug well and electricity served	25
<b>Pir Qayum Village</b>	Partially planned	Medium to small	Medium to low income group	Paved and unpaved streets connecting metalled road	Tube well, toilets are present but discharge from open drains into self-dug well and electricity served	600
<b>Old Town</b>	Haphazard /Unplanned organic pattern	Medium to small	High to medium income group	Paved and unpaved streets connecting metalled road	Tube well (shortage of water), toilets are present but discharge from open drains into irrigation channel and electricity served	1500
<b>New Durrani Camp</b>	Planned clusters of camps	IDP Camp	Medium to low income group	Unpaved streets	Generator and water tanker are used	All tents
<b>Grid Station Colony</b>	Planned	Small size Public constructed	Low to middle income group	Adjacent to main metalled road	Tube well, drains and electricity served	15
<b>C&amp;W Quarters</b>	Planned	Small to medium size Public constructed	Middle income group	Adjacent to main metalled road	Tube well, drains and electricity served	16
<b>APA Colony</b>	Planned	Medium to large size Public constructed	Low to middle income group	Adjacent to main metalled road	Tube well, drains and electricity served	40

**Annexure - G**

**MEDICAL STAFF INFORMATION**

**MEDICAL AND PARAMEDIC STAFF**

The total sanctioned medical and paramedic staff at THQ Hospital is 88 and out of which 59 are filled.

<b>S. No</b>	<b>Name of Post</b>	<b>Sanctioned</b>	<b>Filled</b>
1	ADHO (Additional Health Officer)	1	0
2	SMO(Senior Medical Officer)	2	2
3	Dental Surgeon	1	0
4	Gynecologist	2	0
5	Medical Specialist	1	0
6	Children Specialist	1	0
7	Surgical Specialist	1	0
8	W.M.O (Woman Medical Officer)	5	0
9	M.O (Medical Officer)	17	7
10	Blood Bank Officer	2	1
11	C.M.O (Causality Medical Officer)	5	4
12	L.H.V (Lady Health Worker)	14	12
13	Dispenser	36	33
<b>Total</b>		<b>88</b>	<b>59</b>

**Annexure - H**

**WATER SUPPLY TABLES**

## WATER SUPPLY TABLES

The followings tables have been produced on the information provided by the Public Health Department and Municipal Committee Sadda:

**Table 1: Tube Wells with Over Head Tanks <sup>1</sup>**

S. No.	Location		Storage Capacity (gallons)	Areas Served	Year of Installation	Constructed By	Operation and Maintenance
	Tube Well	Over Head Tank					
1	Govt. Degree College	Govt. Degree College	20,000	Govt. Degree College	1994-95	Public Health Department	Public Health Department
2	Vocational/ Technical College	Vocational / Technical College	5,000	Government Vocational/Technical college colony	2005-06	Public Health Department	Public Health Department, from funds of Political Administration
3	Governor Model School	Governor Model School	5,000	FC check post, FC compound, Football ground	2002	C&W Department	Public Health Department, from funds of Political Administration
4	Tehsil Headquarter Hospital	Tehsil Headquarter Hospital	20,000	THQ Hospital colony	2003-04	Public Health Department, from funds of Health Department	Health Department
5	Govt. Girls College	Govt. Girls College	5,000	Old refugee ware house, APA Lower Kurram colony, sub jail	2011	C&W Department	Public Health Department, from funds of Political Administration
6	C&W Office	C&W Office	10,000	Government high school colony, Grid station colony, PTCL Office	1998	C&W Department	C&W Department

<sup>1</sup> Data provided by Public Health Department and Municipal Committee Sadda

**Table 2: Tube Wells with Surface Tanks <sup>2</sup>**

S. No.	Location		Storage Capacity (gallons)	Areas Served	Year of Installation	Constructed By	Operation and Maintenance
	Tube Well	Surface Tank					
1	Chawni Kalli	Chawni Kalli Tank	100,000	GHS boys, GMHS, Veterinary Hospital, Agriculture Office, Assistant Political Agent lower and central Kurram office, Khuni Village, Tabligi Markaz	1980-81	Public Health Department	Public Health Department, from funds of Political Administration
2	Pir Qayum Main Road	Pir Qayum Village	10,000	Pir Qayum village	1994-95	Public Health Department	Public Health Department, from funds of Political Administration
3	Pir Qayum Park	Pir Qayum Village	20,000	Pir Qayum village	1988-89	Public Health Department	Public Health Department, from funds of Political Administration
4	APA Colony	Direct Pumping	20,000 (5,000 gallons per hour)	FC Colony, APA Office, Assistant Agency Educational Office	2015	Public Health Department	Under Construction

**Table 3: Bacteriological Analysis Report**

S. No.	Parameters	Result	Standard	Method
1	Total Coliform	2.2	<1.1	9221
2	Fecal Coliform Bacteria	Present	Absent	9221 A

<sup>2</sup> Ibid

**Annexure - I**

**POPULATION STRUCTURE OF  
PARACHINAR**



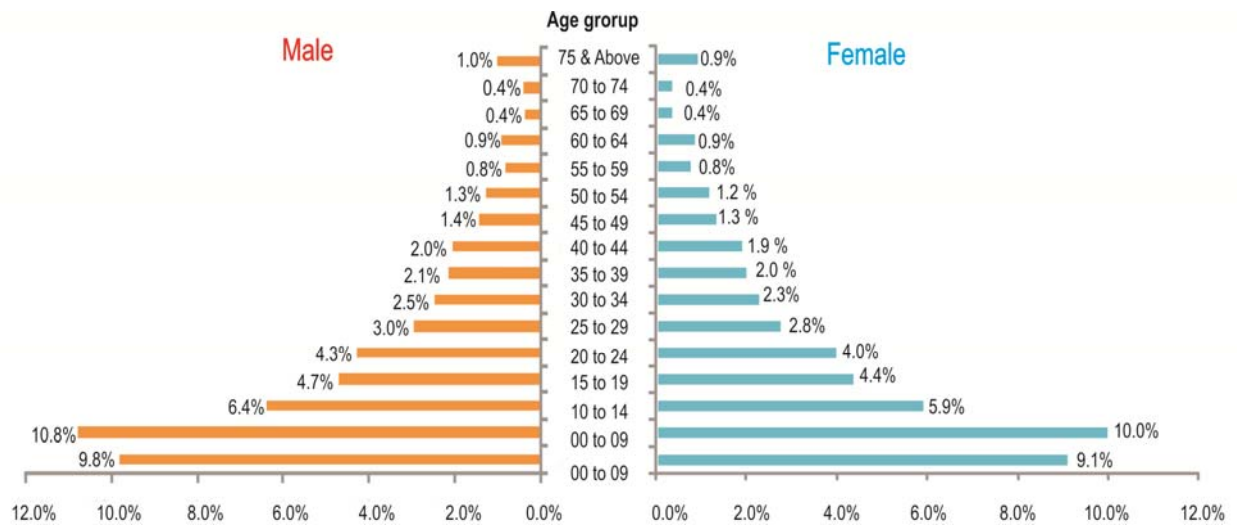
## POPULATION STRUCTURE OF SADDA

The age-sex distribution of present and future population is based on the ratios obtained from 1998 Census.

### POPULATION STRUCTURE IN SADDA

S. No.	Age Groups Years	Age Ratio %	Present Population 2014			Population Projection 2034		
			Total	Male 51.9%	Female 48.1%	Total	Male 51.9%	Female 48.1%
1	00 to 04	18.92%	10,404	5,400	5,005	17,782	9,229	8,553
2	05 to 09	20.79%	11,435	5,935	5,500	19,544	10,143	9,401
3	10 to 14	12.32%	6,778	3,518	3,260	11,585	6,012	5,572
4	15 to 19	9.06%	4,985	2,587	2,398	8,520	4,422	4,098
5	20 to 24	8.28%	4,552	2,362	2,189	7,780	4,038	3,742
6	25 to 29	5.72%	3,147	1,633	1,514	5,378	2,791	2,587
7	30 to 34	4.78%	2,627	1,364	1,264	4,490	2,330	2,160
8	35 to 39	4.13%	2,273	1,180	1,093	3,885	2,016	1,868
9	40 to 44	3.94%	2,169	1,126	1,043	3,707	1,924	1,783
10	45 to 49	2.78%	1,527	793	735	2,611	1,355	1,256
11	50 to 54	2.48%	1,363	707	655	2,329	1,209	1,120
12	55 to 59	1.59%	874	453	420	1,493	775	718
13	60 to 64	1.80%	990	514	476	1,692	878	814
14	65 to 69	0.73%	403	209	194	689	358	332
15	70 to 74	0.74%	409	212	197	700	363	337
16	75 & Above	1.93%	1,063	552	511	1,817	943	874
<b>TOTAL</b>		<b>100%</b>	<b>55,000</b>	<b>28,545</b>	<b>26,455</b>	<b>94,000</b>	<b>48,786</b>	<b>45,214</b>

Note: Present and Future age-sex distribution is based on 1998 census age-sex ratio



**Annexure - J**

**STAKEHOLDER'S WORKSHOP**

**STAKEHOLDERS' WORKSHOP ON  
STRUCTURE PLAN FOR PARACHINAR AND SADDA  
AT PEARL CONTINENTAL HOTEL, BHURBAN  
ON AUGUST 25-27, 2015**

As per Terms of Reference of the project, Stakeholders' Workshop was invited to share the Draft Structure Plan proposals prepared by the Consultants and to get their ownership for the same. The workshop was the second stage of interaction with the stakeholders. In the field. In the first stage Focal Group Discussions were held in both towns, with the common citizens, professionals and common citizens in different fields to make them aware about the Planning Exercise and get their feedback on vision and ownership of the Plans.

The list of invitees for the Workshop was prepared by the TARUCCI and invitations were also sent by them. All the invitees were sent a copy each of the Draft Structure Plan Parachinar and Draft Structure Plan for Sadda. The participants were also provided a Summary or the Draft Report for Parachinar and Sadda. Invitations were sent to 24 stakeholders (list attached) but thirteen were able to attend all sessions of the Workshop. The Consultants gave a multi-media presentation separately on both the Structure Plans and clarified queries/comments raised by the participants. In the end, Certificates of Participation were awarded to all the participants.

**STAKEHOLDERS' WORKSHOP ON  
STRUCTURE PLAN, PARACHINAR STRUCTURE PLAN, SADDA  
AUGUST 25-27, 2015  
AT PEARL CONTINENTAL HOTEL, BHURBAN**

**ATTENDANCE SHEET OF PARTICIPANTS**

<b>Sr. No.</b>	<b>Name</b>	<b>Designation &amp; Departments</b>	<b>Contact Information</b>
1	Mr. Sayed Bahar Husain	Assistant Director L-G Parachinar	0300-3951415 / 0926-310331
2	Naheed Hussaain Bangsal	Chief Officer MC. Sadda	0302- 8833115
3	Mr. Aamir Khan	Procurement Specialist (FUCP)	0300-5832343
4	Mr. Main Mohsin Gul	Infrastructure Specialist (FUCP)	0344-9800002
5	Mr. Qaizar Khan	Social Specialist	0300-9061261
6	Mr. Shahzad Hadi	Assistant Director (Tech): LG&RD	0314-4553737
7	Mr. Sajjad Ahmed	Environment Safeguard Specialist	0346-5585220
8	Mr. Naeemullah	Additional Political Agent, Kurram Agency	0305-5908247
9	Mr. Syed Fayyaz Ali Shah	Project Director (FUCP)	0301-8184566 / 091-9212933 fayyazalishah@gmail.com
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13	Mr. Shah Mahmood Khan	Chief Economist, P&DD FATA	<a href="mailto:smkhan13@yahoo.com">smkhan13@yahoo.com</a>

## STAKEHOLDERS WORKSHOP PICTURES





## STAKEHOLDERS WORKSHOP PICTURES

