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# Report on Focus Group Discussions of Gomal Zam Command Area Advocacy Program

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*“Dedicated to the Communities of  
District Dera Ismail Khan and Tank”*

## Preface

This report is prepared in compliance with the contract of Gomal Zam Command Area Advocacy Program GZAP, and is published by the Regional Institute of Policy Research and Training (RIPORT), Peshawar.

The report provides basic information about the beneficiary communities (farmers) living in command area of Gomal Zam Dam and is one of a series of Focus Group Discussions in ten Union Councils of District Dera Ismail Khan and Tank . The primary purpose of this report is to provide the perceptions of the people of region in the command area of Gomal Zam Dam before the commissioning of the Gomal Zam irrigation network.

This report can be the baseline that could compare change in perceptions over time. The report covers three main areas;

- (i)General information about socio-economic issues of the people.
- (ii)Irrigation and agricultural production practices of the communities.
- (iii)Recommendations for solving issues faced by communities in the command area.

The report will hopefully provide readers, agricultural & irrigation practitioners and policy makers with an insight to the issues of the farmers in terms of agriculture and irrigation in the command area of GZD.



Chairman  
RIPORT

## Acknowledgment

This report has been undertaken in partial fulfillment of a project milestone. I wish to acknowledge those who played an important role in the preparation of this report. They include Mr. Mohsin ul Haq (Manager Operations), Mr. Iftikhar Ahmad (Program Officer M&E) Gomal Zam Command Area Advocacy Program, D. I. Khan, and the five community mobilizers who held the discussions with the communities in the command area.

A word of thanks goes to the Commissioner D. I. Khan and Deputy Commissioners D. I. Khan and Tank without whose unstinted support the advocacy work would not have been possible.

I will be amiss if a word of thanks is not given to the American people and USAID- Small Grants and Ambassador's Funds that shared a major portion of the cost with RIPORT's own contribution.

Finally I want to acknowledge the help provided by the communities who shared their wisdom with RIPORT.



Chairman  
RIPORT

## Acronyms

D. I. Khan	Dera Ismail Khan
DIK	Dera Ismail Khan
FGD	Focus Group Discussion
GZD	Gomal Zam Dam
GZDP	Gomal Zam Dam Project
GZAP	Gomal Zam Advocacy Program
MW	Mega Watt
PMU	Project Management Unit
RIPORT	Regional Institute of Policy Research and Training
UC	Union Council
VC	Village Committee

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## EXECUTIVE SUMMARY

The Regional Institute of Policy Research and Training (RIPORT) was commissioned to carry out Gomal Zam Command Area Advocacy Program with the assistance of Small Grants and Ambassador's Fund Program-USAID. The project commenced with an attempt to gain an understanding of the on-ground situation in the target area vis a vis the overall impression about the Gomal Zam Dam project, and the nature and scale of irrigation related issues prevailing threat.

Following are the major objectives of the project;

- Setting up a consultative institutional mechanism based on community & government stakeholders for addressing agriculture/irrigation related challenges including conflict mitigation.
- Obtain suggestions about water rights and how best to assure availability of rights to claimants.
- Obtain other relevant suggestions of the communities regarding operations by government departments.

In order to provide insight into the perceptions held by the farmers concerning their rights, a total of twenty (20) Focus Group Discussions (FGD) conducted and approximately two in each union council which were attended by local farmers from the project area. Prior to the holding of these FGDs, project team visited the target area for becoming better informed and to establish contact with community and to gather data about potential participants who would reflect various strata and income levels as well as size of land holdings as owners or tenants. Each FGD included approximately 10-20 individuals from a sample of 100 households selected randomly from the upper, middle and the tail end of the project. The target audience of the FGDs were the communities living in 10 UCs of District DI Khan and Tank who will benefit from Gomal Zam Dam.

The following are some of the major findings that resulted from this composite form of FGD carried out amongst the communities in the D. I. Khan and Tank districts;

- This report reveals that major functions of village committee are solution of disputes related to water management and distribution, liaison with government agencies/ departments for solution of problems related to agriculture, acting as welfare committee for the general public and working with political parties to uplift the socioeconomic situation of their areas.
- Results of data analyzed show that the main factors that are contributing to the poverty of the area are low agricultural productivity, unemployment, lack of access to higher value markets and expenses on health.
- Informants pointed out the unavailability of technical resources that could initiate, promote or support modern farming. Hardly any agricultural agents, institutional structures, credit, government or non-governmental services are available to help them.

- Top three problems faced by the communities are related to scarcity of agricultural water (24%), diseases & insufficient use of pesticides/insecticides (19%) and floods/erosion (15%).
- By and large the participants of FGDs showed an absolute agreement on the provision of canal water as solution to most of their problems. It would reduce floods, erosion and seepage of water hereby making available more water to fulfil the existing needs and for extension of irrigation to new areas guaranteeing the substitution of lower value products into higher value products
- 75% of the total land under Rod Kohi system is cultivated in Tank. However, this percentage is only 26 in D. I. Khan and 74% of the remaining land under Rod Kohi system could not be cultivated. On the other hand, 67% of the total rain fed areas is cultivated in D. I. Khan but this percentage is very small and accounts for only 26% of the total in Tank.
- The report finds the prospects that the residents of the study area have high hopes from Gomal Zam project and also summarize the following expectations;
  - Abundance and timely availability of water
  - Floods control
  - Development of water management system
  - Extension of land under cultivation
  - Promotion of modern farming technology
- Out of 20 groups, 15 reported disputes at community level on the distribution of water. All these disputes arise in areas where poor Rod Kohi system is in place and the scarcity of water lead to such disputes. No disputes were reported from areas where most of the land is Barani and distribution of water does not take place.

The report also found that there is a strong need of the local people for formation of farmer village committees in D. I. Khan which could take initiatives for the solution of problems related to agriculture and farming. On the other side District Tank has well developed village committees. There are a number of post project needs of the farming community which are equally important to address for the success of the project and achieving its long term goals. The important of these needs are training on modern farming and livestock, technical assistance possibly through local agricultural offices, field agents and dispensaries, dissemination of useful agricultural information, support in provision of agricultural supplies like fertilizers, quality seeds, pesticides and modern machinery, financial support from government and non-government organizations particularly in the form of institutional credit / agricultural credit and provision of appropriate means of goods transportation to give farmers access to high value markets.

### **Background of Gomal Zam Project**

Gomal Zam Dam (GZD) is a hydro-electric power and irrigation project in northwest Pakistan. It is located on the Gomal River in the South Waziristan Agency and impounds the river at Khajuri Kach. It is an arched, gravity-type roller-compacted concrete dam with a

Height of 437 feet, and has a gross storage capacity of 1,140,000 acre feet. It can irrigate about 191,000 acres of land, and produce 17.4 MW of electricity.

The project was initiated by WAPDA in July 2002 with expected completion by the end of September 2013; there are four major components of this Rs. 12 billion scheme: Dam & Spillway, Diversion Tunnel, Hydro Power, & Irrigation System. Of the four it is the irrigation and agriculture related components that are causing most challenges and are part of this focus group discussions report.

### **Objective of the FGDs**

It was foreseen that providing a limited amount of assured irrigation water in Gomal Zam command area would generate claims that may lead to conflict. Hence it was important to reach out to communities and find the opinion and solutions to their problems.

Following are the objectives of this report;

- Obtain suggestions about water rights and how best to assure availability of rights to claimants.
- Obtain other relevant suggestions of the communities regarding operations by government departments.

### **Methodology**

The following methodology was adopted;

- 20 FGDs were conducted in 10 Union Councils in the project area. Each FGD would include from 10-20 individuals from a sample of 100 households who were randomly selected from the upper, middle and the tail end of the project. Prior to the holding of these FGDs, RIPORT community mobilizers visited the target area for becoming better informed and to establish contact with community and to gather.
- Collection of data about potential participants who reflected various stratas and income levels as well as size of land holdings as owners or tenants.
- The following union councils were represented in the FGDs:-
  - UC Madi (D. I. Khan)
  - UC Hathala (D. I. Khan)
  - UC Luni (D. I. Khan)
  - UC Jattatar (Tank)
  - UC Shah Alam (Tank)
  - UC Shahrozan (Tank)
  - UC Dabara (Tank)
  - UC Gomal (Tank)
  - UC Ranwal (Tank)
  - UC Uttar (Tank)

## **Statement of Research Parameters**

The frame of reference of this research is mainly qualitative in nature which seeks insight and perceptions rather than precise quantitative measures due to limited number of participants from each area. The validity of the findings of this research is based on assumption that the participants of the FGD were able to provide unfiltered responses regarding the issue under discussion.

## **Village Committees**

### **Existence of Village Committees**

The communities were asked if village committees exist in their areas. It was found that majority of the villages of District Tank have well-developed village committees. However, the existence of such village committees was less in D. I. Khan. Only one third of the villages have such village committees in place.

### **Functions of the Village Committees**

Functions of the existing village committees varied across areas and are listed below;

1. Village committees of the areas settle disputes that arose regarding distribution of water in Rod Kohi irrigation system.
2. Liaison with government agencies / departments for solution of problems related to agriculture.
3. Some village committees acted as welfare committees for the general public and took initiatives deemed necessary by the village elders, besides those related to agriculture and irrigation.
4. Some village committees were also reported to be working with political parties. The purpose of such committees is to uplift the socioeconomic situation of their areas by acting as a lobbying group.

### **Willingness to form Village Committees**

When asked about the willingness to form village committee by farmers, all of the participants showed keen interest to form village committee specifically for farmers.

The enthusiasm for formation of farmer village committees was more prominent among the participants of the areas of D. I. Khan where the existence of such committees was low.

## Expectations of farmers from VCs

In response to “how do you foresee village committees assisting you”, following answers were given;

1. The village committees will be comprised of the local people who would thus know the problems very well
2. Committee will keep liaison with all concerned stakeholders and would convey our problems to the concerned authorities in an effective manner
3. They would work for agricultural uplift by advocating adoption of modern agricultural techniques and would extend technical assistance to farmers
4. It would represent all farmers and would thus eliminate the disputes that arise due to lack of representation.
5. It would undertake water management and resolve disputes related to unequal water distribution
6. It would make efforts for improving the canal irrigation system.

In order to have an idea about the magnitude of the above responses, below is a quantitative sketch of these responses:

S.No.	Theme	Frequency	%Age*
1	Better identification and understanding of local problems	5	14
2	Better representation of problems to concerned authorities	16	46
3	Uplift of agriculture by promoting modern techniques	5	14
4	Eliminate disputes due to conflict of interest	4	11
5	Undertake water management & eliminate associated disputes	4	11
6	Would promote and train people in canal irrigation techniques	1	3
	Total	35	100

\*Percentage out of total recorded responses for all areas

## Factor that contribute to poverty of area

Participants of the focus groups discussed different factors that contribute to the poverty in their areas. These factors can be broadly categorized as under:

### Low Agricultural Productivity

Since majority of the population of the target areas depend on agriculture, low agricultural productivity was reported as one of the major factors that contribute to poverty. This low

productivity is further attributed to the following reasons;

1. Inadequate and insufficient supply of water for agriculture. As Rod Kohi system could not fulfill the agricultural needs of the farmers since the available water is insufficient and the water is allowed to flow to the next field only when the first field is filled. Thus making it impossible for all the lands to get water.
2. Major portion of water is lost due to improper construction of shallow water channels.
3. Agricultural lands are not properly leveled and thus it becomes impossible to irrigate to all agricultural lands
4. Gomal Zam Command Area lacks the modern farming techniques primarily because of the limited resources of farmers and lack of education. Over the cycle of bad years, the farmers do not have enough resources to increase productivity using fertilizers, seeds and machinery or to protect crops from deadly disease with insecticide and pesticide. There is also lack of education among farmers which reduce their ability in best utilization of the available resources.

### **Unemployment**

Informants were concerned about unemployment and conversed that the impact of unemployment is more pronounced and serious in the project areas. The root of this problem rests in the following two factors:

1. Decline of farming due to poor productivity is one of the major reasons of the heightened unemployment of the area. More and more people previously involved in agriculture are becoming jobless due to decline of agricultural sector in this area.
2. Majority of the population of the area were illiterate, since illiteracy and unemployment go hand in hand, majority of the adults were thus unable to get a job.

### **Lack of access to higher value markets**

Life of people in the project area has become more precarious due to lack of access to high value markets mainly due to unavailability of roads and communication infrastructure. Farmers could not compete on equitable terms in local or regional markets.

They lacked access to markets because roads are poor and transportation is too expensive. And higher food prices do not always filter down to the farm-gate, where poor farmers often have to sell their produce.

In addition to the above major factor of poverty, the participants also discussed that the health facilities are inadequate in their areas and they have to go to the cities for private healthcare that cost too much out of their earning. Some focus groups also stated that poor

law and order situation, political instability and over population are other major factors contributing to the poverty of the area. Below is graphical / tabulated presentation of the above discussed issues:

Area	Group	Unemployment	Low agricultural productivity	Lack of access to high value markets	Expenses on health	Poor law & order	Political factors	Over population
TANK	01	X	X	X				
	02	X	X	X	X			
	03	X	X		X			
	04	X	X		X			
	05	X	X					
	06	X				X		
	07	X	X					
	08	X	X					
	09	X	X				X	
	10	X	X	X	X			
	11	X	X	X				
	12	X	X					
	13	X	X	X				
	14	X	X					
D.I. KHAN	15	X	X					
	16	X	X	X			X	
	17	X	X					
	18	X			X			
	19	X	X					X
	20	X	X	X				

### **Agricultural Productivity**

Perception regarding core issues affecting agricultural productivity, informants shared a number of issues of their respective areas. These issues can be broadly categorized as under:

#### **Lack of modern farming techniques**

The use of modern farming techniques is negligible in all union councils of the study area. This problem is ascribed due to non-availability of material and technical resources due to asset poverty.

### **Insufficient material resources for modern farming**

1. A considerable number of informants reported that their crops are frequently attacked by different diseases that destroy the crops. The farmers cannot afford the use of expensive pesticides and insecticides. Due to the same reason, these pesticides are rarely available in the local markets and thus further escalates the problems associated with acquisition.
2. Machinery and equipment required for modern farming is unavailable. Only a small percentage of the farmers own tractors and other small machinery which is no way sufficient for the whole study area. Majority of other farmers fail to acquire modern machinery for farming
3. The use of good quality approved seeds is negligible either due to high prices and unavailability in the local markets or lack of awareness and education of the farmers. The crops thus grown are prone to diseases and the agricultural productivity is decreased.
4. Most of the farmers use indigenous fertilizers while the use of modern synthetic fertilizers is very limited due to high prices or unavailability. This also reduces agricultural productivity of irrigated lands

### **Insufficient technical resources**

Insufficient technical resources relevant to farmers' circumstances were a major constraint in all areas. While discussing the issue of insufficient technical resources, informants pointed out the unavailability of technical resources that could initiate, promote or support modern farming. Hardly any agricultural agents, institutional structures, credit, government or non-governmental services are available to help them.

Overall, lack of modern farming techniques are linked to various factors like the available technology being more suited to less risky production conditions; a strong sense of risk aversion by small-holder farmers in these conditions, in which production of most of their subsistence food requirements was often a primary concern; and a lack of access to resources to adopt technology, which was associated with farmers' marginal economic status in difficult environment.

### **Scarcity of agricultural water**

Almost all the informants of the focus groups discussed the scarcity of the water available for agriculture. The agricultural land is either rain fed or by Rod Kohi. However in both cases, the available water is insufficient and the storage capacity is very poor. Major portion of the agricultural water is lost due to seepage of water from imperfectly constructed shallow water channels (*Nallas*). Due to the same reason, the fields away from the Nallas remain barren and uncultivated.

Large numbers of farmers are facing the problems related to uneven land and consequently insufficient water for irrigation. More land is being taken out for bunds and ditches and results in uneven distribution of water.

### **Floods and soil erosion**

Rod Kohi system makes use of the hill torrents to supply water for irrigation. However, major constraints limiting utilization of flood flow of hill-torrents include unpredictable flash floods, improper control, soil erosion and heavy silt load in flood water. Considerable number of informants described floods and erosion as the major issues affecting agricultural productivity.

In addition to above, informants also described lack of institutional credit, hail and water logging as other problems of some areas. A group wise quantitative summary of the response distribution is given below;

PROBLEMS	FREQUENCY	%AGE*
Land Leveling	6	10
Diseases & insufficient use of pesticides/insecticides	12	19
Use of low quality seeds	3	5
Lack of agricultural machinery	3	5
Insufficient use of fertilizers	4	6
Lack of technical resources	4	6
Scarcity of agricultural water	15	24
Floods & erosion	9	15
Hailing, water logging, finance related problems	6	10
Total	62	100

\*Percentage out of total number of responses provided by all groups

### **Measures to eradicate issues related to low productivity**

There was absolute agreement among participants on the provision of canal water as solution to most of their problems. It would reduce floods, erosion and seepage of water.

Hereby making available more water to fulfill the existing needs and for extension of irrigation to new areas guaranteeing the substitution of lower value products into higher value products. This would promote the use of modern farming technology and reduce unemployment in these areas. In short, the root cause of the agricultural and corresponding socioeconomic problems is associated with decline of agriculture in these areas. Ensuring the availability of water through canal system would act as multiplier in the uplift of agricultural sector in these areas.

Participants stressed the strong need of training and technical assistance particularly in control of disease, utilizing the existing resources efficiently and for the promotion of modern farming techniques and technology.

They also expressed the need of government support in provision of modern farming technology, fertilizers, seeds and pesticides. A large number of participants discussed the financial problems of the farmers in acquiring technology and materials, and also emphasized the role of government and NGOs in this regard.

### **Availability of agricultural machinery and services**

It is a well-known fact that agricultural machinery and services are extremely vital for rapid development of agricultural production. However, none of the participant from any of the areas reported the availability of agricultural services and machinery. All the areas lack agricultural services like agricultural support offices or agents, dispensaries etc., while only a negligible number of farmers own private tractors (as low as 3 tractors per village on average).

### **Community expectations from Gomal Zam Dam**

Residents of the study area have high hopes from Gomal Zam project and believe it would change their lives. Following are point wise expectations of the community:

#### **Abundance and timely availability of water**

Scarcity of agricultural water was the main problem of these areas which is expected to end with Gomal Zam. The timely availability of water for all farmers irrespective of location and distance from the reservoirs is equally important which can be achieved with canal irrigation system.

#### **Floods control**

The problem of unpredictable flash floods, improper control, soil erosion and heavy silt load in flood water that destroy major portion of the crops each year will be controlled.

#### **Development of water management system**

There is lack of any institutional setup for water management in Rod Kohi system. The informants expect that Gomal Zam project will ensure the development of proper institutional setup for water management and would guarantee the judicious distribution of agricultural water and help in elimination of disputes that arise due to water distribution.

### **Extension of land under cultivation**

The extension of cultivable land will be made possible by providing water to the currently barren lands thus increasing the land under cultivation.

### **Promotion of modern farming technology**

With increased area under cultivation and reduction of the risks associated with other irrigation systems, Gomal Zam Dam will promote the use of modern farming techniques and technology.

The informants also shared that some of the areas lack drinking water and they expect that this project will solve all their problems associated with availability of clean drinking water.

### **Impact on production and economic conditions of community**

All informants have confidence in positive impact of Gomal Zam Dam on agricultural productivity. They are of the view that canal irrigation system of Gomal Zam will increase production by ensuring timely availability of water, reduce risks associated with Rod Kohi, bringing more land under cultivation; promote modern farming and agri-business, reduce unemployment and poverty and would ultimately result in economic uplift of the whole area.

### **Post Project Requirements for Agriculture and Livestock**

When asked about the requirements after the availability of water, informants expressed the need for the following:

1. The foremost requirement of the informants was the need of training on modern farming and livestock. The farmers want to get the best out of their lands by adopting modern agricultural methods and increase productivity for which training is needed on priority.
2. Technical assistance to the farmers will be an important requirement to be provided by local agricultural offices, field agents, dispensaries. At the same time, it will be equally important to devise a mechanism for dissemination of useful agricultural information like pest control and other precautionary measures.
3. Support in provision of agricultural supplies like fertilizers, quality seeds, pesticides in a way that is convenient and affordable for the local farmers is a priority need.
4. Support in provision of agricultural machinery for mechanization of the farming and particularly for leveling of the agricultural lands is needed.

5. Financial support from government and non-government organizations particularly in the form of institutional credit / agricultural credit is required.
6. Constructions of roads and provision of appropriate means of goods transportation to give farmers access to high value markets was also mentioned as one of the major requirement in this regard

### **Resolution of disputes**

Out of 20 groups, 15 reported disputes at community level on the distribution of water. All these disputes arise in areas where poor Rod Kohi system is in place and the scarcity of water lead to such disputes. No disputes were reported from areas where most of the land is Barani and distribution of water does not take place.

Different means of dispute resolution are adopted at community level out of which Jirga system is most prevalent. Below is a statistical summary of the means of dispute resolution:

<b>Mean/ Method of dispute resolution</b>	<b>Percentage*</b>
Jirga	87
Darogha / Sardar / Elders	7
NGO & Govt. Officials	7
Total	100

In response to satisfaction on the means of dispute resolution, almost all informants showed their satisfaction with the Jirga system where it prevails. However, no clear responses were provided by informants where mean of dispute resolution other than Jirga system exists. Informants were also unable to suggest other possible mechanism for dispute resolution.

### **Quantitative dimensions of information**

Following are quantitative dimensions of the data collected from informants of twenty focus groups regarding their areas/villages:

#### **Total agricultural land**

<b>Type of land</b>	<b>Area in Kanals</b>		<b>Total</b>
	<b>Tank</b>	<b>DIK</b>	
Cultivated Barani	45,900	85,000	130,900
Cultivated - Rod Kohi	257,150	58,000	315,150
Non-Cultivated- Barani	130,200	42,000	172,200
Non-Cultivated- Rod Kohi	83,500	167,000	250,500
Total agricultural land	516,750	352,000	868,750

Rod Kohi irrigation system is more prevalent in the study area as compared to rain fed lands. Out of the total, only 35% of lands are rain fed.

## Comparison of Tank and D. I. Khan

Type of land	Agricultural Area			
	Tank Kanals	%Age	DIK Kanals	%Age
Rod Kohi	340,650	100	225,000	100
Cultivated - Rod Kohi	257,150	75	58,000	26
Non-Cultivated- Barani	83,500	25	167,000	74
Barani	176,100	100	127,000	100
Cultivated - Barani	45,900	26	85,000	67
Non-Cultivated- Barani	130,200	74	42,000	33

Although the total agricultural land in Tank and D. I. Khan is comparable in many ways, there is substantial difference in the area under cultivation of two different systems. 75% of the total land under Rod Kohi system is cultivated in Tank. However, this percentage is only 26 in D. I. Khan and 74% of the remaining land under Rod Kohi system could not be cultivated. On the other hand, 67% of the total rain fed areas is cultivated in D. I. Khan but this percentage is very small and accounts for only 26% of the total in Tank.

## Household size and education

Theme	Tank	DIK
Number of households	14,480	2,310
Average household size	11	11
Literacy rate	24	2

The number of households in D.I. Khan are 19,290 and number of household in Tank are 19,636. Average household size is same in both the districts. However, the average literacy rate shared by respondent from D. I. Khan is as low as 2%, much lower than 24% for Tank. It is important to note that the above quantitative information are extracted from a range of qualitative discussions and may only present the rough statistical picture of situation.

## Major sources of income

Area	Indicator	Employed %age	Business/ Employers %age	Farmers/ tenant/ land owner %age	Daily Wages %age	Total %age
Tank	No. of Persons	427	228	6488	3772	10915
	Percentage	4	2	59	35	100
DI Khan	No. of Persons	132	342	3715	1220	5409
	Percentage	2	6	69	23	100

Major source of income of people is farming. Daily wage workers comprise second largest category of earning.

## Kharif and Rabi Crops

Crop	Frequency	Percentage	Average income/ Kanal
<b>KHARIF</b>			
Maize	9	29	1505
Sargam	4	13	1850
Sugarcane	6	19	3166
Rice	4	13	2125
Melon	4	13	1850
Barley	4	13	2750
Total		31	100
<b>RABI</b>			
Wheat	13	37	3850
Mustard	8	23	1068
Gram	11	31	1960
Tomato	3	9	1500
Total		35	100

A number of crops are grown in the project area with varying level of income from them. Among Kharif crops, sugarcane is the most profitable crop followed by barley and rice. Similarly, wheat is the most paying crop of Rabi followed by gram.

### Main Conclusion Derived from FGDs.

The focus group discussions were a success in gaining insight on how the people see the problems associated with Gomal Zam project. Some broad conclusions can be drawn from the analysis and after obtaining deeper levels of meaning, making important connections and identifying subtle nuances:

There is a strong need of the local people for formation of village committees for farmers in D. I. Khan which could take initiatives for the solution of problems related to agriculture and farming. However, the study found that District Tank has well developed village committees already in place, but there is much to do to for formation of either specialized farmer village committees or reformation of the existing committees and development of efficient problem solution mechanism related to agricultural. It is mandatory that these committees be comprised of the local people acceptable to local population without any conflict of interest.

People expect that future village committees will keep liaison with all stakeholders, convey the agricultural related problems to the concerned authorities, promote modern farming, extend technical assistance to farmers, resolve disputes of water distribution and raise awareness among farmers. All these objectives cannot be achieved without extended of capacity building of these village committees. At the same time, devising proper legislation regarding the role of these committees and its institutionalization is equally important for its assured performance and sustain ability.

The main factors contributing to the poverty of the area include low agricultural productivity, unemployment, lack of access to high value markets, scarcity of agricultural water, floods and soil erosion. Low agricultural productivity was found the major of all factors which was further attributed to insufficient material and technical resources. No agricultural agents, institutional structures, government or non-governmental services are available to help in this regard. Use of substandard seeds and frequent attacks of diseases on crops is a common phenomenon primarily due to lack of awareness and financial constraints. Modern farming does not exist and hence high productivity cannot be acquired for the reason that available technology being more suited to less risky production conditions; a strong sense of risk aversion by small land holders in these areas, in which production of most of their subsistence food requirements was often a primary concern; and a lack of access to resources to adopt technology, which was associated with farmers' marginal economic status in difficult environment.

Water is scarce in all the study areas and the storage capacity is very poor. Major portion of the agricultural water is lost due to seepage of water from imperfectly constructed shallow water channels (Nallas). Large numbers of farmers are also facing the problems related to land leveling and more land is being taken out for bunds and ditches and results in uneven distribution of water while major constraints limiting utilization of flood flow of hill-torrents include unpredictable flash floods, improper control, soil erosion and heavy silt load in flood water. The root cause of the agricultural and corresponding socioeconomic problems is associated with decline of agriculture in these areas. Ensuring the availability of water through canal system would act as multiplier in the uplift of agricultural sector in these areas.

There are number of post project needs of the farming community which are equally important to address for the success of the project and achieving its long term goals. The important of these needs are training on modern farming and livestock, technical assistance possibly through local agricultural offices, field agents and dispensaries, dissemination of useful agricultural information, support in provision of agricultural supplies like fertilizers, quality seeds, pesticides and modern machinery, financial support from government and non-government organizations particularly in the form of institutional credit / agricultural credit and provision of appropriate means of goods transportation to give farmers access to high value markets.

Gomal Zam project is a hope for the majority of people associated with agriculture and there is strong confidence on the positive economic impacts on the whole community. They expect high from the project and believe that it will ensure the abundant availability of water, control floods, promote the use of modern agricultural techniques and technology and more land would be brought under cultivation. People also expect that the project would bring attention of the stakeholders on development of institutional setup for water management and its judicious distribution.

Most of the traits of the study areas are although comparable e.g. type of agricultural land, household size, sources of income, Kharif and Rabi crops, there are clues about factors that vary from area to area e.g. literacy rate, employment rate etc. Further quantitative assessments can be made for in-depth analysis in the context of project outcomes and impacts.



## Regional Institute of Policy Research & Training

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