



**Pakistan Poverty Alleviation Fund
Water Management Centre**

**DROUGHT MITIGATION AND PREPAREDNESS PLAN
JANGIAN, DISTRICT WASHUK, BALOCHISTAN**



PROJECT COMPLETION REPORT

October 2008

STUDY TEAM

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Part – II: ANNEXURES

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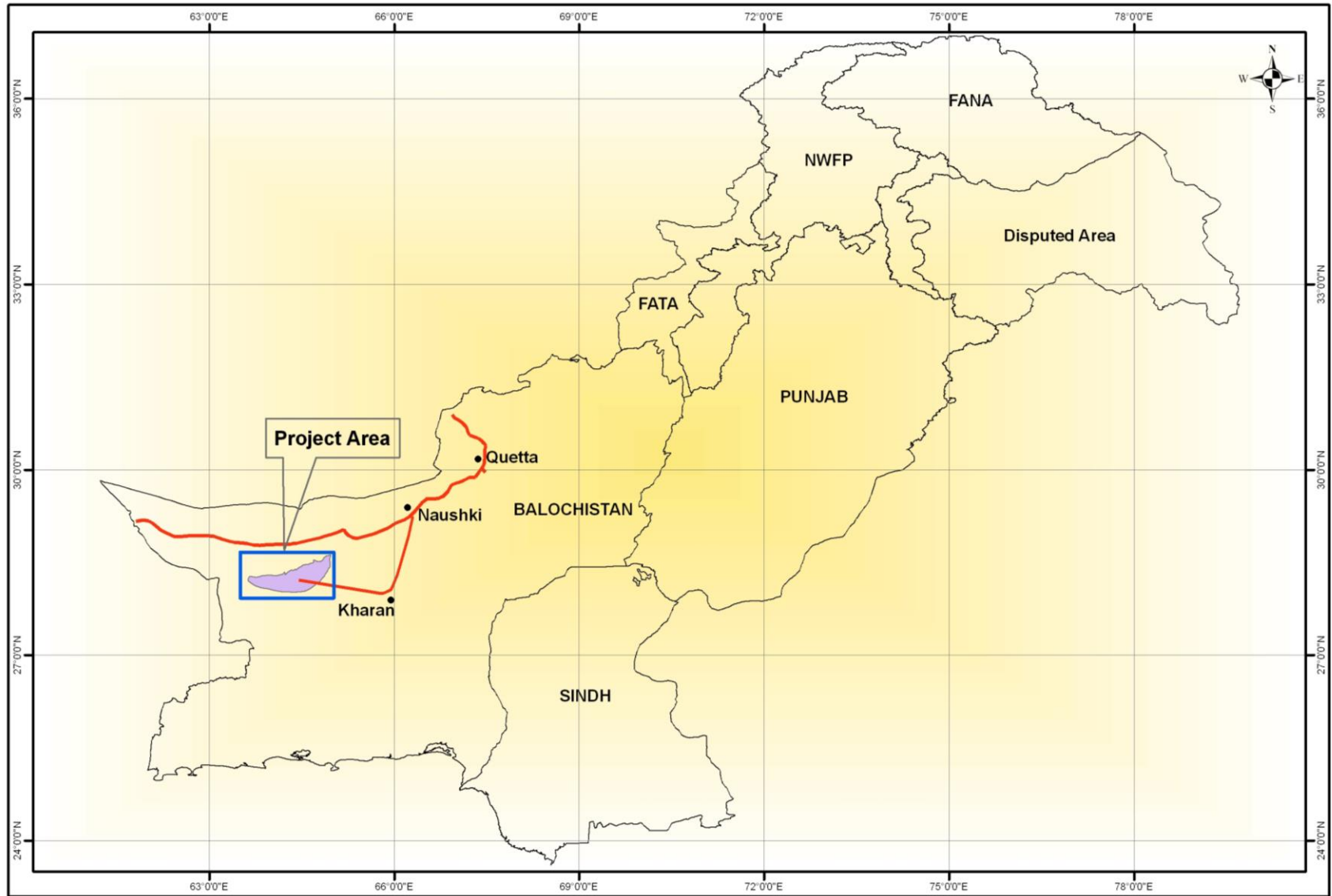
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Part – I
MAIN REPORT

1. BASIC DATA SHEET

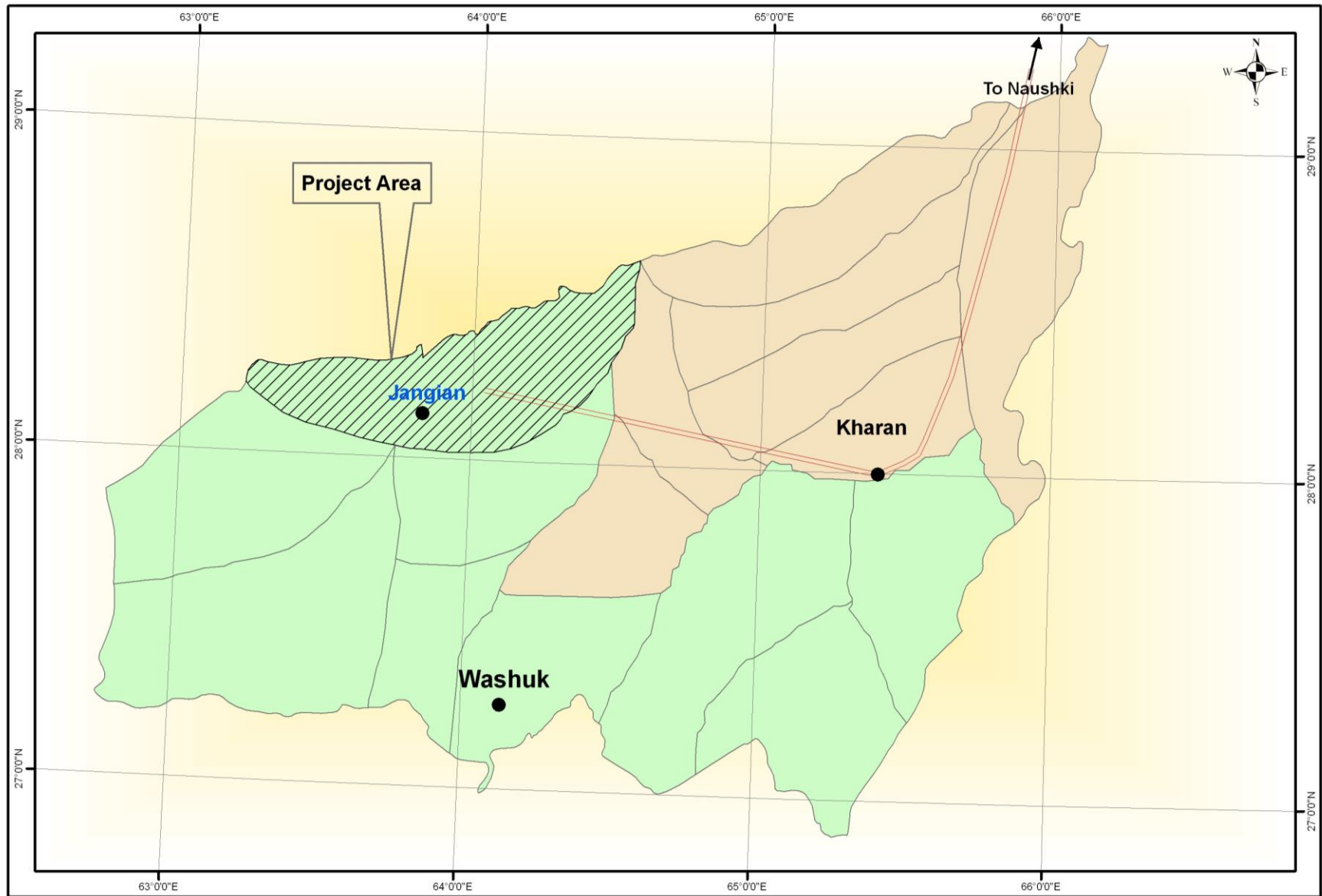
Project Objective	Mitigate the effects of drought along with improvement in the general well being of the people in Union council Jangian, District Washuk, Balochistan
Name of Agency	Islamic Relief House 85, Street 59, Sector F-11/4, Islamabad, 4000 – Pakistan.
Contact Person	Munier Mohammed, Country Director, Islamic Relief, Pakistan
Donor Agency	Pakistan Poverty Alleviation Fund (PPAF) (World Bank Financial Resources)
Name of Project	Jangian Drought Mitigation Project (JDMP) District Washuk
Duration of Project	First Phase: 24 Month (July 2005 – June 2007), Project extended for 9 months (July 07 – March 08), Total Duration: 33 Months
Project Cost	Agreement Cost Rs. 40.76 million Funds Utilized by IR Rs. 23.98 million
Direct Beneficiaries Achieved	Households = 1,806 Population = 12,642
Indirect Beneficiaries	Households = 2,185 Population = 17,480
Location of Project	Union Council Jangian, District Washuk
Number and Type of Sub-Projects	Khushkaba Bandat 670 Wind Mills for Drinking Water Supply 7 Pipe Irrigation Schemes 10 Lift Irrigation Schemes 19 Spillways 5

Figure – 1.1 **Location Map of Project Area**



Researched and produced at PPAF Water Management Center

Figure – 1.2 **Location Map of Jangian UC in Washuk District**



Researched and produced at PPAF Water Management Center

2. BACKGROUND AND OBJECTIVES

2.1 Background

Balochistan is the largest province with respect to area covering about 44% of land in the southwest Pakistan. It is a sparsely populated land bordering with Afghanistan and Iran. Much of it is a high barren plateau 1,000 to 1,250 meters (3,000 to 4,000 feet) above mean sea level. The region is made up of 28 districts with an estimated seven million inhabitants.

This region is characterized as arid and semi-arid with a wide range of inter related desert ecosystems that vary from one another, mainly as a function of precipitation, temperature, and altitude. Generally, the economic and human condition there present a dismal picture of under development due to the limited socio economic opportunities, lack of education, poor infrastructure, limited cultivable land, scarcity of water and irrigation schemes and limited access to health services.

Pakistan has experienced severe drought in its arid areas during 1997-2002. The spread of drought was almost extensive in Balochistan where 24 out of 26 districts severely affected by drought. District Kharan was one of these districts where Islamic Relief a PPAF partner started drought relief activities.

2.2 Washuk District

Newly created Washuk district was a part of Kharan district till 2007. It comprises six union councils including Jangian where Islamic Relief started implementation of Drought Mitigation and Preparedness Program (JDMPP) in July 2005. Drought and flash floods are the most common natural hazards in Washuk . Major area of district Washuk is under continuous flash floods due to heavy rains in the Raskoh hills. In Washuk drought is a perennial and recurring feature that results in serious economic, social and environmental impacts. Droughts are two to three times less likely to occur, however the damage caused by the drought ranks a lot higher than other natural disasters. Throughout its history, Washuk experiences cycles of drought, associated with a complementary upheaval and degradation in economic, social and environmental conditions.

Washuk has the poorest socio-economic development indicators compared to the rest of Balochistan and they have worsened in the past few years due to the impact of the drought. Like the other areas of Balochistan, agriculture and livestock are the most important economic sectors in Washuk. Hence, the drought and accompanying water shortage have hit the province and its people, creating significant challenges to food insecurity.

For the majority of the population of Washuk disasters have become part of their “normal” life. They experience difficulties but they find ways to survive. Their sources of livelihood are unstable and their income is often insufficient to sustain the family’s basic needs. Most of the families suffer from food shortages and

malnutrition. When disasters strike they become more indebted because they have little or no savings. Due to low literacy level, they have limited access to information and low awareness of hazard risks and what they can do to protect themselves. When disasters strike, their already poor health condition worsens and makes them more vulnerable to infections and epidemics.

2.3 Jangian DMP Project Area

Based on its previous drought relief activities in the area, IR selected Jangian UC as an area of intervention for drought mitigation and long terms intervention for preparedness against future droughts. The project area is spread over 4,205 sq. km. Jangian is located some 400 kilometer south-west of Quetta and 110 km from Kharan town. From Quetta a metalled road leading to Kharan via Noshki. The only access to Jangian from Kharan is a 110 km long shingle road leads to Killi Thalok, the first sub-project village in the DMPP area.



The total population of the project area is around 18,500 (Table – 2.1), settled in small hamlets ranging from 5 to 30 households. The total population of the project area is widespread over an area of about 4,205 sq. km making population density of only 4.4 persons per sq. km. The household size on the other hand is higher than the national average with around 8.5 persons per household.

Table – 2.1 Distribution of Villages by Households and Population

Sr. No.	Cluster Name	Number of Villages	Number of Households	Total Population
1	Jangian	2	240	2,027
2	Shah o Geri	5	195	1,643
3	Talonk	17	340	2,873
4	Jhalawar	8	371	3,128
5	Urmagay Kona Kalat	20	381	3,226
6	Pulangee	6	102	867
7	Jozedar	5	97	821
8	Khoicha	9	150	1,266
9	Aloo	3	69	581
10	Zarnazcha	3	103	869
11	Cheel	2	16	137
12	Soro	2	126	1,062
Total		82	2,190	18,500

Source: Islamic Relief Proposal for JDMPP. For details see Annexure-1.

The project interventions covered 82.5% of the total household and 53% of total settlements (Table – 2.2). The literacy level in the project area is less than 5 percent. The settlement pattern is based on family or extended families living on their lands, settlements are mostly named with the head of the family called Killi. To implement the DMPP activities the IR formed 74 COs in 43 villages. Of the total 74 COs, 34 were male COs, 28 female COs and 12 joint COs with mixed male and female members.

The basic amenities of the life in the whole district are missing – no electricity, no roads, and few but non-functional public sector health and education facilities. Inhabitants of Jangian are totally dependent on rainfall for agriculture which was affected by the very low precipitation in past seven years. Due to low literacy rate in the union council, most of the population is not organized and don't take initiatives collectively for their well being.

Table – 2.2 Area and Population Covered by JDMPP

Description	Total	Coverage	% of Total Covered
Area	4,205 Sq. Km	NA	NA
Population	18,500	12,650	68%
Households	2,190	1,806	82.5%
Villages/settlements	82	43	52%
Community organizations Formed - Male COs - Female COs - Joint Cos	74 (34) (28) (12)	43 Villages	63%

3. SOCIAL MOBILIZATION PROCESS

Social mobilization has been the backbone of JDMPP and Community Organizations (COs) were the only local institutions of the people of Jangian to decide, plan, implement and manage sub-project activities. This provided an opportunity to the local communities to critically think and determine their priorities for social change and development ensuring ownership of the project at the early crucial stage. Social mobilization was gender focused process with men and women equally participating in formation of COs. The IR project management taken following steps in the formation of COs in JDMP area:

3.1 Initial Contact

Initial contact with the communities was made by the IR Community Development Officers (CDOs) consisting of male and female teams. The teams covered each potential village in two to three field visits. The team met the community activists, leaders and available men and women. Along with exchange of dialogue, the team also used observation and transect walk, a PRA tool, for obtaining basic information about village.

3.2 Programme Introduction

Programme introduction has been the first planned activity by the CD staff. It was always ensured that majority village population participates in this meeting. Since the size of the settlements is small and residents are mostly extended families, holding these meetings has never been a problem. Programme introduction consists of introduction of Islamic Relief, an in-depth discussion on the concept of DMPP and possible interventions and implementation methodology. Participants are briefed on CO formation, process and role of COs in implementation of sub-projects.

3.3 Formation of COs

The agreement on the proposed implementation methodology follows the formation of Community Organization (CO). All the households are eligible to become members in male and female COs. It was ensured that no one is denied membership on the basis of gender, language, ethnic identity, socio-economic status or any other discrimination criterion. COs sign a code of conduct, elect office bearers (President and Manager) and identify their roles and responsibilities. It was the COs to maintain record of meeting minutes, resolutions, activities and saving on prescribed registers. However, owing to the very low literacy rate, the record has to be maintained by the CD staff. The COs deposited 20% share in project cost through their savings that were maintained in the joint bank account. IR Field Office Kharan maintained records of the all the activities of social mobilization in files on the basis of each CO. The main objective of record keeping at PO level was to integrate lessons learnt in the programme implementation and future project designs. A total of 74 community

COs were formed in the project area, of which 34 are Male COs, 28 Female COs and 12 Joint COs. For list of all category COs and membership see Annex – 4.

3.4 Training /Capacity Building of COs

IR's field office maintained separate files for the above record requirements and these files were updated regularly by the concern CDOs in social mobilization unit. The completion of CO formation follow various capacity-building training (Community Skill Management Training for Managers & Presidents, Managers Conference etc.) highlighting to them the workings of the COs. Beside these trainings, several livelihood related trainings e.g. livestock management skill training, agriculture management training, livestock extension worker training, agriculture extension worker training were also conducted for the improvement of their livelihood. Community Organization's office bearer's linkages with line departments and other stakeholders in the area were also developed through events.

3.5 Task Force

As per normal practice for all DMPPs a Task Force was formed in union council Jangian. The main purpose behind the formation of the task force was to form a group of people which can lead the community organizations in the implementation of the project and can play as a mediator in the community level conflicts resolution. This task force was formed during a meeting where Jangian union council Nazim, area notables, Community activists, Cluster Community Organization and Community Organization office bearers were part of the meeting.

- **Objectives of Task Force Formation**

1. To transform cluster level organization on union council level forum
2. Ownership of the project through different stakeholders at broad level
3. Sharing of information and project objectives
4. Resolution of community level conflicts regarding the project activities through Task Force members

- **Steps Taken in the Formation of the Task Force**

1. Initial dialogue with community organizations, notables, religious leaders regarding the task force and its objectives.
2. Meeting information and venue selection
3. Task force formation meeting

4. JANGIAN DROUGHT MITIGATION & PREPAREDNESS PLAN

4.1 JDMPP Implementation Period

The JDMPP was approved by the PPAF in June 2005. The Islamic Relief (IR) submitted implementation plan of 24 month period (July 2005-June 2007), later on it was extended for another 9 months and the IR informed the WMC of PPAF for that it has completed the project by March 2008.

4.2 Internal and External Constraints

The delay in implementation of the sub-projects has been due to both internal and external factors. The internal factors being; the IR's new entry as development agent into the area; selection of the remotest UC (Jangian) of the district Kharan for DMPP interventions – 110 km away from the district head quarter as well as IR's Project Implementation Office (PIO); non-availability communication facilities between the PIO and the project area; residential and working difficulties for the staff in project area.

The external factors include a combined opposition by the local tribal/political and the religious leadership. The opposition to DMPP related development initiatives by the tribal/political leadership was based on the fear of losing control over the vulnerable rural communities that were supposed to be strengthened through the CO formation process and training. The provision of development fund by IR/PPAF without their consent, interest and involvement was added blow to their leadership.

The religious elements in line with the political leadership indoctrinated a provocation against the CO share (saving) as Interest (Sood) which is prohibited in Islam. The provocation worked well in the initial period of six months when the Community Development staff was involved in CO formation and no hardware project was on the ground and the communities even refused the IR CD teams to enter into the villages. To counter this provocation IR had to arrange special meetings with the local religious leaders to explain and convince them on the concept of CO share and the whole implementation methodology of sub-projects.

4.3 Project Targets and Achievements

Despite above mentioned constraints IR successfully managed the implementation of JDMPP in one of the remotest UC of Washuk District. The IR started implementation of a 24 month Drought Mitigation and preparedness plan in July 2005, which was originally scheduled for completion in July 2007. Before the end of agreed time schedule the IR requested for a nine months extension till March 2008. The PPAF granted this extension on no cost basis. The IR reported completion of the project by end March 2008.

Based on the Implementation plan the project targets and the project achievements are presented in Table – 4.1 below:

Table – 4.1 Targets and Achievements

Sr. No.	Activities	Proposed No of Sub-Project Clusters	No. of Sub-Projects Completed
1	Khushkaba Bandat	46	645
2	Lift Irrigation Schemes	15	19
3	Deep Wind mills	2	7
4	Pipe Irrigation Schemes	10	10
5	Rainwater Ponds	11	0
6	Rangeland Management	1	0
7	Delay Action Dams	2	0
8	Spillways	0	5

The JDMPP in Washuk district in Balochistan within a span of 33 months completed all 87 projects initially agreed between the IR and PPAF. The construction of 46 Khushkaba Bandat means the PO proposed to construct Bandat (plural of Band) in 46 villages or settlements and each village may construct more than one band. A total of 645 small household level bands were completed during the project period. The IR sub-project implementation activities revolved around construction of earthen Khushkaba bands (95%) and lift irrigation schemes (3%). Combining pipe irrigation (1.5%) with the irrigation water management schemes leaving only 0.5% margin for any other activity and that is provision of drinking water through deep windmills. Village-wise list of sub-projects implemented is attached as Annex – 2.

4.4 Description of Project Interventions

4.4.1 Khushkaba Bandat (Rain/flood Water Harvesting)

Background: The livelihoods of people in Jangian DMPP area are still tied to the livestock and rainfed agriculture. Surface flow of water generated by spring and monsoon rains, has long been an important source of water for irrigation and drinking purposes. In Kharan, surface flow has been utilized very efficiently through construction of different water harvesting and spreading structures, in the past. Drought coupled with ground water depletion has adversely affected the agricultural crop



production dependent upon these water sources. The drought forced the rural communities to switch back to traditional water harvesting and spreading techniques to increase production of agricultural and fodder crops.

The IR started JDMPP just after the Drought in Kharan. Main objective of this initiative was assist the local communities in reviving the traditionally old system of rain/flood water harvesting called as Khushkaba Bandat. It was expected that construction of these water harvesting and spreading structures would increase productivity of agricultural and fodder crops and strengthen social bonding among community members and substantially contribute to the farm family income. The IR planned to construct Khushkaba Bandat in 45 rural communities.

Community-based Khushkaba Bandat (rain/flood water harvesting)-the paradigm of the past - has in it as much strength today as it ever did before. In early August, one got further confirmation of our conviction. Traveling from Kharan to Jangian in Washuk district one could see nothing but barren fields at least for 100 kms from Kharan to Killi Talong, the area suffered from drought - and suddenly we came across green and brown fields and realized that one had reached the Jangian DMPP area where a cluster of over 43 small villages have over the last 2-3 years built hundreds of Khushkaba Bandat (rainwater harvesting structures). Nobody needed to emphasize the importance of rain/floodwater harvesting any more. While the flood nullahs were more or less dead, the wells were still full of water, agriculture fields were rich and productive.

The situation in the villages not covered under the JDMP, is the same as if they are under drought conditions. They receive the same amount of flood and rain water, but their capacity to retain flood water is low and they are still suffering from shortage of drinking water even.

The JDMPP Bands: Following the traditional water rights distribution, the bunds were constructed in series in such a manner to utilize maximum run off water for agriculture. Construction of these earthen bunds followed the traditional water right distribution of local communities (Fig – 4.1). To maximize the use of run off water the IR team modified the height of these bunds from the traditional system of 2-3 feet high embankments to 5-6 feet. Such high embankments allowed for maximum water conservation and its later utilization for crop production (Fig – 4.2).

What makes rainwater harvesting such a powerful technology? Simply providing resource to the poor peasants to enhance the capacity of their agriculture fields to store and retain more flood water coming from the nearby Raskoh hills. Higher the retention period of flood water not only provide more moisture for food production but also recharge the ground aquifer for deep well that provided water for irrigation and drinking for human and livestock.

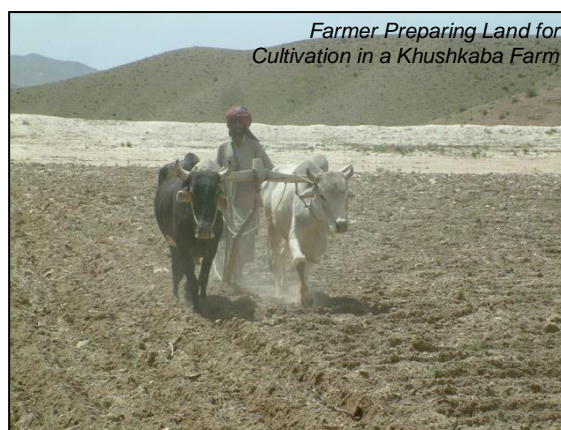


Figure – 4.1 Conceptual Plan of Khushkaba Bandat

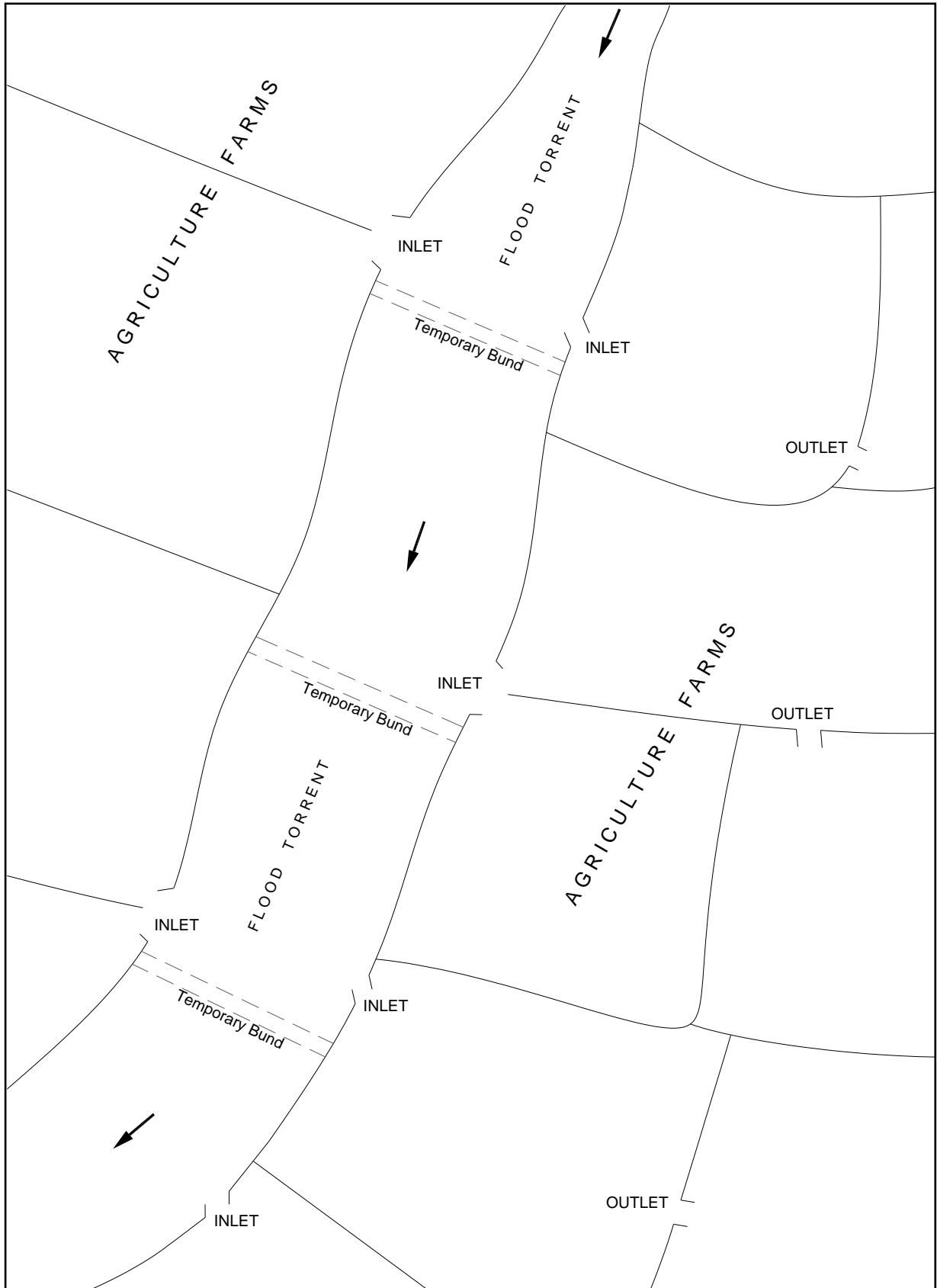
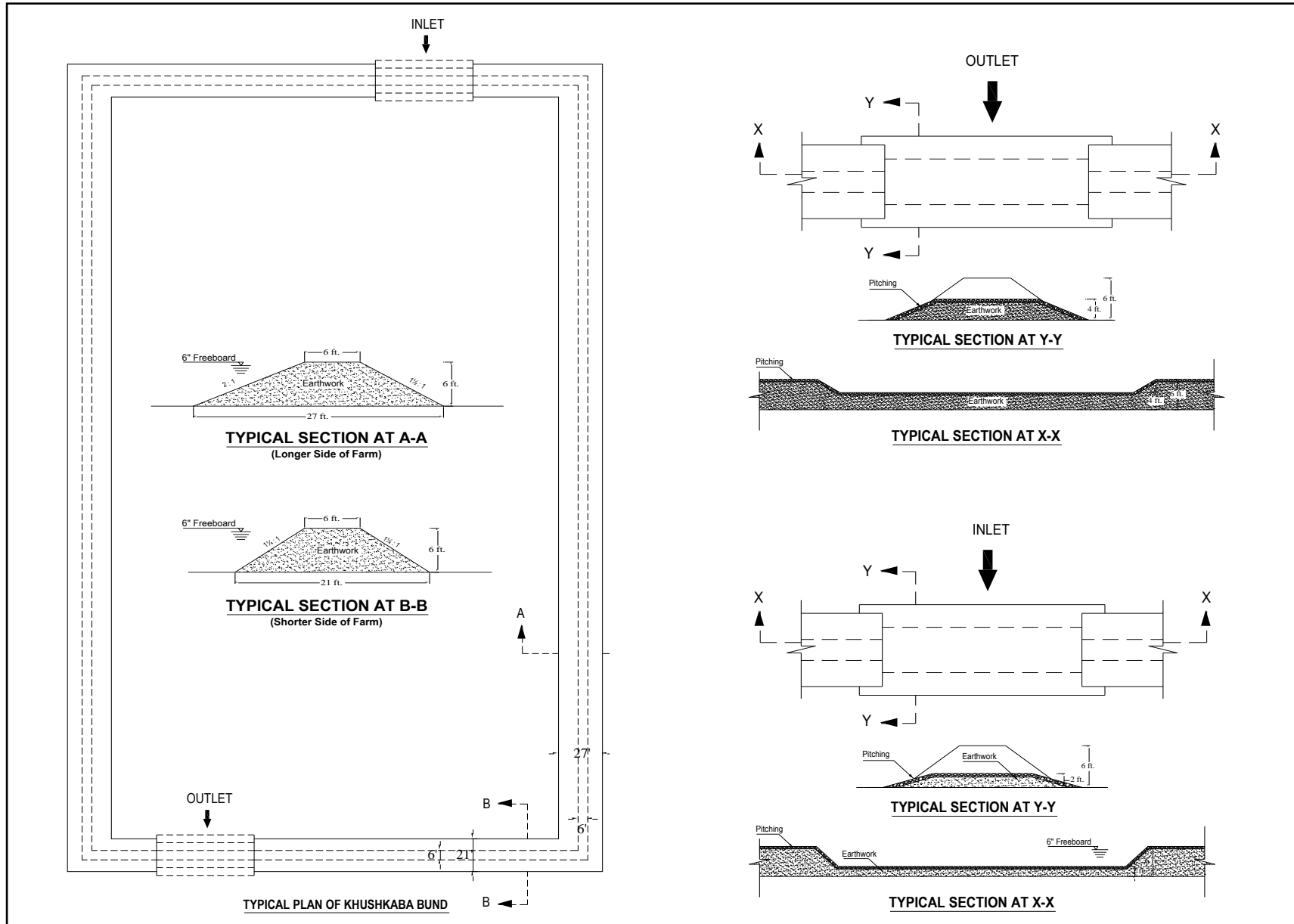


Figure – 4.2 Cross Section of Typical Khushkaba Bandat



Production of wheat, sorghum, Zeera and Mong-bean has increased manifold in communities where these structures have been constructed. This has given way to the establishment of sustainable livelihoods system in these communities. In many cases farmers have become self sufficient in wheat production. These bunds also proved important tool for providing drinking water facilities for human and livestock.

The Islamic Relief at the time of designing JDMPP was perhaps not fully realized the potential and importance of Khushkaba Bandat for the agriculture and pastoral communities in Jangian and proposed only 48 Khushkaba Bandat's for the entire UC. The IR report admitted that "with the passage of time, Jangian community needs and priorities were changed which affect the agreed interventions". It is also observed that the IR was also not sure on the design and cost of average Khushkaba Band. With almost the same cost the PO constructed 645 bands as against 48 planned initially.



Average Khushkaba Band covered around 6-7 acres of land and retains around 47 acre feet of flood water for a period of 5-7 days. Average Khushkaba Band costs Rs. 22,500 with 20% COs share of Rs. 4,500 and PPAF share of Rs. 18,000 only.

The total 645 Khushkaba bandits in 46 villages covered a total area of 4,500 acres of land. With average of 11 KBs in a village and each KBs with around parameters of 1,730 ft. The total water retention capacity in the JDMPP area is estimated at 19,500 acre feet. An analysis of the Khushkaba Band Irrigation System for five sample villages is given in Table – 4.2 bellow:

Table – 4.2 Situation Analysis of Khushkaba Irrigation

Village	No of Khushkaba Bands	Area Covered by KBs (Acres)	Parameters	Quantity of Water Retained (Acre Feet)
Khuda Bakhsh	16	207	45,117	770
Arz Mohammad	18	86	31,834	596
Ghani Bukhsh	16	188	46,500	718
Abdul Rahim	15	35	18,900	171
Abdul Qudus	7	164	27,370	678

The end product of this strategy has been the construction of 645 Khushkaba Bands flood/rain harvesting facilities to 1,800 households reclaiming about 6500 acres of land for agriculture. The KBs also serve as groundwater recharging ponds for drinking water dug-wells, deep wells, and windmills for the entire population of the project area.

4.4.2 Lift Irrigation Schemes

Lift irrigation schemes are based on diesel pumps and water transmission systems. These lift irrigation schemes have only been possible after the Khushkaba Bands recharged the ground aquifer and the water level reached at 200-300 feet. All the lift irrigation schemes constructed in the middle of Khushkaba bands. A lift irrigation scheme consists of a dug-well, suction pump, diesel engine and pipe network. The IR initially proposed construction of 15 lift irrigation schemes. By the end of the project a total of 19 such schemes were constructed. The lift irrigation schemes are benefiting 350 families (population 2,800).

Average lift Irrigation scheme costs about Rs. 450,000 with Rs. 320,000 shared by PPAF and remaining Rs. 130,000 by the COs.

4.4.3 Wind Powered Deep Well/Drinking Water Supply Systems

Under the technological innovation component of the DMPP the IR introduced wind mill technology in the JDMPP area. The wind mills are used for hauling ground water for human and livestock consumption. The wind mills are installed in those villages getting enough wind to operate the systems. These mills are installed on a dug-well with a suction pump. As the wind velocity in the project area is inconsistent it was essential to construct a ground storage tank with the system.

The IR initially proposed to introduce only 2 wind mills as experimental projects. The success of the initiative without any energy cost created demand from many other communities, as a result the number of wind mills in the JDMPP area was increased to 7.

The installed wind mills meeting the drinking water demand for 152 families (population 1,216) and around 1,600 animals.



4.4.4 Pipe Irrigation

The pipe irrigation schemes were implemented with those COs where the basic infrastructure for irrigation was available and during the drought the sources were dried up and dug-wells or bore-holes were abandoned. At least 10 such systems were rehabilitated and the traditional water collection mechanism was converted to the water efficient into pipe irrigation.

During the project implementation, although the demand for pipe irrigation systems was higher but CO lacked capacity to buy motor pumps which the IR was not allowed to provide by PPAF. IR, therefore completed the target of 10 pipe irrigation schemes. The pipe irrigation schemes enabled the peasants to grow cash crops and increase their income by maximizing the cropping intensity. A total of 187 families (population 1,496) benefit from these schemes.



4.4.5 Rain Water Harvesting Ponds

The IR earlier planned to construct 11 water ponds in the project area. During the implementation the organization replaced these target interventions to other priority needs of the local communities.

The IR presented two reasons for replacement of water ponds to other interventions;

- The District Government launched a program to construct Water Ponds in the drought affected areas under a federal government grant. These ponds were constructed free of any share by the beneficiary communities.
- The IR in order to avoid duplication and save the community share for other development activities altogether dropped construction of water ponds. Instead it diverted these funds in the construction of 5 wind mills for provision of drinking water and 4 lift irrigation schemes for agriculture.

4.4.6 Rangeland Management

As in the case of other PO implementing DMPPs, the IR also have shown reluctance in entering into those areas where the local COs do not have control and the sub-projects in which CO does not have direct stakes. In case of Jangian DMPP the rangelands in technical terms are at long distances and the Task Force was not willing to take any initiative in distant locations due to local tribal norms.

4.4.7 Delay Action Dams

In the post drought era, the priority of the local communities was to get more and more water for their own lands to grow more food for them and fodder for their animals. Any attempt or ideas to stop the flow of water in the way to their flooding nullahs was strongly resisted. The IR initially planned for the construction of 2 Delay Action Dams in the JDMPP. The staff as well as the Task Force initially identified a few sites for detailed technical investigations/ feasibility studies. The identification process met with strong resistance by the participating community organizations. The IR discussed the issue with WMC – PPAF and it

was agreed to drop the construction of Delay Action Dams and divert the funds to increase the number of Windmills and improve the Khushkaba Bandat's through inclusion of spill ways.

4.4.8 Spillways

Spillways were not a planned activity under the JDPMM. However IR constructed 5 spillways with the Khushkaba Bandat where the water flow was higher and it was felt that the flow will damage earthen dams.

5. SUMMARY COST OF JDMPP

5.1 Proposed Funds Allocation

The total cost of JDMPP was estimated at Rs. 40.75 million including Rs. 3.7 million as operational cost and Rs.36.07 million for implementation of sub-projects under the JDMPP. With 20% CO share the total cost of the project would be equal to Rs. 50.015 million. Besides the operational cost the proposed allocation of funds was shared by Khushkaba bandats (50%), Delay Action Dams (22%), Lift Irrigation Schemes (16%), Pipe Irrigation and Water Ponds (10%). For Rangeland Management and Windmills a small amount (2%) was also proposed (Figure – 5.1).

Table – 5.1 Proposed Disbursement of Funds by Activity *(Pak Rupees)*

Types	No	Total Cost	PPAF Share	CO Share
Lift Irrigation	15	7,500,000	6,000,000	1,500,000
Deep Well Windmills	2	535,000	428,000	107,000
Pipe Irrigation	10	2,040,000	1,632,000	408,000
Water Ponds	11	2,750,000	2,200,000	550,000
Khusk Kaba Bunds	46	23,000,000	18,400,000	4,600,000
Rangeland Management	1	500,000	400,000	100,000
Delay Action Dams	2	10,000,000	8,000,000	2,000,000
Operational Cost	1	3,690,000	3,690,000	0
Total	87	50,015,000	40,750,000	9,265,000

5.2 Actual Disbursement of Funds

Due to cost effective approach taken by the IR the actual total disbursement of funds reduced by 41%. The PPAF shared Rs. 23.97 million as against Rs. 40.7 million (Figure – 5.2).

Figure – 5.1 Proposed Funds Disbursement Ratio by Activity

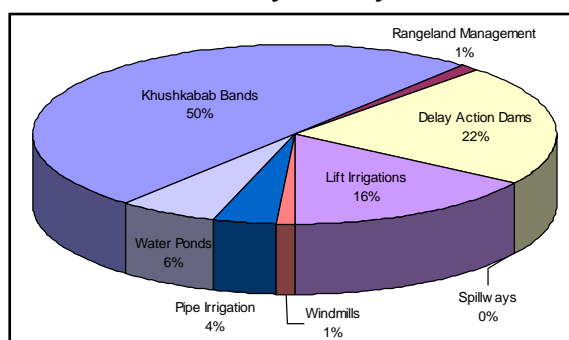


Figure – 5.2 Actual Funds Disbursement Ratio by Activity

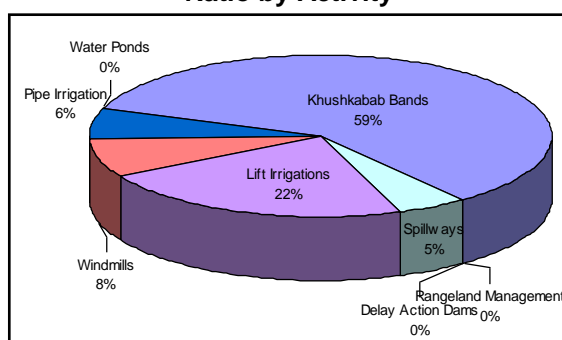


Table – 5.2 Actual Disbursement of Funds by Activity *(Pak Rupees)*

Types	No	Total Cost	PPAF Share	CO Share
Lift Irrigation	19	8,550,000	6,840,000	1,710,000
Deep Well Windmills	7	2,450,000	1,960,000	490,000
Pipe Irrigation	10	540,000	432,000	108,000
Water Ponds	-	0	0	0
Khusk Kaba Bunds	645	13,545,000	10,836,000	2,709,000
Rangeland management	-	0	0	0
Delay action dams	-	0	0	0
Spillways	5	265,000	212,000	53,000
Operational Cost	1	3,690,000	3,690,000	0
Total	686	29,040,000	23,970,000	5,070,000

6. PROJECT OUTCOMES

With all challenges and constraints since the start till completion of the project which rigorously affected the project implementation but along all the issues and hindrance project overall objective were achieved. The immediate outcomes are as under:

6.1 Organization of Community

Although it is a bona fide reality that working in a union council where literacy ratio is very low (estimated 5-10 %) was a challenging job for Islamic Relief and its team but with the commitment and strong mobilization strategy, now communities of Jangian are more organized as compared with the past. Now people of the area have formed 74 Community Organizations (1,484 membership) with the facilitation of IR and two CCO (Cluster Community Organizations). Although CO members conduct their regular meeting on monthly basis but most of them can't record it as nobody is literate in the whole village. Now they have their own CO savings in Bank and coordinate their issues and problems with their elected representatives and Government line departments openly. Total membership of these 74 community organizations is 1,484.

6.2 Capacity Building

Capacity building of the Community members on community organization management, record keeping, CPIs implementation, livestock management skills training, local resource management and health and hygiene promotion was also a successful integral part of the project. These capacity building activities enable the vulnerable communities of the Jangian to enhance their capacities to improve their well beings. Communities have developed lasting capacities for development as a result of the trainings arranged during the period. These trainings helped a lot to the members of community organizations in the improvement of livelihood.

6.3 Sustainability of Programme

The direct participation of beneficiaries through their Community Organizations (COs) permit some level of sustainability of programme interventions and possibilities for questioning anti-poverty policies.

6.4 Access to Clean Drinking Water

It was very laborious job for women and children to fetch water from open wells or open surface stored water during the hot days of summer and cold days of winter. After the installation of wind mills at the door step of the communities, 152 families area benefited from clean drinking water. Now women's spend more time with their families and their livelihood as they sew local embroidery which they sell out for a good sum.

6.5 Reduction in Dependency

People of Jangian are very poor and deprived. Local tribal and political leaders are dominant upon these marginalized people. After CO formation through proper social mobilization now communities are aware and their dependency upon influential has decreased.

6.6 Community Participation in the Programme

Through proper social mobilization, communities were involved in all steps of the implementation of schemes so contributions in kind and in cash have been ensured in all completed schemes. Communities have ownership and it will ensure the sustainability of these CPI's.

6.7 Improvement in Livelihood

The construction of Khushkaba Bandat and lift irrigation schemes not only helped in minimizing the impact of drought but also will help in maintaining the water balance. More importantly the project initiatives helped improvement in the livelihood and socio-economic condition for the entire project area. Raising the height of traditional bands from 2 feet to 5-6 feet increased the water collection capacity by 300%. Three times more water for agriculture increased wheat production from 120-130 kg per acre to 450-500 kg per acre.

The ensured availability of more water induces the farmers to grow other cash crops such as water melons and zeera that has already proved giving 5 times more profit than growing wheat.

7. LESSONS LEARNT

1. Implementation of infrastructure projects through social mobilization is an approach through which sustainability can be ensured but it was a big challenge to implement projects these in most deprived and remotest areas where most of the population is uneducated. The process which was in practice made several hurdles in the achievements of targets. More hard work was done to ensure participation of these poor families.
2. Participation of females in all interventions was not at a satisfactory level as nearly all of women of project areas were uneducated and culturally they were not used to participate in interventions more openly. As per local culture they are not allowed to go outside of home for any activity.
3. People of Jangian are living below poverty line and most of the population is dependent on livestock and agriculture which is associated with rain fall. Long spell of drought damaged these both sources ,so community 20 % contributions in Khushkaba Bandate (Spate irrigation) while 30% share in lift irrigation and Pipe irrigation schemes was very difficult for them. The reason many of the farmers could not be included in the Bandat program as they can not afford to arrange for their 20% share.
4. Recent heavy flood (June 2007) in district Kharan disturbed all the projects as all the projects activities were stopped for 4 months and total focus was on relief. Thus other developmental projects along with JDMP suffered as JDMP was extended for 9 months from (July 07- March 08). This long period disturbed the implementation plan of JDMP and few activities were not completed with the completion of project timeframe.
5. Tribally influential notables put a lot of pressure on Islamic Relief field management. They stopped the project activities for 2 months as they demanded to implement the project activities according to their provided list and will. Through different meetings, their behavior towards project was changed.
6. Religious leaders have a strong hold in the uneducated communities and whenever they want, can divert the views of the common masses according to their agenda. In union council Jangian and especially in Jalwar Cluster Islamic Relief team could not even move due to the opposition of these religious people. But after the several meetings Islamic Relief field management able to initiate the project interventions and community organization formation in the area.

8. RECOMMENDATIONS

The immediate outcome of the JDMPP is the local communities are relieved from the drought; their livelihood and socio-economic conditions are improved. The construction of Khushkaba bandats bring about an environment change from waiting for small flood water for growing some wheat for food to managing enough flood water for wheat and other crops. The groundwater is recharged and more and more people investing in boring deep-wells for irrigation.

It is therefore recommended that to quantify the impact of this initiative a third party impact assessment be conducted.

Part – II
ANNEXURES

Annexure – 1 List of Villages in Union Council Jangiyan

Sr. No.	Cluster Name	Village Name	Number of Households	Total Population
1	Jangian	Jangiyan	200	1340
2		Ali Murad	10	67
3	Shah o Geri	Shah o Geri	65	436
4		Pir Sabz	40	268
5		Amer Bux	15	101
6		Wazir Khan	25	168
7		Jan Muhammad	25	168
8	Talonk	Talonk	45	302
9		Dalonk	45	302
10		Rahija	6	40
11		Arz M. Zard	25	168
12		Khuda Bux	7	47
13		Rasool Bux	20	134
14		Mir. Ghulam Mustafa	20	134
15		Haji Mohim khan	15	101
16		Hazoor Bux	8	54
17		Abdul Hamid	25	168
18		Ramullah	10	67
19		Mulla Abdul Rehman	10	67
20		M. Hasan	25	168
21		Abdul Ghani	7	47
22		M. Abbas	7	47
23		Abdul Aziz	15	101
24		Sahib Khan	7	47
25	Jhalawar	Khir M.	45	302
26		Jhalawar	200	1340
27		K. Abdul Ghayur	20	134
28		Abdul Razzaq	10	67
29		Killi Waya	15	101
30		Abdul Majeed	20	134
31		Sayar Khan	7	47
32		Lal Muhammad	7	47
33	Urmagay Kona Kalat	Muhammad Rafique	20	134
34		Ghulam Sarwar	8	54
35		Khuda Bux	15	101
36		Ali Jan	10	67
37		Shah Jahan	25	168
38		Dur Muhammad	8	54
39		Kabul Khan	10	67
40		Muhammad Amen	6	40
41		Abdul Rafique	6	40
42		Mohammad Amen	7	47
43		Mulla Baidullah	40	268
44		Mulla Muhammad Arif	10	67
45		Master Niaz	20	134
46		Naik Muhammad	10	67
47		Muhammad Murad	6	40

Sr. No.	Cluster Name	Village Name	Number of Households	Total Population
48		Muhammad Akbar	8	54
49		Abdul Waheed	10	67
50		Ghulam Mustafa	15	101
51		Sour gill	40	268
52		Said Khancha	60	402
53	Pulangee	Shah Muhammad	50	335
54		Abdul Rahim	10	67
55		Rehmatullah	8	54
56		Mulla Abdul Hamid	6	40
57		Fateh Khan	6	40
58		Sakhi Sultan	10	67
59	Jozedar	Abdul Ghani	15	101
60		Noor Muhammad	30	201
61		Syed Shah Dad	10	67
62		Mulla Bux	20	134
63		Syed Khan	10	67
64	Khoicha	Naik Muhammad	30	201
65		Juma Khan	10	67
66		Ghulam Muhammad	10	67
67		Ghulam Rasool	10	67
68		Noor Muhammad	8	54
69		Abdul Khaliq	30	201
70		Samad Khan	15	101
71		Rashid	8	54
72		Ghazi Khan	10	67
73	Aloo	Muhammad Khair	15	101
74		Khan Muhammad	30	201
75		Khuka e Rahim	15	101
76	Zarnazcha	Abdul Wahab	40	268
77		Faqir Muhammad	40	268
78		Muhammad Arif	10	67
79	Cheel	Killi Mengal	8	54
80		Shamsudin	6	40
81	Urmagay	Killi Muhammad Gul	60	402
82	Soro	Qadoos Khan	50	335
Total			1,915	12,843

Annexure – 2 Number of Sub-Projects Completed by Village and Category

Sr. No.	Name	Khushkaba Bandat	Lift Irrigation	Windmill	Pipe Irrigation	Spillway
1	Abdul Khaliq	18				
2	Abdul Qudoos Soro	7				
3	Abdul Raheem	18		1		
4	Abdul Raziq/M Anwar	17	1			
5	Akbar Ghulam Sarwar	13	1		1	
6	Ameer Baksh	5		1		
7	Arz Mohammad Zard	20	1			
8	Ashraf Jalwar	7	1		1	
9	Ashraf Zard	20				1
10	Barkat Wafa	12				
11	Dur Muhammad	13				
12	Faqeer Mohmmmad	12				
13	Fateh Khan Chah	14		1		
14	Ghani Baksh	13				
15	Ghulam Mustafa Zard	27	1			1
16	Ghulam Rasool	7				
17	Judje Khuda Baksh	20	1		1	
18	Kabul	8				
19	khan mohmmad	16				
20	Kona Cha	21				
21	Laragee	10				
22	Mohammad Gul (1,2,3)	37	1			
23	Mohammad Jumah	16	1			
24	Mohammad Rafiq	21	1			
25	Moheem khan zard	13	1			1
26	Mohmmad Khair Bajak	20				
27	Molvi Obaidullah	12	1		1	
28	Moulah Baksh	8				
29	(2&1) Moulladad	33	2		2	
30	Naik Jumah Dirr	14				
31	Niaz Mohammad	15		1		1
32	Noor Mohammad	19	1		1	
33	Noorullah	19				

Sr. No.	Name	Khushkaba Bandat	Lift Irrigation	Windmill	Pipe Irrigation	Spillway
34	Reeja	9				
35	Saleh Mohammad	22	1		1	
36	Shahdad Naik Mohammad	14		1		
37	Shahjan	24	1			
38	(2&1) Shaogari	28	1			1
39	Sour Gill	14	1		1	
40	Sultan Mohmmad	12		1		
41	Thalonk	13		1		
42	Wazeer Khan	9	1		1	
Total		645	19	7	10	5

Annexure – 3 DMPP Beneficiaries by Type of Sub-Projects

Sr. No	Co Name	Project	Beneficiaries			Total Houses
			Male	Female	Total	
1	Sour Gill	Khushkaba Bandate	103	107	210	30
2	Abdul Rahim	-DO -	51	54	105	15
3	Shahjan	-DO -	110	114	224	32
4	Saleh Mohammad	-DO -	58	61	119	17
5	Mohammad Rafique	-DO -	103	107	210	30
6	Shaogari No-2	-DO -	51	54	105	15
7	Noorullah	-DO -	99	104	203	29
8	M.Akber, G Serwar	-DO -	69	71	140	20
9	Mohd Gul No I	-DO -	120	125	245	35
10	Killi Kona Cha	-DO -	103	107	210	30
11	Mohd Gul No 2	-DO -	117	121	238	34
12	Killi Abdul Khaliq	-DO -	72	75	147	21
13	Killi Thalonk	-DO -	103	107	210	30
14	Molvi Obaidullah	-DO -	89	93	182	26
15	Meyam Khan	-DO -	69	71	140	20
16	Mouladad	-DO -	86	89	175	25
17	Shaogari No-1	-DO -	69	71	140	20
18	Mohmmad Khair Bajak	-DO -	72	75	147	21
19	Killi Dur Mohd	-DO -	69	71	140	20
20	Killi Noor Mohd	-DO -	62	64	126	18
21	Kiili Judge Khuda Buksh	-DO -	103	107	210	30
22	Mohammad Gul-lii	-DO -	86	89	175	25
23	Arz Mohammed Zard	-DO -	86	89	175	25
24	M. Ashraf Zard	-DO -	69	71	140	20
25	Kabul	-DO -	48	50	98	14
26	Abdul Qudoos Soro	-DO -	55	57	112	16
27	Ghulam Mustafa Zard	-DO -	103	107	210	30
28	Razzik M Anwar	-DO -	103	107	210	30
29	Syed Shadad Nak M	-DO -	110	114	224	32

Sr. No	Co Name	Project	Beneficiaries			Total Houses
			Male	Female	Total	
30	Killi Faqeer Mohmmmad	-DO -	96	100	196	28
31	Killi Moulah Baksh	-DO -	56	57	112	16
32	Killi Ghani Baksh	-DO -	56	57	112	16
33	Killi Sultan Mohmmad	-DO -	79	82	161	23
34	Killi Niaz Mohammad	-DO -	96	100	196	28
35	Killi Ghulam Rasool	-DO -	51	54	105	15
36	Killi Wazeer Khan	-DO -	51	54	105	15
37	M.Ashraf Jalwar	-DO -	103	107	210	30
38	Killi Fateh Khan Chah	-DO -	75	79	154	22
39	Killi Ameer Baksh	-DO -	17	18	35	5
40	Killi Mohmmad juma	-DO -	54	58	112	16
41	Laragee	-DO -	103	107	210	30
42	Mohammad Wafa	-DO -	103	107	210	30
43	Reeja	-DO -	103	107	210	30
44	Naik Jumah Dirr	-DO -	103	107	210	30
45	Mullahdad No 2	-DO -	103	107	210	30
46	Killi khan mohmmad	-DO -	94	102	196	28
47	Sour Gill	Lift Irrigation	51	54	105	15
48	Judje Khuda Buksh	-DO -	51	54	105	15
49	Killi Shaolgari No 2	-DO -	51	54	105	15
50	Akbar Ghulam Sarwar	-DO -	51	54	105	15
51	Killi M. Rafiq	-DO -	86	89	175	25
52	Killi Noorullah	-DO -	51	54	105	15
53	Haji Dur Mohammed	-DO -	51	54	105	15
54	Killi Shajan	-DO -	51	54	105	15
55	Killi Asraf Zard	-DO -	51	54	105	15
56	Killi Arz M .Zard	-DO -	72	75	147	21
57	Killi Saleh Mohammad	-DO -	69	71	140	20
58	Killi Moheem Khan	-DO -	72	75	147	21
59	Killi Ghulam Mustafa Zard	-DO -	82	86	168	24
60	Killi Wazeer Khan	-DO -	65	68	133	19

Sr. No	Co Name	Project	Beneficiaries			Total Houses
			Male	Female	Total	
61	Killi Ashraf Jalwar	-DO -	86	89	175	25
62	Killi Mohammad Gull # 1	-DO -	86	89	175	25
63	Killi Sultan Mohmmad	-DO -	51	54	105	15
64	Killi M.Jumah	-DO -	51	54	105	15
65	Killi A.Raziq + Anwar	-DO -	67	73	140	20
66	Killi Moullahdad	Pipe Irrigation	51	54	105	15
67	Killi M.Ashraf Jalwar	-DO -	65	68	133	19
68	Killi M.Obaidullah	-DO -	67	73	140	20
69	Killi Saleh Mohammad	-DO -	67	73	140	20
70	Killi M.Akbar+Ghulam Sarwar	-DO -	67	73	140	20
71	Killi J.Khuda Baksh	-DO -	62	64	126	18
72	Killi Wazeer Khan	-DO -	86	89	175	25
73	Killi Mullahdad No 2	-DO -	79	82	161	23
74	Killi Noorullah	-DO -	51	54	105	15
75	Sour Gill	-DO -	40	44	84	12
76	Killi Shaogari-2	Storage Reservoir	51	54	105	15
77	Killi Fathe khan Chah	Wind Mill	62	64	126	18
78	Killi Sultan Mohmmad	-DO -	51	54	105	15
79	Killi Abdul Raheem	-DO -	51	54	105	15
80	Killi Ameer Baksh	-DO -	58	61	119	17
81	Killi Shahdad Naik Mohmmad	-DO -	58	61	119	17
82	Killi Niaz Mohammad	-DO -	86	89	175	25
83	Killi Thalonk	-DO -	103	107	210	30
84	Killi Ghulam Mustafa Zard	Spill way	17	18	35	5
85	Killi Ashraf zard	-DO -	17	18	35	5
86	Killi Moeem khan zard	-DO -	17	18	35	5
Total			6,182	6,462	12,642	1,806

Annexure – 4 Type of COs by Membership and Number of Households

Sr. No.	Name Of Community Organization	CO Type	Total Membership	No Of H/Hs
1	Fateh khan cha	MCO	23	31
2	Faqir Mohammad	MCO	37	35
3	Kona Cha	MCO	16	20
4	Master Niaz Mohammad	MCO	34	25
5	Talonk	MCO	27	55
6	Noor ullah	MCO	30	29
7	Abdul Qudoos (soro)	MCO	16	33
8	Abdul khaliq (Keera chah)	MCO	18	25
9	Ghulam Mustafa (zard)	MCO	14	21
10	Mohd. Ashraf (zard)	MCO	15	20
11	Maula Baksh(1)	MCO	20	15
12	Mohd.Murad	MCO	16	20
13	Abdul khaliq (jalwar)	MCO	44	50
14	Shaogari (1)	MCO	16	35
15	Ladgi	MCO	21	25
16	Muladad	MCO	15	12
17	Hagi Mohammad hassan	MCO	13	20
18	Alloo Hoshap (khan Mohd)	MCO	28	40
19	Ghulam rasool (loos)	MCO	21	17
20	Lad Gasht	MCO	14	33
21	Baninkan Zard	MCO	10	10
22	H.Meem khan zard	MCO	12	15
23	Sultan Mohd (khurmagai)	MCO	18	22
24	Dalo	MCO	24	25
25	Naik Jumma Khan Dir	MCO	15	20
26	Sor Gil Two	MCO	20	25
27	Mohammad Gul Two	MCO	32	25
28	Muladad Two	MCO	21	30
29	Shaowgari 2	MCO	22	35
30	Mulla Ubaid Ullah	MCO	26	50
31	Mohammad Gul (1)	MCO	35	35
32	Soro sher Mohmmad(1)	MCO	18	61
33	Khuda Baksh(Judge)	MCO	39	17
34	Abdul Majeed	MCO	12	30
35	Kona Cha	FCO	12	15
36	Dalonk	FCO	24	25

Sr. No.	Name Of Community Organization	CO Type	Total Membership	No Of H/Hs
37	Talonk	FCO	21	55
38	Faqir Mohammad	FCO	21	62
39	Mullahdad	FCO	24	33
40	Fateh khan cha	FCO	15	31
41	Haji Mohd Hassan	FCO	17	20
42	Sahogari 1 mohd ashraf	FCO	16	35
43	Shahogari 2 H. Raza Mohammad	FCO	19	250
44	Abdul Majeed (Jalwar)	FCO	17	30
45	Abdul Kaliq	FCO	16	25
46	Noor ullah Two jalwar	FCO	14	40
47	Abdul Razaq jalawar	FCO	15	15
48	Mohd Murad	FCO	11	25
49	Naiz Mohammad	FCO	14	25
50	Mohd Ashraf Zard	FCO	11	20
51	Killi Noor Allah One	FCO	19	40
52	Muhammad Gul (2)	FCO	14	25
53	Khan Mohammad (Aloo)	FCO	14	40
54	Sultan Mohammad	FCO	12	22
56	Abdul khaliq(Jalwar)	FCO	26	50
57	Soro Sher Mohammad	FCO	13	61
58	Ghulam Rasool	FCO	10	17
59	Judje Khuda Baksh	FCO	11	17
60	Dur Mohammad	FCO	12	10
61	Ghulam Mustafa Zard	FCO	11	20
62	Ladgi	FCO	20	25
63	Abdul Raziq Mohammad Anwar	JCO	37	15
64	Kabul(joint)	JCO	20	15
65	Mohmmad Gul 3(joint)	JCO	28	30
66	Mohd Khair Bajak	JCO	23	22
67	Barkat wafa	JCO	28	25
68	Noor Mohammd	JCO	32	11
69	Amir Bakash(joint)	JCO	16	16
70	Reeja	JCO	15	11
71	Mohd Akbar +Ghulam Serwar	JCO	32	25
72	Shadad+Naik Mohd(JCO)	JCO	32	25
73	Mohammad Juma Loos	JCO	21	15
74	Samad Khan(Kohi Chah)	JCO	27	18