



Rains & Flood Loss Assessment of District Khuzdar Balochistan

July, 2007

Prepared by:



**Participatory
Development Initiatives [PDI]**

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1. Introduction and Background

Khuzdar District of Balochistan which has been facing worst drought since last one decade has been ravaged by the floods last month. The rain which started in the last week of June 2007 brought destruction to the district. Human losses are heavy as the number of dead and missing people has reached at 250 in the district while the more than 47 dead bodies have so far been recovered from Naal Tehsil and 7 dead bodies from Moola River. More devastation has wrought by the breaking of Soorab Dam which flooded Naal River in Naal Tehsil of Khuzdar. As a result, more than 20 villages of Naal Tehsils have been completely wiped out from the surface of the land. The rains and floods have also devastated many villages and towns in Naal, Moola, Karakh, Wadh, Baghbana, Zeedi, Hazar Ganji and other areas of Khuzdar. Seven dead bodies have been recovered from Moola where many towns have been wiped out by the flooding. Thousands of local communities are homeless, shelter less without food and water in those areas.

Participatory Development Initiatives [PDI] being a responsible civil society organization considered its responsibility to support the vulnerable communities. In this connection besides providing immediate relief to the affected communities PDI conducted rapid Assessment of the rain and flood damages in the district.

1.2 Assessment Objectives

- To assess the damage to the humans, their livelihoods and infrastructure in the district
- To assess the level of vulnerability of the local communities as a result of heavy rains and floods in the district
- To suggest relief and rehabilitation measures for the flood and rain affected communities of the district

1.3 Assessment Methodology

PDI team used a participatory approach in data collection and analysis. The main techniques were (1) focus group discussion, (2) transect walk and (3) direct observation. Besides information collection from the field, the team also gathered information from the Secondary Data Sources such as district census reports, published material and tabulated data on disasters, Reported facts and figures from District Government. The baseline of all the Union Councils including Village Profiles of the target UCs was already available with PDI. During the Rapid Assessment Visits, these proved very handy and saved time in carrying out the assessment. All the data was collected compiled and analyzed to prepare this report.

2. Background of the Disasters in the District

Khuzdar is the third largest district area wise of Balochistan with an area of 43,261 sq. km and a population of 409,164 persons, according to the 1998 census. Population density is 10.54, lower than the provincial average. It has three tehsils and nine sub-tehsils. The District is among the most disadvantaged. Most of the land is locked within rocky hills, leaving only little patches amenable to agricultural activities in selected locations in Wadh and Baghbana tehsils. The main Quetta-Karachi highway passes through Khuzdar District, playing a lifeline role by making access to the main town possible.

Agriculture and livestock are the prime livelihood resources in Khuzdar district. Agriculture is practiced through karez, dug well rain-fed river and streams. The two Khushkaba and Sailaba methods of agriculture are common in the district. However, with reaching of electricity agriculture through tub wells is also fast replacing the other indigenous systems. Wheat is the main crop; however, pulses, barley and other low delta crops are also cultivated. In some areas the rice crop is also cultivated by the growers. The area having electricity facilities usually have orchards and vegetables. However, with the lowering of the groundwater orchards have been largely affected. The communities have also diverted to the cash crops like cotton and sunflower in some areas.

In the urban centers shops, daily wage labor and transport are the key livelihood activities. People also find daily agriculture labor in the areas like wadh, Moola etc during the crop harvesting etc. The communities from some remote area have also been adopting migration patterns migrating to the agricultural areas of Sindh during the crop harvesting seasons along with their families to earn livelihoods. Some families especially from the urban areas have also sent their youth to Middle East countries especially Dubai and Qatar for earning livelihoods.

The district is traditionally below the poverty line. It is food insecure due to lack of agriculture, scarce economic opportunities and difficult access to food. Almost all food requirements are met through commercial mechanism. The non-existence of roads has contributed to the paucity of resources and their marketability. The overwhelming reliance of the population on livestock has left them with no other means to survive. The human population trying to exist in this area is generally very poor, with the majority of them managing a subsistence livelihood.

The district has been facing slow onslaught of drought following the heavy rains in 1995 which had completely submerged its Moola Tehsil. This slow onslaught of drought had had its worst affect in year 2000 when media reported deaths of more than 70 persons in Arranji Sub Tehsil of the district due to continuous drought conditions. These drought conditions continued till 2007 when heavy rains and floods destroyed the major Tehsils and sub Tehsils of the district.

The drought had already ravaged the local communities, their livelihoods and the local economy. Starting from Arranji Sub Tehsil the drought had spread in almost all the

Tehsils of the district. Although the severe impact of drought was on the same Arranji Sub Tehsil, however, the drought spell has also spread to the other tehsils of the district including Moola and Saroona.

3. Early Monsoon Rains and Floods in Khuzdar

As the threats of severe drought were looming large on Khuzdar, all of sudden heavy rains broke out in the district along with the other districts of Balochistan. The early monsoon rains started in the district on June 24, 2007 and continued till the first week of July, 2007 unabated. As a result of heavy rains water in the whole district started flooding as a result of heavy hill torrents from the different hilly ranges of the district. To increase the miseries of the local communities at least two small dams were also broken as a result at least two Tehsils of the district were completely washed away as thousands of people marooned in the flood waters and more than 250 people were drowned away by the gushing waters. The severity of the rains and floods was so high that the Tehsil headquarter of Moola Tehsil was completely destroyed along with its police station, schools and other building and all the people living in the Tehsil have to take refuge on the nearby mountains. Similarly, as a result of the breaking of the Soorab Dam more than 20 big villages of Naal Tehsil were completely wiped out leaving thousand of people without home and shelter less. Out of the hundreds of local communities flown away by the gushing floods 47 dead bodies have so far been recovered from the flood waters of Naal and 7 dead bodies have been recovered from Moola Tehsil. Still more than 200 people are missing from the district.

4. Most Affected Areas of the District

Although the whole district was affected by the rains and gushing floods, however, the following Tehsils and their union councils have been largely affected as a result of the rains and floods:

Tehsil /Sub Tehsil	Affected Union Councils	Affects	No of Affected Households
Naal	Naal, Dharnali, Garakh, Greeshah baleena, Greeshah Zareena,	Mass Displacement, Human Losses, Livelihood losses, infrastructure losses	2500
Moola	Sadar Kharzan, Meenaloo,	Mass Displacement, Human Losses, Livelihood losses, infrastructure losses	1700
Khuzdar	Baghbana-1, Baghbana II, Zeedi 1, Zeedi II,	Partial Displacement, Human losses, livelihood losses, infrastructure losses	3400
Zahri	Zehri, Ghat-1, Ghat-2	Partial Displacement, Human losses, livelihood losses, infrastructure losses	900

Kharakh	Bhalonk, Sadar Abad, Sunchakoo,	Partial Displacement, Human losses, livelihood losses, infrastructure losses	700
Wadh	Dancer, Barkhalo, Lopop, Sadar Wadh	Partial Displacement, livelihood losses, infrastructure losses	200
Subtotal			9400

5. Losses as a Result of Rains and Floods

5.1 Human Losses

More human losses have occurred in Khuzdar District than any other district of Balochistan. The key cause of the human losses was the sudden breaking of Soorab Dam, coming from Kalat District. Following the construction of the dam at the upstream the flow of Naal River had considerably reduced. Therefore, a large number of people were living on the banks of the Naal River to be close to the water resources which they used for drinking and agriculture purposes. However, following the continuous three days of rains, the Soorab Dam was broken which brought gushing floods. These floods not only wiped out more than 20 villages of Naal Tehsil but more than 200 people of those villages were also drowned away by the river.

People soon after being hit by the flood and becoming homeless started searching their dear ones in the river waters. So far 47 dead bodies have been recovered. Local Administration has also confirmed those deaths. However, still more than 150 people including women, children and men are missing and people are searing the dead bodies of those people. In such search they have even reached up to Lasbella District to find the dead bodies of their dear ones.

The Killing Fields Confirmed List of the Persons Died in Some Villages of Naal Tehsil

S#	Name of the Village	Tehsil	Persons Died
1	Tayghaab	Naal	58
2	Dhal Cross	Naal	24
3	Dhal Channal	Naal	2
4	Hurri	Naal	8
5	Ablo	Naal	1
6	Daat Naal	Naal	2
7	Kharmistan	Naal	5
8	Naseeb Abad	Naal	3
9	Khandadi	Naal	10
10	Small Maroki	Naal	8
11	Damb Kambarani	Naal	9
12	Faiz Abad	Naal	5
13	Hazar Ganji	Naal	12
14	Nabdada	Naal	1
15	Shapach	Naal	2
16	Sehro	Naal	6
17	Lop Dncer	Naal	8
18	Patki	Naal	3
19	Kunj	Naal	4
20	Kori	Naal	2
21	Gatuk	Naal	4

Source: Village level survey by PDI team. Also confirmed by Tehsil Nazim Naal

Similarly, as many villages including the Tehsil headquarter of Moola Tehsil was wiped out by flood local communities' claim that more than 50 people of this Tehsil are also missing. There are five rain fed rivers in this Tehsils which brought flood waters. So far 7 seven dead bodies have been recovered from various parts of Moola Tehsil. The rest are still missing and the local people are trying to find the dead bodies of their dear ones in the waters of different rivers of Moola Tehsil.

5.2 Collapses of Houses

As a result of heavy rains and flooding majority of the houses of the local communities have collapses. According to PDI Survey 4000 houses have completely collapsed in the most affected areas. As a result not only they have lost their belongings, but are also compelled to live under open sky, without any shelter. The shelter less people are compelled to live on the uplands, elevated places as well as on the mountains to save them from further losses.

Major house destruction losses have occurred in Naal tehsil where almost 80 to 90 houses have either completely or partially damaged making it unable for the owners of those houses to live under the roof of those houses. The main damage to the houses have occurred due to the breaking of the Soorab Dam which brought gushing floods and wiped out more than 20 villages of Naal Tehsil. As a result more than 99 percent houses of those villages have been wiped out while in other areas of Naal the house destruction losses is around 80 to 90 percent.

Besides the heavy losses of house collapse in Naal the other Tehsil where also the houses collapses are increased in number is Moola Tehsil, where also besides almost complete destruction of the buildings, bazzars and the houses of its Tehsil head quarter Kharzan, more than 90 percent houses have collapsed in almost all the major villages of the Tehsils, which has rendered thousands of the local communities homeless.

5.3 Destruction of Food Resources

Local communities in Khuzdar have already been facing severe shortage of food due to continuous drought conditions in the district. Since last 10 years there is been drastic reduction in the agriculture production and the livestock has also largely perished. However, whatever food grain was available with the local communities has degraded as

Hundred Percent House Collapse				
List of some of the villages of Tehsil Naal where 100 percent houses have collapsed				
S#	Name of the Village	Tehsil	Total Houses	Houses Collapsed
1	Tayghaab	Naal	100	100
2	Dhal Channal	Naal	45	45
3	Hurri	Naal	80	80
4	Tabo	Naal	800	800
5	Khandadi	Naal	45	45
6	Damb Kambarani	Naal	154	154
7	Faiz Abad	Naal	45	45
8	Hazar Ganji	Naal	500	500
9	Lop Dncer	Naal	100	100
10	Kunj	Naal	30	30

Sources: Village Survey by PDI Team

a result of continuous rains for almost a week in the district. According to PDI survey almost 80 to 90 percent house holds have lost their foods resources in six Tehsils of Khuzdar District. As a result they have nothing to eat and large number of villagers including their women and children are facing starvation in such situation.

5.4 Degradation of Water Resources

Wells, streams and the ponds and tube wells are the key sources of drinking water for the local communities of Khuzdar. However, the rains and floods have almost completed damaged those sources. In six Tehsils of Khuzdar almost all the wells have been filled with rain and flood water and filth. Besides their structures have largely damaged as a result their water is no fit for consumption. Similarly, streams and rivers have brought large scale dusty and degraded flood water and the ponds have also mostly submerged in the degraded flood water making the water of those rivers and ponds unfit for the human consumption. The level of the damage to the tube wells in some areas can be judged from the fact that only in Moola Tehsil 3000 Tube wells have been destroyed due to the floods and rains and are not in the running condition. This has also badly affected the drinking water sources of the local communities. The local communities are compelled to drink unhygienic rain water which is creating more and more diseases for the local communities especially to the children and women.

5.5 Livestock Losses

Livestock has been one of the key livelihood resources in Khuzdar. Similarly, livestock grazing is the biggest land use in the area. Due to aridity, the vegetation has the characteristics typical of arid or semi arid regions. These rangelands serve as the production base for livestock, which in turn supplies milk, meat for human consumption and other products such as wool, hair, hides and skins. The major livestock species raised in the area are sheep and goats.

The drought had left very little grazing available, particularly for small ruminants. Furthermore, continuously repeated grazing on the available vegetation had caused irreparable damage to the vegetation in the area. The constant nutritional stress had lowered the resistance of the animals and diseases were common. The shortage of drinking water for livestock in most of the area was another cause of the diseases. As a result majority of the livestock had perished due to the continuous drought

The recent rains and floods have inflicted final blow to the livestock in the district. Whatever remnants of the livestock, they died as a result of rains and floods. According to PDI team survey almost 90 percent of the livestock in the rain and flood areas has died. As a result in the rain and flood affected areas the availability of meat, milk and milk-products, as part of the family diet, has either totally disappeared or drastically reduced adding to malnutrition and poor health, particularly in children and nursing mothers.

5.6 Agriculture Crop Losses

Agriculture and other related livelihoods have also receiving severe damage as a result of continuous rains in the region. The torrential rains have had disastrous impact on the standing crops which were on the hundreds of acres in flood-hit areas. Thousands of acres of fields have also been wiped out along with seasonal crops. Cotton, Tomato, water melon, melon and other crops and fruits have completely been destroyed. Most loss to the agriculture has occurred in Baghbana and Wadh areas of Khuzdar. Both the areas had been known as food and fruit basket for Khuzdar district and other areas of Balochistan. With its length of 19 km and width of 22 km Baghbana has been a valley of orchards. Apple, grape, peach, apricot orchards have been the key orchards of Baghbana besides different kinds of food and cash crops. Similarly, due to the facility of electricity, there has been large number of tube wells in near Wadh town the Tehsil headquarter of Wadh Tehsil. Different crops and orchards were there as a result of the water availability from the tube wells. However, all those crops have completely been damaged and the people have lost their agriculture crops worth millions of rupees. This has also increased in food insecurity and increase in the prices of the food of daily consumption in Khuzdar district.

6. Key Findings of the Assessment

- Food is the primary need for the affected communities. The local communities have lost their all food resources in the rains and flooding and are unable to purchase food stuff due to lack of incomes from any sources. Food resources of **9400** households in Six Tehsils have completely perished bringing those households at the verge of severe food insecurity and starvation which can threaten the lives of the members of those households. Those are mainly poor and cash starved families facing drought conditions since last ten years. Therefore, there is no possibility for them to purchase food items, which is also exposing them to further vulnerability and food insecurity
- Majority of those households have also lost their houses as their houses have collapsed and members of those houses holds are taking refuge on the elevated places, broken roads or on the nearby mounts. This is threatening the health and hygiene of all the household members especially the women and children of those homeless communities. In the case of more rain those homeless communities would face severe onslaught of the disaster and their lives would be under constant threat.
- All those affected communities have lost their access to safe drinking water as the whole area has been filled with flood and rains waters. Therefore, in the case of non availability of safe drinking water and the consumption of unhygienic water, the likelihood of water born diseases has increased many folds and in fact during this survey many cases of the water born diseases were reported among the affected communities.
- Livestock was one of the key sources of food intake for them as they consumed the milk as well as the meat of their livestock. However, majority of the livestock had already perished during ten years of drought. The remaining livestock has been badly hit by the floods and rains. In many areas the carcass of the livestock are visible which show that a large number of the remaining livestock has also

died which has deprived those communities from one of the coping mechanisms of preventing food insecurity of the family members. While losing milk the small children have become more vulnerable in the area.

Emergency Requirements

About work on emergency basis we believe that the affected families should be provided safe shelter, proper food, potable water, medicines and other essential items till the problem exists. Milk for children and vaccination of women should be ensured on priority basis to save their precious lives. Musafa should be made available to the victim families to keep the drinking water safe for them. In the present unhygienic conditions these affected families will again face major problems of diseases. In this regard temporary latrines with reasonable items including soaps should be setup at each relief camp. Cooked food for the entire people should be provided timely. Mats should be provided to the affected and spray should be ensured at their camps/ temporary living areas as preventive measurements against flies, mosquitoes and other poisonous insects. Crockery should be made available for the families.

- Besides livestock agriculture was the key source of livelihoods in the district. Especially after the facility of electricity in some areas close to Khuzdar city those areas thanks to the installation of tube wells had emerged as food baskets for the whole district. Those areas were providing grain, vegetables and fruits to the whole district. Besides the surplus production was even sent to Karachi and Quetta market for sell. Those both the food basket areas including Baghbana and Wadh have emerged as pools of water due to the rains and floods and all the crops have completed been washed away in the floods. Besides, a large number of communities were also involved in subsistence agriculture on the Khushkaba and Sailaba areas of the district Khuzdar. Those floods have not only washed away the crops of Khushkaba and Sailaba areas but have also large damaged the crop lands. Gushing waters have torn apart the leveled lands and has also broken down the small bunds which the local communities develop to arrest rain waters for their lands and crops. As a result those communities would not be able to re cultivate crops on those lands for at least coming one to two seasons.
- With standing water both in their dwellings and agriculture lands, health and hygiene conditions were very poor and already cases of diarrhea and malaria are on increase. Having lost their drinking water resources as well as earthen water pots, the affected communities are facing worst drinking water shortages. According to PDI assessment team observation the villagers are compelled to consume unhygienic and unsafe saline water due to non-availability of water. They also face problems in fetching water even from far-flung areas due to non-availability of water pots.

7. Recommendations

7.1 Emergency Needs

- There is severe threat of severe food insecurity and malnutrition among the affected communities, which may led to illnesses and consequent deaths. Therefore, there is dire need of initiating food distribution among the affected families.

- Safe drinking water sources are not available. Therefore, there is strong need of providing safe drinking water to the communities along with the water carrying pots especially hygienic jerry cans.
- Majority of the local affected households are living under the open sky amidst the threat of more rains and floods. They need immediate plastic sheets as well as tents
- Health hazards are also on increase among the affected families due to unsafe food and water consumption. Therefore, there is need of providing them medical kits and other medical facilities as well as health and hygiene kits and facilities on emergency basis.

7.2 Rehabilitation

- Destruction of the houses of the affected communities is a greater challenge for those communities which would face worst winter after the continuous summer monsoon rains. There is a need to support the communities in building their houses during the phase of the rehabilitation of those affected communities.
- Livestock restocking for the most vulnerable families largely depending on the livestock who have lost their livestock during almost a decade of drought and the recent rains and floods
- Preparation of the fields for the next crops through land leveling and construction of Bunds on those fields to capture rainwater for moister and groundwater stability of those *khushkaba* lands. It is because all the leveling of their lands and the bunds of those lands have completely broken and washed away during the rains and the floods
- Provision of certified seed for the coming crops
- Construction of water tanks and the rehabilitation of the destroyed well as tube wells
- Digging of wells and provision of hands pumps to fetch water from those wells
- Rehabilitation of the previously dug wells and previously installed hand pumps

7.3 Disaster Preparedness

- Organization of the communities through disaster preparedness and response groups
- Disaster preparedness and response capacity building of the local communities including men and women
- Preparedness of local level disaster management plans and linking those plans with the district level plans
- Capacity building of the local government officials / elected representatives
- Capacity building of the civil society organizations and activists in disaster management planning / preparedness
- CCB Formation at the local community level to participate in the local community development endeavors

7.4 Sustainable Livelihoods

7.4.1 *Community Development:*

- Mobilization and organization of the local communities and developing their capacities for sustainable livelihoods and natural resource management through the drought as well as flood conditions in the area
- Development of alternative livelihoods including modernization and marketing of Pesh work, modernizing and marketing of local Brahui/ Balochi Embroidery
- Development of local community level poultry farming and capacity building of the local communities
- Community based development and management of health and education facilities
- Pilot plantation of olive and other beneficial trees
- Education and health development plans and proper implementation

7.4.2 *Advocacy and Lobbying:*

- Advocacy with the Union Council, tehsil and district government for the preparation of disaster management plans
- Engagement with the local government by preparation of participatory District Disaster Management Plan with the help of civil society [for example, preparation of alternative civil society draft of District disaster management and creating ownership and acceptance of the same draft with the district government
- Advocacy with the provincial government for the development of provincial disaster management plans and framework and implementation of the same framework
- Advocacy with the government at district as well as provincial level for the sustaining livelihoods of the local communities by encouraging and facilitating alternative livelihoods, sustainable, effective and efficient use of water , land and other natural resources in Khuzdar and other district of Balochistan
- Community based research initiatives for local level and indigenous disaster resistance mechanisms, sustainable livelihoods and community based management of natural resources
- Local level civil society organizations capacity building for community based organizational management and advocacy and campaigning mechanisms