

**Rapid Assessment of Flood Affected Areas in  
Balochistan**



05 August 2010

## **1. Introduction**

Pakistan is facing a difficult situation where a large number of people in all provinces are facing post flood crises and heavy rains are continuing in most areas including Balochistan. The Balochistan government has fewer resources as compared to the other provinces. The capacity of the people of Balochistan to cope with such a calamity is the low as compared to other provinces, keeping in view that it is the most deprived province of Pakistan. It is evident that owe to the scale of disaster a major humanitarian response is required. to assist the people to return to a normal live.

The most recent and on-going torrential monsoon rains are resulting in flash floods in Balochistan leaving behind large scale destruction. This assessment is an effort to provide timely information on the needs of the population affected by the floods and recommend appropriate humanitarian interventions. Balochistan is an arid zone having long terrain of dry mountains all round. The province is underdeveloped by all standards. It is Pakistan's largest province with 43% lans mass of the entire country, as well as it is the poorest and least populated.

The province is prone to natural disaster and endures frequent droughts, earthquakes and flash floods. Since 20<sup>th</sup> July 2010, a series of flash floods has struck four districts of Balochistan i.e. Barkhan, Kohlu, Naseerabad and Sibi. The death toll in Balochistan runs into hundreds. Immediately after the calamity, UN-HABITAT set up a team to conduct a rapid assessment in the two most affected villages of Sibi District. UN-HABITAT requested Tameer-e-Khalaq Foundation to continue the assessment in another four districts.

## **2. Background**

A team of UN-HABITAT reached Quetta on 24 July 2010 and held meetings with Chairman NDMA, PDMA and UNHCR. The PDMA meeting was aimed at bringing together potential stakeholders for sharing information and the situation about the damages brought by recent floods in four districts of Balochistan. It was decided in the meeting held at UNHCR that an immediate assessment of the affected areas was required for immediate response and long term development planning, the responsibility was assigned to UN-HABITAT. Chairman NDMA chaired the meeting with UN-HABITAT, UNHCR, UNICEF, WFP, Red Crescent, CRS, SPO, WESS, SMART, Taraqee Foundation, South Asia Partnership PAK, TEAM and some other local NGOs and asked all organizations to intervene according to their capacity. . In the same meeting, UN-HABITAT was asked by the chairman NDMA for immediate provision of model houses (mud houses) and technical assistance for reconstruction of damaged houses in the affected areas, in view of the fact communities will start construction as soon as the rains stop.

## **3. Objective of the assessment**

Shelter was the main focus of UN-HABITAT rapid assessment along with water and sanitation, infrastructures and other facilities such as schools and BHU.

The main objectives of the assessment was to;

- find the exact number of completely and partially damaged houses in the flood affected areas
- what was shelter condition of affected population after flood and where people were staying,
- collect information on immediate needs of the affected population in water and sanitation
- Assess the damages to infrastructure i.e. health facilities, schools, roads, bridges, culverts, water supply schemes and retention walls.

#### **4. Geographical scope of the assessment**

The assessment has been carried out in four districts; i.e. Barkhan, Kohlu, Naseerabad and Sibi. 125 villages (*list attached at Annex-A*) were surveyed in six tehsils of these districts by field teams of UN-HABITAT and Tameer-e-Khalaq Foundation.

#### **5. Methodology**

Eight teams were formed, comprising of two enumerators in each team (total 16 enumerators) and two teams assigned in each district, completed the assessment. Considering the nature of emergency and the need to respond immediately on the basis of the assessment, village level clusters were formed. A community level survey form was designed (*Annex-B*) and used.

##### **5.1 Selection of areas to be assessed**

The villages were identified in consultation with the district administration and almost all the affected areas were surveyed except some areas of District Naseerabad which were inaccessible.

##### **5.2 Interviews and group discussions**

The assessment teams conducted structured interviews with the village clusters. In over 70% cases, representation of at least 40% of the households was ensured. In other cases, where families had migrated to other villages for seeking shelter, representation of households was 20-30%. There were some cases in Naseerabad where representation was below 20%, because the affected villages were not accessible. The focused groups comprised villagers belonging to all

walks of life. Presence of teachers, government servants and students was specifically ensured.

## 6. General Findings of the Assessment

### A) Housing

The damages in housing sector are summarized in the following table:

District	No. of affected villages	Total number of houses	Totally damaged houses	Partially damaged houses	% of damaged houses by District
Barkhan	37	1,190	455	375	69%
Kohlu	10	364	224	49	20%
Naseerabad	28	1,174	757	341	62%
Sibi	50	6,070	3,830	836	77%
<b>Total</b>	<b>125</b>	<b>8,798</b>	<b>5,266</b>	<b>1,601</b>	<b>–</b>

### B) Shelter

District	No. of surveyed villages	No. of shelterless families	No of families that are in their villages	No of families in collective centers
Barkhan	37	516	414	44
Kohlu	10	230	166	40
Naseerabad	28	888	534	15
Sibi	50	4,845	3,873	112
<b>Total</b>	<b>125</b>	<b>6,479</b>	<b>4,987</b>	<b>211</b>

The large majority of families, 80%, did not migrate to other villages and are in their place of origin.

The assessment included assessing preferences for shelter solutions.

District	Preferred shelter solution	
	tents	shelters
Barkhan	19%	81%
Kohlu	28%	72%
Naseerabad	41%	59%
Sibi	39%	61%
<b>Total</b>	<b>32%</b>	<b>68%</b>

When communities were asked regarding their preferable shelter solution, some indicated tent as a preferable solution keeping in view that a tent can be arranged within a short span of time

### C) Water and sanitation

District	No. of surveyed villages	No. of liter of water available/person	% of people access to latrines
Barkhan	37	8	0,05
Kohlu	10	7,95	2,86
Naseerabad	28	17,32	31,96
Sibi	50	8,76	6,1
Total	125	-	-

Considering the Sphere standards of 20 liter/person/day, all affected villages do not have access to sufficient water supply. Field teams observed that communities are using contaminated water which can result in epidemic of diarrhea and other communicable diseases.

### D) Infrastructure

The overview of destruction of infrastructure is given below:

District	Roads (Kms)	Bridges	Water Supply Schemes	Small Dams	Health Facilities		Schools	
					Fully Destroyed	Partially Destroyed	Fully Destroyed	Partially Destroyed
Barkhan	12	9	3	0	0	6	2	3
Kohlu	8	5	7	0	0	0	2	4
Naseerabad	8	1	4	10	0	1	1	8
Sibi	24	5	10	24	3	9	4	17
Total	52	20	24	34	3	16	9	32

## 7. Field Observations

The field teams observed that all affected communities had lost all their food stock.

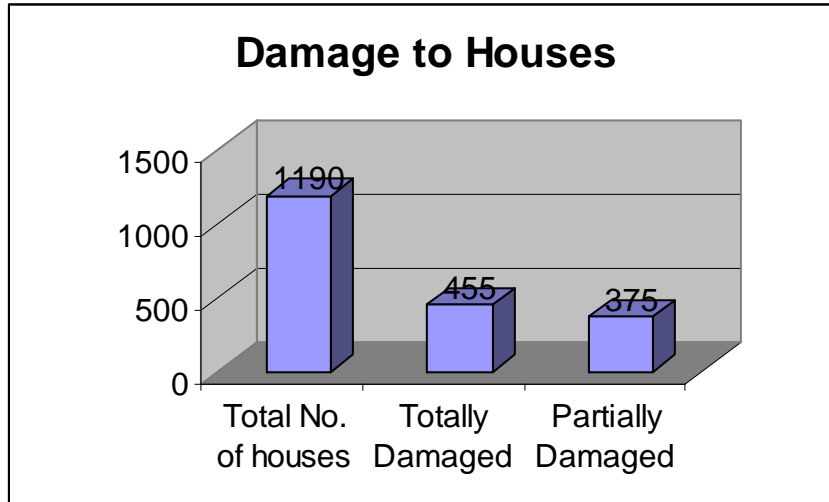
The district-wise findings of the assessment are presented below.

## 8.1 District Barkhan

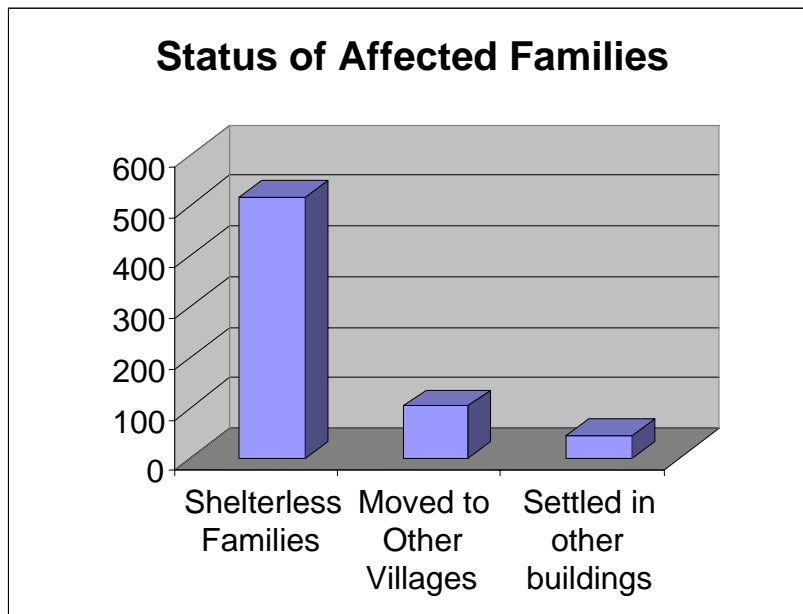
### 8.1.1 General assessment of damages

No. of Villages Assessed: 37

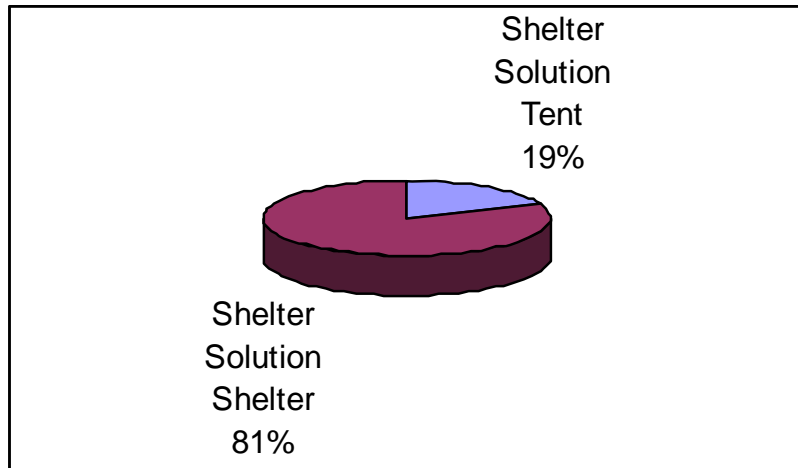
Population of affected areas: 9715



### 8.1.2 Status of Families



### 8.1.3 Preferred Shelter Solution



### 8.1.4 Infrastructure Damage

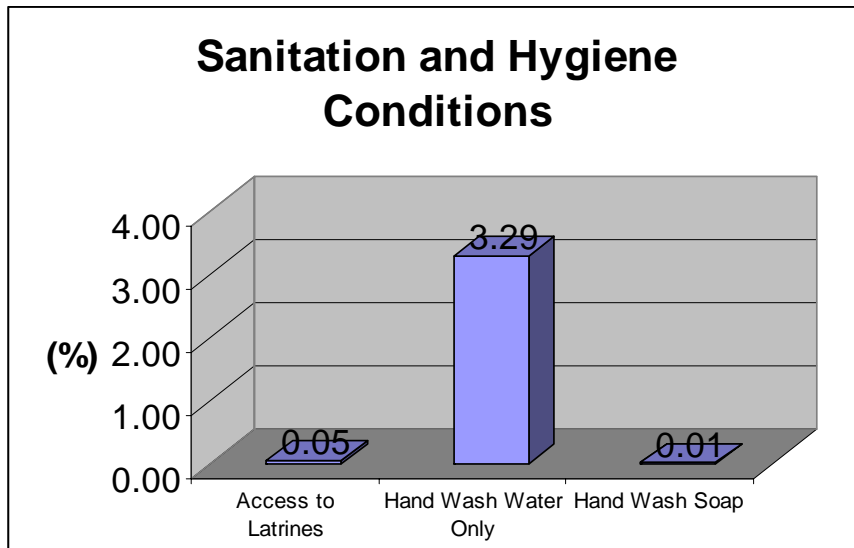
Roads (KM)	Bridges	Water Supply Schemes	Drains	Small Dams	Retaining Walls (feet)
12	9	3	0	0	0

### 8.1.5 Water Availability

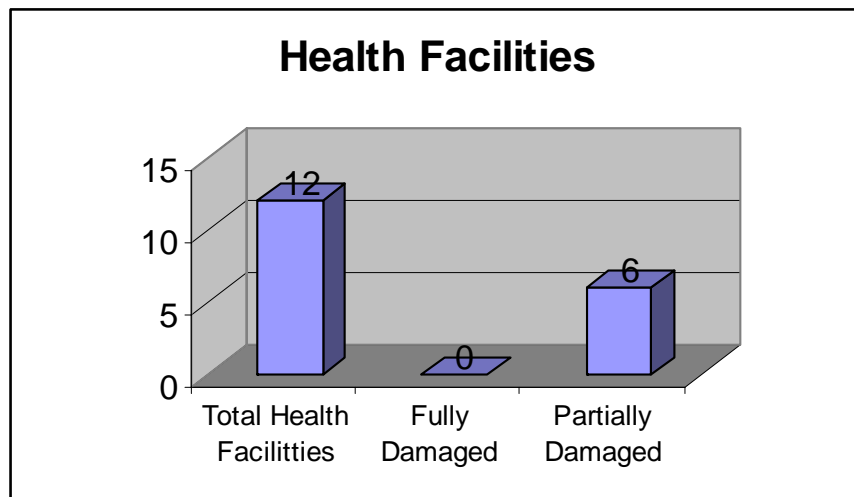
Drinking Water Sources includes: Rain Water Collection, Tube wells,, drinking water supply schemes and water is outsourced as well.

Water availability per person (in liters) ranges from 2-18 liters. The average water availability is 08 liters.

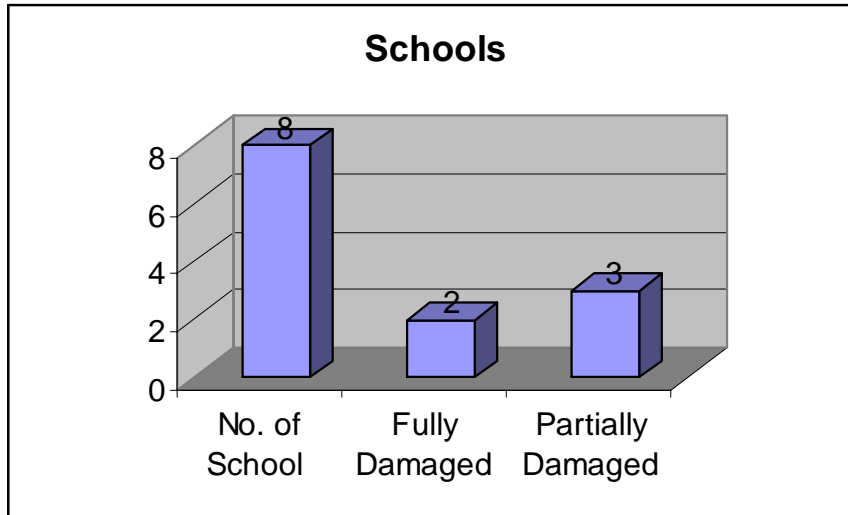
### .1.6 Sanitation and Hygiene Conditions



### 8.1.7 Health Facilities



### 8.1.8 Schools

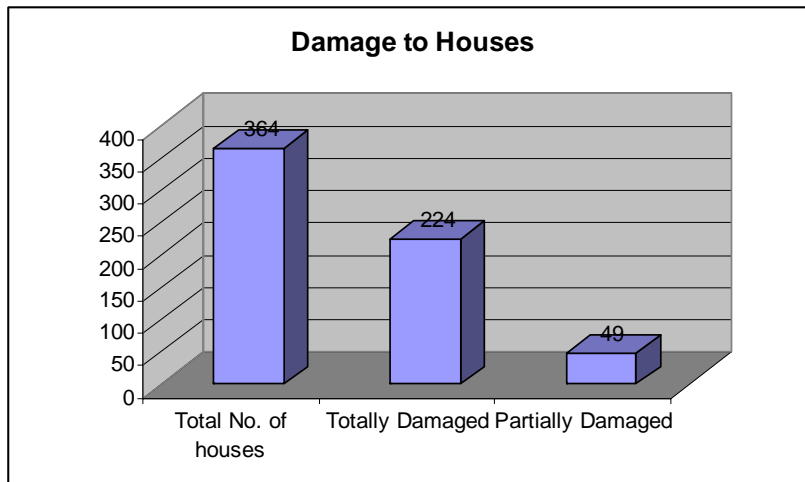


## 8.2 District Kohlu

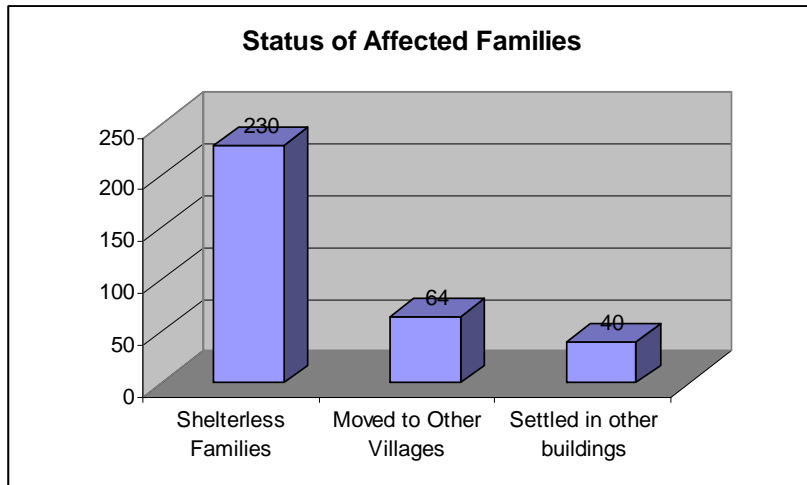
### 8.2.1 General assessment of damages

No. of Villages Assessed: 10

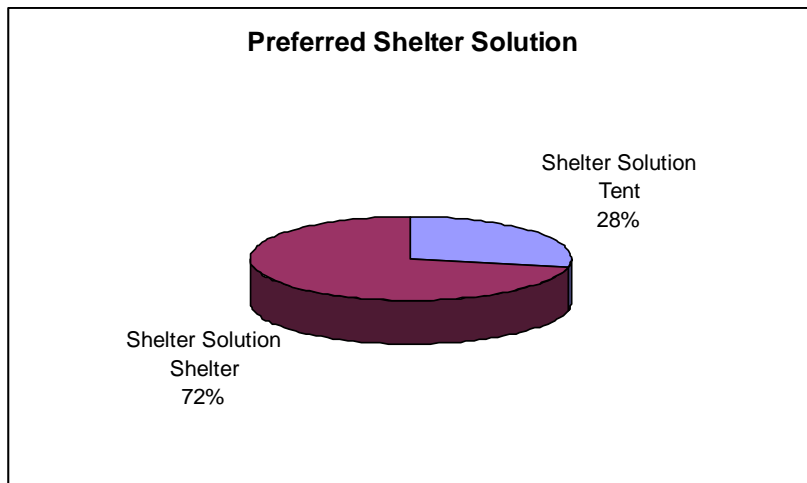
Population of affected areas: 2950



### 8.2.2 Status of Affected Families



### 8.2.3 Preferred Shelter Solution



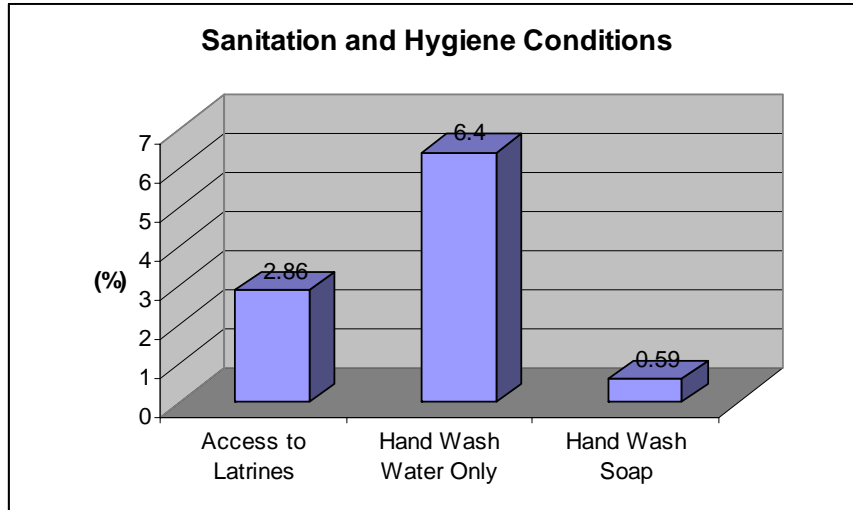
### 8.2.4 Infrastructure Damage

Roads (KM)	Bridges	Water Supply Schemes	Drains	Small Dams	Retaining Walls (feet)
8	5	7	0	0	0

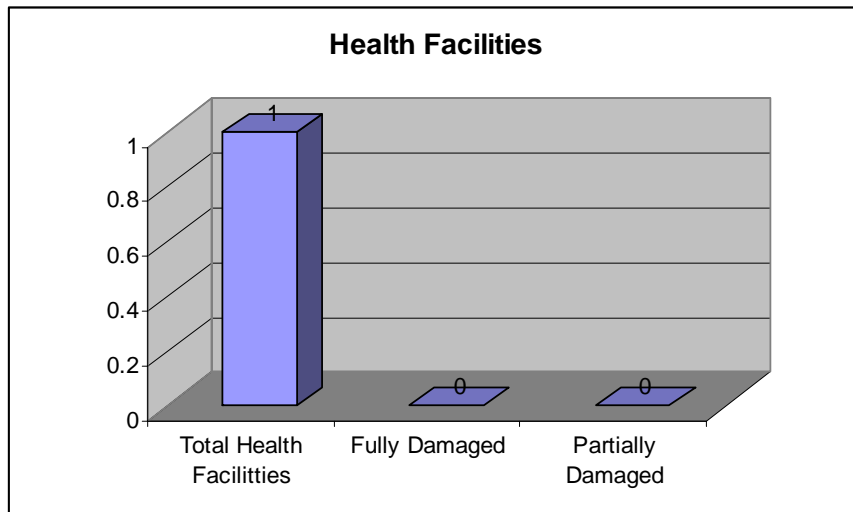
### 8.2.5 Water Availability

Drinking Water Sources includes: Rain Water Collection, wells, drinking water supply schemes and water is outsourced as well. Water availability per person (in liters) ranges from 1.5-19 liters. The average water availability is 7.95 liters.

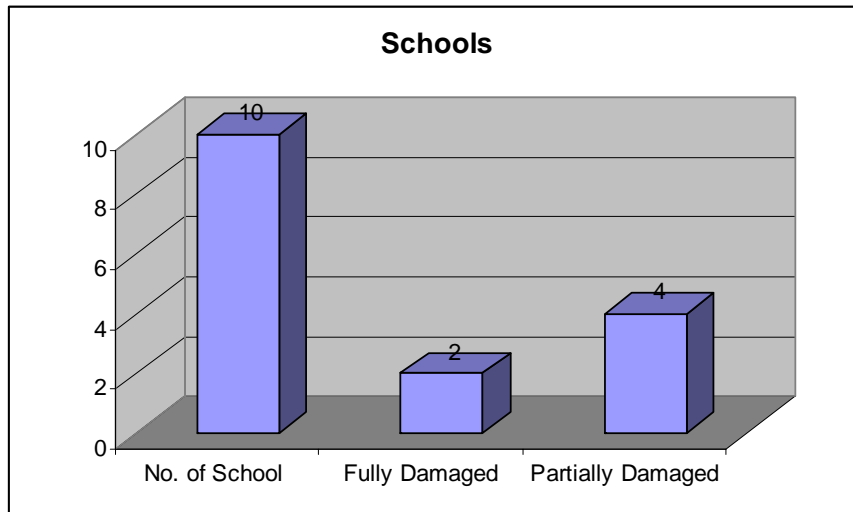
### 8.2.6 Sanitation and Hygiene Conditions



### 8.2.7 Health Facilities



### 8.2.8 Schools

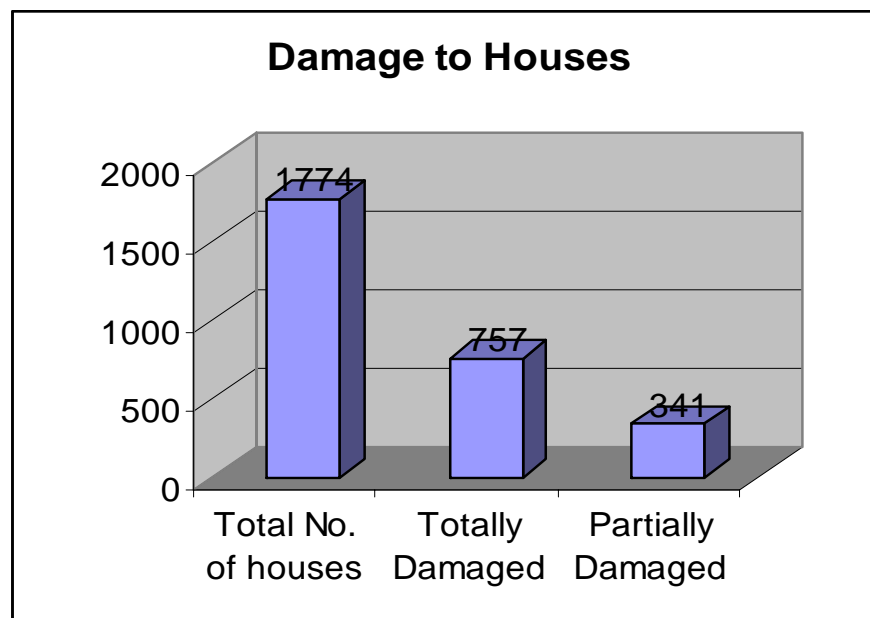


### 8.3 District Naseerabad

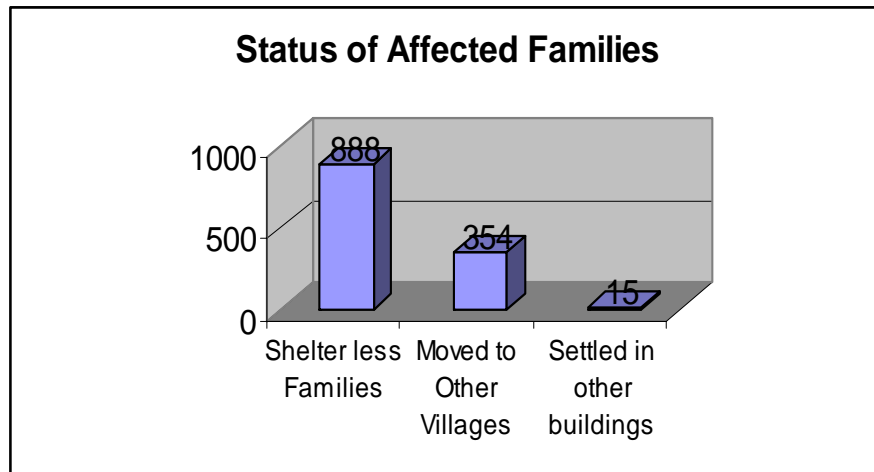
#### 8.3.1 General assessment of damages

No. of Villages Assessed: 28

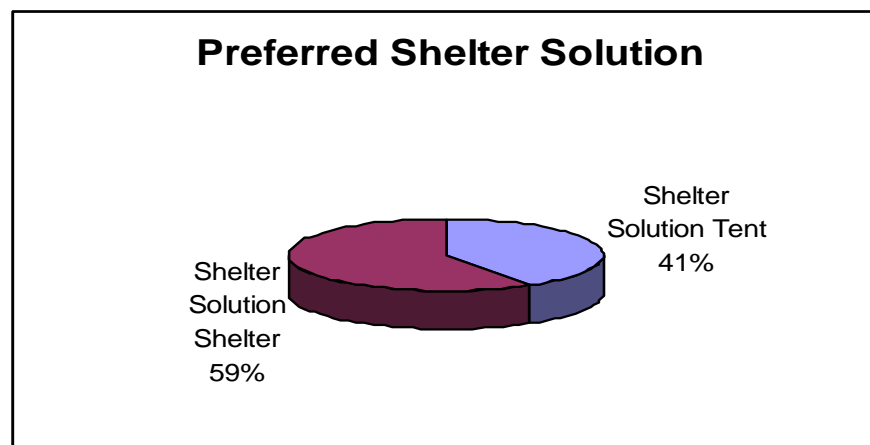
Population of affected areas: 14773



### 8.3.2 Status of Affected Families



### 8.3.3 Preferred Shelter Solution



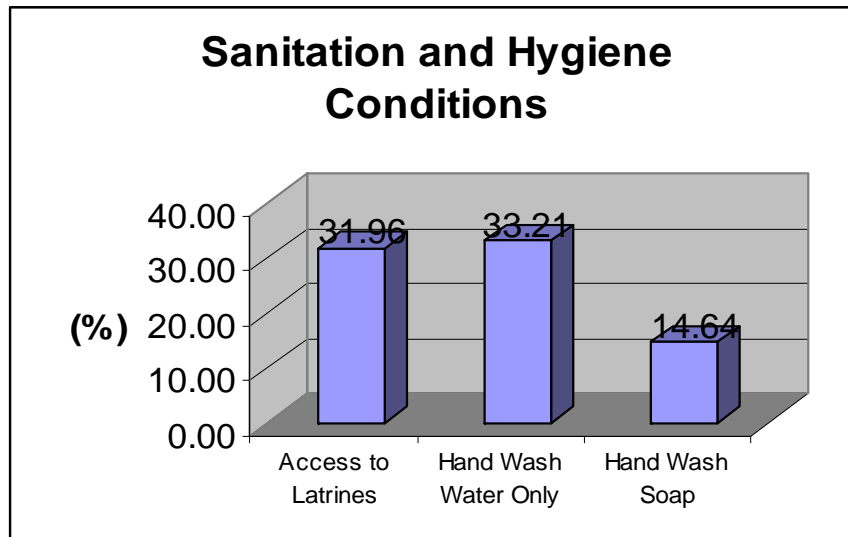
### 8.3.4 Infrastructure Damage

Roads (KM)	Bridges	Water Supply Schemes	Drains	Small Dams	Retaining Walls (feet)
8	1	4	0	10	1600

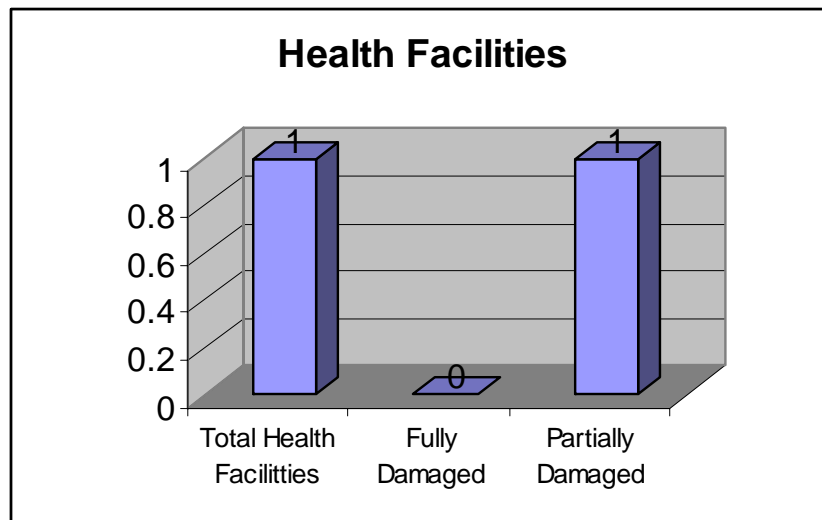
### 8.3.5 Water Availability

Drinking Water Sources includes: Hand pumps and stream water. Water availability per person (in liters) ranges from 14 - 30 liters. The average water availability is 17.32 liters.

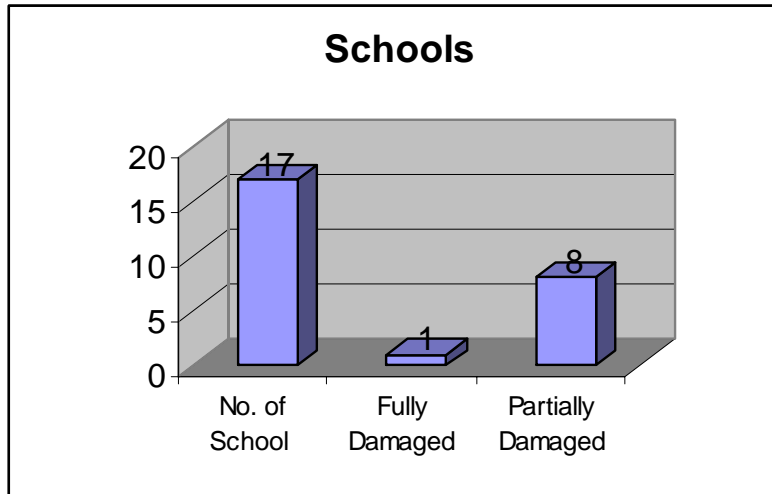
### 8.3.6 Sanitation and Hygiene Conditions



### 8.3.7 Health Facilities



### 8.3.8 Schools

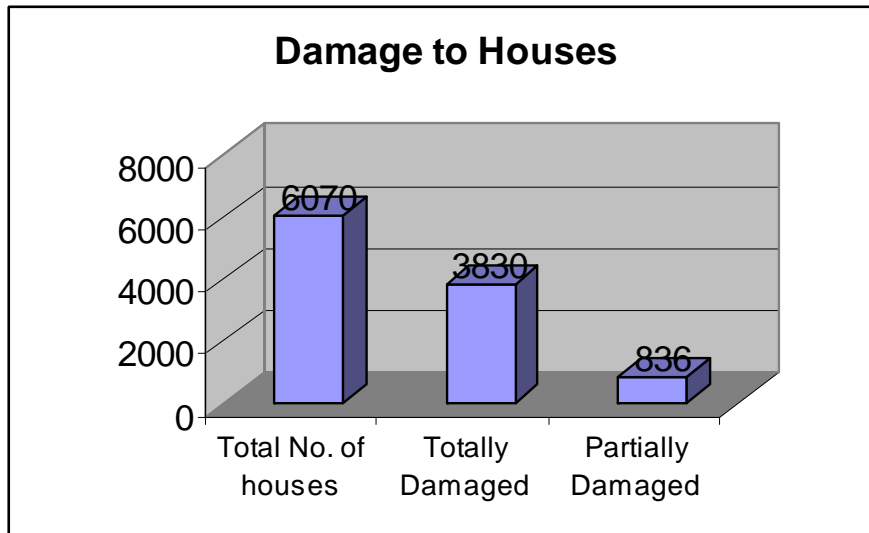


## 8.4 District Sibi

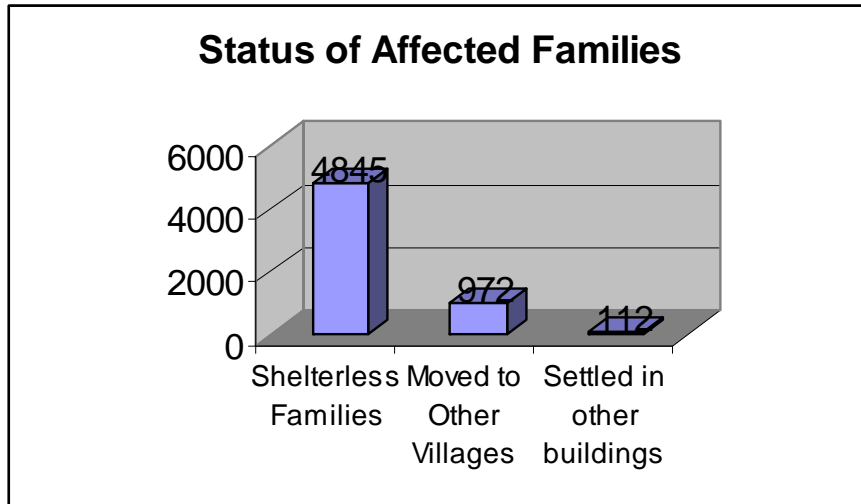
### 8.4.1 General assessment of damages

No. of Villages Assessed: 50

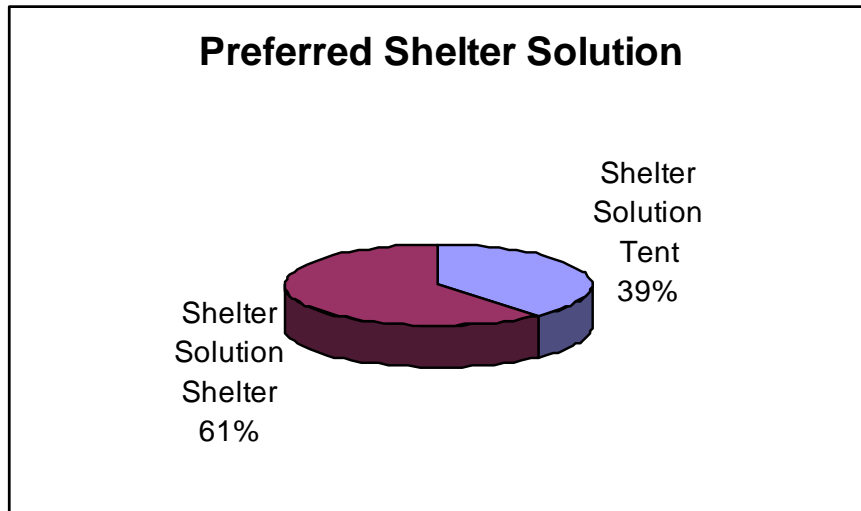
Population of affected areas: 52820



### 8.4.2 Status of Affected Families



### 8.4.3 Preferred Shelter Solution



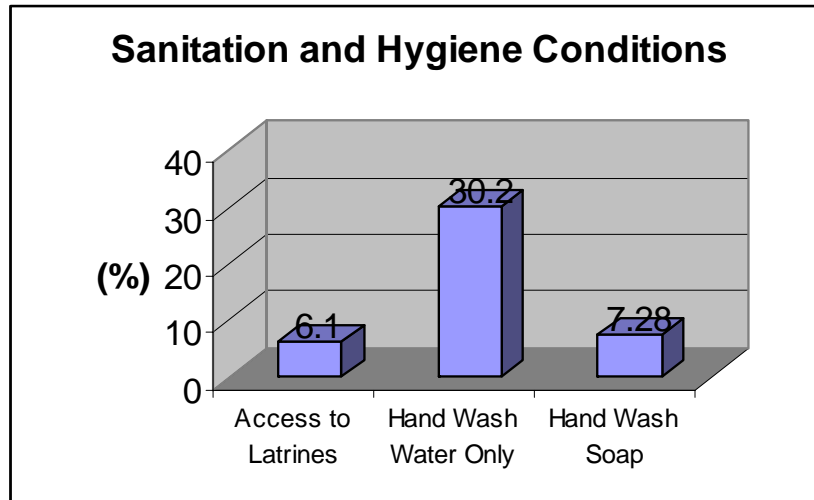
### 8.4.4 Infrastructure Damage

Roads (KM)	Bridges	Water Supply Schemes	Drains	Small Dams	Retaining Walls (feet)
24	5	10	0	24	1250

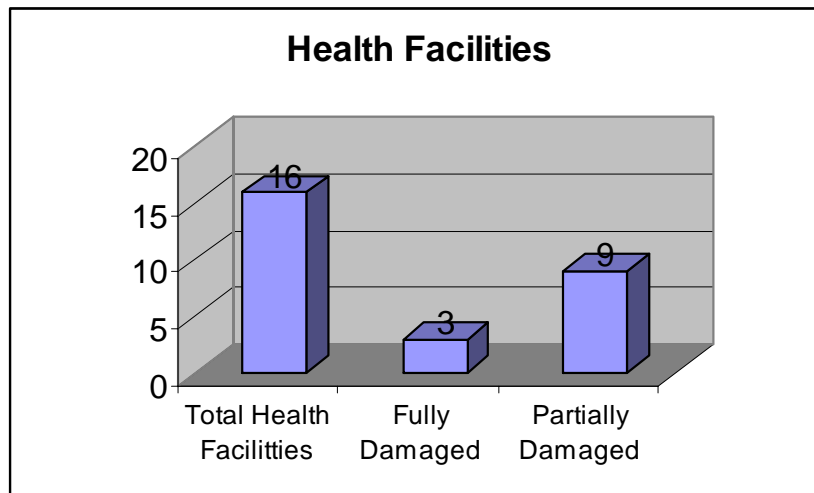
### 8.4.5 Water Availability

Drinking Water Sources includes: Drinking Water Supply Schemes, hand pumps, ponds, tube wells, wells and water is outsourced also. Water availability per person (in liters) ranges from 05- 20 liters. The average water availability is 08.76 liters.

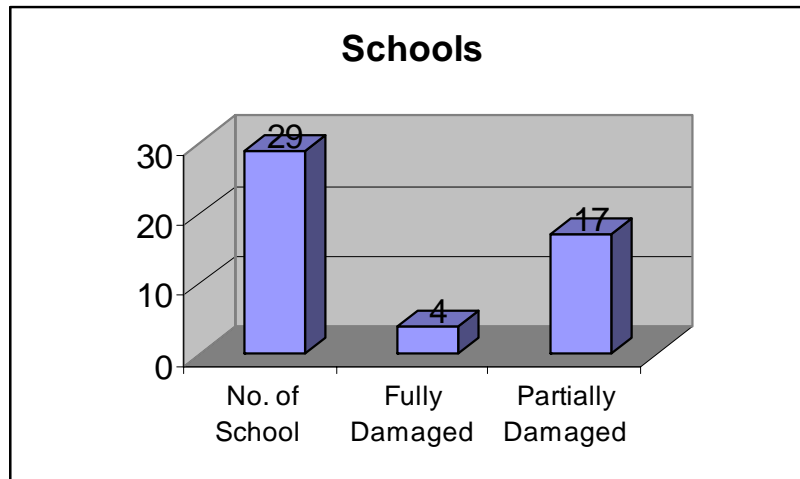
### 8.4.6 Sanitation and Hygiene Conditions



### 8.4.7 Health Facilities



### 8.4.8 Schools



## 9. Detailed assessment (Sibi)

District Sibi and its adjoining areas are the most flood prone areas of Balochistan therefore; Sibi is one of the most affected districts having a population of approximately 0.25 million. After a series of flash floods in the current monsoon, Sibi, Barkhan and Kohlu were struck on 22 July 2010. There are two tehsils in district Sibi namely Sibi and Lehri. It is also known as the "hot spot" of Pakistan where the temperatures in the summer exceed far above normal over 50 °Celsius. There are two rivers in Sibi i.e. Nari River & Talli River.

According to surveying teams, thousands of families are waiting for relief and less than 5% of the affected people have received any kind of aid including medical assistance. The floods have caused significant infrastructure damages. Safe drinking water is becoming scarce and communities are at the risk of water borne diseases. Health and hygiene conditions of the affected are no exception. Average water available in all affected areas (per person per liter) is 10 liter. Only 10% people have access to latrines and unfortunately, 20-25% people wash hand after using latrines. Health facilities and schools have also suffered damages. Railway tracks and majority of roads have been disconnected with other parts of the country. Over 35 villages around Sibi town have been submerged and large portions of roads linking Sibi with these villages have been completely destroyed.

Following table contains the data gathered through direct survey;

Name of Village	Tehsil	UC	Total Houses	Population	Damaged Houses	Partially Damage	Livestock	Health Facility
Talli	Sibi	Talli	1800	23000	1650	80	Cows:100 Goats:100 0 Sheep:70 0 Bufflaws:1 00	01 BHU is partially damaged
SultanKot	Sibi	Talli	570	4000	430	110	Cows:75 Goats:50 Sheep:45 Buffalows:10	

The assessment of the following villages has been done through secondary data sources.

Name of Village	Tehsil	UC	Total Houses	Population	Damaged Houses	Partially Damage	Livestock	Health Facility
Savery	Sibi	Talli	142	1000	40	90	Cows:25 Goats:35 Sheep: 20	
Basti Imam Bux	Sibi	Mall	200	1600	130	35	Cows:15 Goats:20 Sheep:05	
kot Mengal	Sibi	Mall	30	210	12	13	Cows:13 Goats:12 Sheep:05	
Mall Gohramzai	Sibi	Mall	40	300	12	23	Cows:14 Goats:09 Sheep:03	

## **10. Constraints Faced during Assessment**

- Accessibility to the some affected areas was not possible.
- Problems in coordination due to disruption in services of mobile phone communication and electricity which made data collection more difficult.
- Frustration and non cooperative attitude by the communities.
- Two districts Kohlu and Barkhan are very thinly populated therefore, significant time was consumed during traveling.
- Continued heavy rainfall during the assessment period.

## **11. Limitations of the Assessment**

The rapid assessment form was designed keeping in view of the disaster and to capture the needs of the affected population. It is very simple and self explanatory but there was occasional misunderstandings by the communities. There is a also a general conception and tendency of the communities to follow what community elders have to say instead of giving an unbiased opinion so this may have led to collection of incorrect information at times.

In some cases when questions such as total number of houses or distance in kilometers of road damage were asked, the community members had diverse replies. Unavailability of reliable data with the concerned authorities ruled out the option of cross verifications. In view of the above, in some cases such information may not be an exact figure but will be an acceptable estimate.

The report discusses damages like number of houses totally damaged and those houses which have been partially damaged. It is, however, beyond the scope of this study to assess other damages like furniture, electronics or food stocks so a true picture of the damages cannot be presented.

## 12. Recommendations

UN-HABITAT proposes following measures to be taken on immediate basis:

1. As almost 70% of the surveyed population prefers shelters over tents as temporary solution, it is recommended that 4,500 shelters and shelter material are immediately provided as well as 2,000 tents.
2. Following NDMA request, provision of mud model houses and technical assistance is required immediately.
3. Provision of safe drinking water is a high priority. Due to damages to water supply and contamination of wells, the recommendation is to repair urgently the 24 assessed water supply schemes and decontaminate wells.
4. Provision of sanitation is required. The recommendation is to ensure access to emergency latrines for the 6,500 assessed families.
5. There is a need for hygiene promotion activities in the affected areas as the hygiene practices are poor and have deteriorated after the flood. The target are the 6,500 assessed families.
6. It is recommended to give special attention to vulnerable groups and female-headed households.
7. There is the urgent need to repair infrastructures including BHU, schools, health, bridges and road, and retaining walls.
8. Based on field observations, food interventions are required since affected population has lost food stocks and provision of livelihood interventions / agricultural inputs

**ANNEX A**

**(LIST OF VILLAGES SURVEYED)**

<b>Sr.</b>	<b>District</b>	<b>Village</b>	<b>Tehsil</b>
1	Sibi	Treehar	Lehri
2	Sibi	Kach Kocho	Lehri
3	Sibi	Nalo Abro	Lehri
4	Sibi	Muhammadi	Lehri
5	Sibi	Shahik	Lehri
6	Sibi	Bakhtiyarabad	Lehri
7	Kohlu	Rehmanabad	Kohlu
8	Kohlu	Faiz Muhammad	Kohlu
9	Kohlu	Killi Kalkani	Kohlu
10	Kohlu	Haji Malik Miandad	Kohlu
11	Kohlu	Malik Hashim	Kohlu
12	Barkhan	Langoabad	Barkhan
13	Barkhan	Bazmeer Machrani	Barkhan
14	Barkhan	Barkhan Zakhwani	Barkhan
15	Barkhan	Basti Loma Zehreen	Barkhan
16	Barkhan	Basti Haji Yar Mohammad	Barkhan
17	Barkhan	Kalo Machrani	Barkhan
18	Barkhan	Basti Ballu	Barkhan
19	Barkhan	Basti Totta	Barkhan
20	Barkhan	Basti Syed Zakhwani	Barkhan
21	Barkhan	Basti Haji Jamal	Barkhan
22	Barkhan	Basti Dilshad	Barkhan
23	Barkhan	Basti Totta Zakhwani	Barkhan
24	Barkhan	Basti Gulsher Math	Barkhan
25	Barkhan	Sahib Khan Killi	Barkhan
26	Barkhan	Basti Syed Turab Shah	Barkhan
27	Barkhan	Killi Fareed Kachi La	Barkhan
28	Barkhan	Syed Gawar Shah	Barkhan
29	Barkhan	Basti Gumman Shah	Barkhan
30	Barkhan	Basti Dadu Shah	Barkhan

31	Barkhan	Basti Totak	Barkhan
32	Barkhan	Basti Taj Mohd Kasmani	Barkhan
33	Barkhan	Basti Gul Balochani	Barkhan
34	Barkhan	Basti Paind Khan Kasmani	Barkhan
35	Barkhan	Basti Haji Saeedullah	Barkhan
36	Barkhan	Basti Wadera Jan Mohd Kasmani	Barkhan
37	Barkhan	Basti Saddiqani	Barkhan
38	Barkhan	Basti Kachi Jaggani	Barkhan
39	Barkhan	Basti Rabbani	Barkhan
40	Naseerabad	Fazal jamali	DM Jamali
41	Naseerabad	Goat lashker khan mughairi	DM Jamali
42	Naseerabad	Goat mashooque khan	DM Jamali
43	Naseerabad	Abdul rehman jamali	DM Jamali
44	Naseerabad	Lari bron	Tumbo
45	Naseerabad	Barak	Tumbo
46	Naseerabad	Yousaf Palal	Tumbo
47	Naseerabad	Mir Wah Drak	Tumbo
48	Barkhan	Basti Wattakri	Barkhan
49	Barkhan	Basti Sengali	Barkhan
50	Barkhan	Basti Mochi	Barkhan
51	Barkhan	Basti Manora	Barkhan
52	Barkhan	Basti Bangla	Barkhan
53	Barkhan	Basti Jamal Khan Nada	Barkhan
54	Barkhan	Basti Sattardom	Barkhan
55	Barkhan	Basti Syed Jammalan Shah	Barkhan
56	Barkhan	Basti Atta Mohd Jilani	Barkhan
57	Naseerabad	Abdul hakeem jattak	DM Jamali
58	Naseerabad	Fazil grani	DM Jamali
59	Naseerabad	Goat ghulam rasool abro	DM Jamali
60	Naseerabad	Goat khadim hussain	DM Jamali

61	Naseerabad	Goat masood khan	DM Jamali
62	Naseerabad	Goat rasool bux pandrani	DM Jamali
63	Naseerabad	Goat riaz ahmed bhanger	DM Jamali
64	Naseerabad	Goat sikander jamali	DM Jamali
65	Naseerabad	Khosa bradri	DM Jamali
66	Naseerabad	Malik grani	DM Jamali
67	Naseerabad	Mola bux sasoli	DM Jamali
68	Naseerabad	Shori Datta	Tumbo
69	Naseerabad	Mir Wah Borra	Tumbo
70	Naseerabad	Ali Khan Broni	Tumbo
71	Naseerabad	Shahwani	Tumbo
72	Naseerabad	Kanda	Tumbo
73	Kohlu	Killi Malik Janan Ferozi	Kohlu
74	Kohlu	Killi Ferozi	Kohlu
75	Kohlu	Killi Malik Sher Jan	Kohlu
76	Kohlu	Killi Mehrab Khan	Kohlu
77	Kohlu	Killi Suleman	Kohlu
78	Naseerabad	Lashari	Tumbo
79	Naseerabad	Khushhaal	Tumbo
80	Naseerabad	Basti Qaim Shah	Tumbo
81	Naseerabad	Imamo Chandia	Tumbo
82	Sibi	Tehri Brahmani	Lehri
83	Sibi	Kach Allah Wah	Lehri
84	Sibi	Murad Wah Gola	Lehri
85	Sibi	Murad Wah Singyani	Lehri
86	Sibi	Nandani	Lehri
87	Sibi	Thahro Machi	Lehri
88	Sibi	Qaiser Mengal	Sibi
89	Sibi	Imam Bux Chacher	Sibi
90	Sibi	Mall Gohranmzai	Sibi
91	Sibi	Arbab Chachar	Sibi
92	Sibi	Sabrani	Sibi
93	Sibi	Juma Kach	Sibi
94	Sibi	Imam Kach	Sibi
95	Sibi	Kocha	Lehri
96	Sibi	Rilo	Lehri

97	Sibi	Bhilao	Lehri
98	Sibi	Bughdar Qubat	Lehri
99	Sibi	Wazir Machi	Lehri
100	Sibi	Hijo Machi	Lehri
101	Sibi	Qazi Mir Wah	Lehri
102	Sibi	Drengar Dopasi	Lehri
103	Sibi	Perik Lehri	Lehri
104	Sibi	Damboli	Lehri
105	Sibi	Kach Khan Wah	Lehri
106	Sibi	Abdul Malik	Lehri
107	Sibi	Basti Nala	Lehri
108	Sibi	Walo Machi	Lehri
109	Sibi	Sial	Lehri
110	Sibi	Wazira	Lehri
111	Sibi	Nihal Machi	Lehri
112	Sibi	Abdul Rehman Machi	Lehri
113	Sibi	Salarabab	Lehri
114	Sibi	Jalal Khan Band	Lehri
115	Sibi	Loi Bhand	Lehri
116	Sibi	Madad Khan Bughdad	Lehri
117	Sibi	Bhand	Lehri
118	Sibi	Sher Dil Bhugdad	Lehri
119	Sibi	Thara	Lehri
120	Sibi	Talli	Sibi
121	Sibi	SultanKot	Sibi
122	Sibi	Savery	Sibi
123	Sibi	Basti Imam Bux	Sibi
124	Sibi	kot Mengal	Sibi
125	Sibi	Mall Gohramzai	Sibi

**ANNEX B (ASSESSMENT FORM)**  
**RAPID ASSESSMENT FORM (Cluster Level)**  
**(FLOOD AFFECTED AREAS OF BALOCHISTAN)**

District							
Date	DD - MM -YY	Name of Enumerator					
Village		Tehsil		Distance from Metal Road (km)			
Population		Total No. of houses		No. of houses totally damaged			
No. of Houses Partially Damaged		No. of Families rendered shelter less					
No. of families moved to other villages		No. of families living in schools etc.					
Preferable shelter solution (%)		Tents(%)	.	Shelter(%)			
Roads		Bridges					
Water supply schemes		Drains		Small dams		Retaining walls	
Drinking Water Sources		Average Water per person (Litres)					
No. of people having access to Latrines (%)			No. of people wash hand after using latrines (%)	Water Only %			
				Water & Soap %			
No. of Health facilities (BHU etc)		No. of Health Facilities Fully damaged			No. of Health Facilities Partially damaged		
No. of school in village		No. of school Fully damaged			No. of school Partially damaged		
<b>Observations</b>							

Signature of Enumerator	
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