PAKISTAN FLOODS 2014:
RECOVERY NEEDS ASSESSMENT AND ACTION FRAMEWORK 2014-16

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ACRONYMS

AJ& K	Azad Jammu and Kashmir
BISP	Benazir Income Support Programme
CBDRM	Community Based Disaster Risk Reduction
CBOs	Community Based Organisations
CNIC	Computerised National Identity Card
CPI	Community Physical Infrastructure
CPIE	Child Protection in Emergency
DC	Deputy Commissioner
DDMA	District Disaster Management Authority
DRR	Disaster Risk Reduction
EDO	Executive District Officer
EEIC	Emergency Employment Information Centres
EIIP	Employment Intensive Infrastructure Programme
FAO	Food and Agriculture Organisation
HFA	Hyogo Framework for Action
HH	Household
HRC	Housing Reconstruction Centre
ILO	International Labour Organisation
INGO	International Non-Government Organisation
LFS	Labour Force Survey
MICS	Multi Indicator Cluster Survey
MIRA	Multi-sector Initial Rapid Assessment
NADRA	National Database and Registration Authority
NDMA	National Disaster Management Authority
NFI	Non Food Item
NGO	Non-Government Organisation
P&D	Planning and Development Department
PDMA	Provincial Disaster Management Authority
PITB	Punjab Information Technology Board
PSLM	Pakistan Standard of Living Survey
RNA	Recovery Needs Assessment
SDMA	State Disaster Management Authority
SUPARCO	Space and Upper Atmosphere Research Commission
TPV	Third Party Verification
UN	United Nations
UNDP	United Nations Development Programme
UN-Habitat	United Nations Human Settlements Programme
WFP	World Food Programme

EXECUTIVE SUMMARY

In the first week of September 2014, heavy monsoon rains and floods in the catchment areas of the eastern rivers of Chenab, Ravi, Sutlej, and Jhelum, resulted in flash floods that collapsed homes in Punjab, Gilgit Baltistan and Azad Jammu and Kashmir (AJ&K). According to latest figures, 367 persons lost their lives, more than 2.5 million people were affected by the floods and rains, and 129,880 houses were partially damaged or destroyed. Over 1million acres of cropland and 250,000 farmers were affected, in most cases resulting in the loss of standing food, fodder or cash crops. Non-farm sources of livelihoods and services affected include many small enterprises, manufacturing and processing businesses and loss of wage employment due to disruption of the economy.

At present, the biggest challenge is that of restoring lives and livelihoods ideally to a level where they become more resilient to future disasters, and structural and non-structural disaster risk reduction measures are inculcated at all steps of recovery process. The estimated cost of the recovery effort is US$ 439.7 million, including US$ 56.2 million which are would help build resilience of the affected population and their productive assets.

The sector-wise breakdown for resilient recovery is given below:

Province/ Region	Housing	Crops	Livestock	Livelihoods	CPI	DRR	Total (PKR in Million)	Total (US$)
Punjab	11,163.0	10,851.44	216	2,723.8	15,945.55	250	41,149.79	411.5
AJ&K	1,430.35	63.08	17.47	17.79	1,218,84	100	2,847.53	29.3
Total	**12,593.32**	**10,914.52**	**233.47**	**2,741.59**	**17,164.38**	**350**	**43,997.32**	**439.97**

This Recovery Needs Assessment describes the strategic basis for a response to the 2014 floods in Pakistan. The document identifies and estimates the cost steps to bridge the gap between relief and rehabilitation by concentrating on interim, transitional and immediate actions to assist the affected population restore their lives and livelihoods. The RNA prioritises four sectors: Housing, Agriculture, Livelihoods and Community Infrastructure, with Disaster Risk Reduction and "build back better" as the overarching themes.

The RNA caseload and cost estimates are based on the data collected by the governments of Punjab and AJ&K through the district governments and relevant line departments. Both the governments have put in place multiple levels of validation and triangulation to ensure the credibility of needs and recovery costs. In addition, the teams of NDMA and relevant UN agencies (FAO, ILO, UNDP, UN-Habitat and WFP) carried out spot checks to selected locations to verify the data reported by the provincial governments.

The projected timeframe for these activities is up to 24 months. The framework projects the costs of two approaches, "replacement" and "build-back-better". The slightly more focused action plans for the priority areas of housing, agriculture, non-farm livelihoods and community physical infrastructure are included as annexes, as well as an annex on Disaster Risk Reduction. Costs reported in the document were established through a robust process

undertaken by the government. The figures reflect needs and projected expenditures as of the third week of October 2014. These will be reviewed, refined and verified for the available data, and accounting for changes in physical and financial gaps resulting from the recovery efforts of the affected population.

The RNA implementation will follow the guiding policies of early recovery and will be led by the federal and provincial governments: NDMA at the federal level and PDMA Punjab and SDMA for the province of Punjab and AJ&K, respectively. The cash transfers and grants, already underway for certain interventions, will use the government transmission channels and the extensive verification processes already put in place by the Governments of Punjab and AJ&K. The technical assistance and additional support, especially for building community resilience across the priority sectors, may be provided by the international community using appropriate implementation channels and strategies in coordination with the NDMA, PDMA and SDMA.

Table 1: Recovery Needs of the 2014 Flood Affected Districts – Without Disaster Risk Resilience

	Districts	Housing (PKR)		Agriculture (PKR)		Livelihoods (PKR)	Community Physical Infrastructure (PKR)	Total	
		Partially Damaged	Fully Damaged	Crops	Livestock			PKR	US$
1	Bahawalpur	3,770,270	131,959,459	192,050,000	-	29,720,000	81,000,000	438,499,730	4,384,997
2	Chiniot	4,458,758	771,982,484	273,760,000	-	27,192,000	333,227,000	1,410,620,242	14,106,202
3	Gujranwala	6,925,037	75,449,926	491,700,000	46,704,331	41,848,000	1,252,400,000	1,915,027,295	19,150,273
4	Gujrat	14,425,322	81,349,356	97,830,000	27,871,940	16,328,000	1,165,790,000	1,403,594,618	14,035,946
5	Hafizabad	49,621,288	491,057,424	503,700,000	48,085,374	12,832,000	1,218,370,000	2,323,666,085	23,236,661
6	Jhang	19,326,491	4,551,947,017	2,945,120,000	-	132,576,000	4,300,798,000	11,949,767,509	119,497,675
7	Jhelum	165,138	11,669,725	144,710,000	1,255,493	14,256,000	305,747,000	477,803,355	4,778,034
8	Khanewal	-	159,200,000	306,720,000	-	24,392,000	89,000,000	579,312,000	5,793,120
9	Khushab	2,887,117	44,525,765	140,270,000	-	26,136,000	237,460,000	451,278,883	4,512,789
10	Mandi Bahaud Din	10,349,020	101,101,961	402,430,000	12,303,829	18,128,000	754,731,000	1,299,043,810	12,990,438
11	Multan	45,435,169	1,324,829,663	945,780,000	753,296	187,248,000	834,600,000	3,338,646,127	33,386,461
12	Muzaffargarh	21,393,457	1,292,813,086	2,247,000,000	28,248,588	230,600,000	549,623,000	4,369,678,131	43,696,781
13	Narowal	-	105,600,000	191,450,000	753,296	20,456,000	250,887,000	569,146,296	5,691,463
14	Sargodha	-	280,400,000	720,820,000	1,004,394	65,056,000	917,470,000	1,984,750,394	19,847,504
15	Sheikhupura	-	59,400,000	266,430,000	-	41,896,000	681,061,000	1,048,787,000	10,487,870
16	Sialkot	5,775,093	299,149,814	177,860,000	33,019,460	19,272,000	607,678,000	1,142,754,367	11,427,544
17	12 Rain affected districts	-	-	-	-	-	1,184,560,000	1,184,560,000	11,845,600
	Sub-total Punjab	**184,532,160**	**9,782,435,681**	**10,047,630,000**	**200,000,000**	**907,936,000**	**14,764,402,000**	**35,886,935,840**	**358,869,358**
1	Bagh	76,200,000	89,920,000	-	672,000	1,150,000	46,444,600	214,386,600	2,143,866
2	Bhimber	48,620,000	5,240,000	-	711,000	80,000	235,413,000	290,064,000	2,900,640
3	Hattian Bala	10,760,000	5,140,000	-	793,000	190,000	63,888,400	80,771,400	807,714
4	Haveli	328,320,000	74,200,000	55,695,300	2,685,000	-	279,969,458	740,869,758	7,408,698
5	Kotli	42,060,000	27,120,000	2,720,000	1,299,000	380,000	114,266,000	187,845,000	1,878,450
6	Mirpur	6,460,000	5,540,000	-	220,000	-	7,494,007	19,714,007	197,140
7	Muzaffarabad	5,180,000	1,980,000	-	510,000	830,000	-	8,500,000	85,000
8	Neelum	2,360,000	0	-	6,960,000	440,000	40,259,061	50,019,061	500,191
9	Poonch	262,080,000	74,580,000	-	1,339,000	2,410,000	199,581,103	539,990,103	5,399,901
10	Sudhnuti	174,420,000	36,920,000	-	988,000	450,000	141,235,000	354,013,000	3,540,130
	Sub-total AJ&K	**956,460,000**	**320,640,001**	**58,415,300**	**16,177,000**	**5,930,000**	**1,128,550,629**	**2,486,172,930**	**24,861,729**
GRAND TOTAL (PKR)		**1,140,992,160**	**10,103,075,681**	**10,106,045,300**	**216,177,000**	**913,866,000**	**15,892,952,629**	**38,373,108,770**	**-**
GRAND TOTAL (US$)		**11,409,922**	**101,030,757**	**101,060,453**	**2,161,770**	**9,138,660**	**158,929,526**	**-**	**383,731,088**

Table 2: Recovery Needs of the 2014 Flood Affected Districts – With Disaster Risk Resilience

	Districts	Housing (PKR)		Agriculture (PKR)		Livelihoods (PKR)	Community Physical Infrastructure (PKR)	Disaster Risk Resilience (PKR)	Total	
		Partially Damaged	Fully Damaged	Crops	Livestock				PKR	US$
1	Bahawalpur	4,222,703	147,794,595	207,414,000	-	89,160,000	87,480,000	-	536,071,297	5,360,713
2	Chiniot	4,993,809	864,620,382	295,660,800	-	81,576,000	359,885,160	-	1,606,736,151	16,067,362
3	Gujranwala	7,756,041	84,503,917	531,036,000	50,440,678	125,544,000	1,352,592,000	-	2,151,872,637	21,518,726
4	Gujrat	16,156,361	91,111,279	105,656,400	30,101,695	48,984,000	1,259,053,200	-	1,551,062,934	15,510,629
5	Hafizabad	55,575,843	549,984,314	543,996,000	51,932,203	38,496,000	1,315,839,600	-	2,555,823,961	25,558,240
6	Jhang	21,645,670	5,098,180,660	3,180,729,600	-	397,728,000	4,644,861,840	-	13,343,145,770	133,431,458
7	Jhelum	184,954	13,070,092	156,286,800	1,355,932	42,768,000	330,206,760	-	543,872,538	5,438,725
8	Khanewal	-	178,304,000	331,257,600	-	73,176,000	96,120,000	-	678,857,600	6,788,576
9	Khushab	3,233,571	49,868,857	151,491,600	-	78,408,000	256,456,800	-	539,458,829	5,394,588
10	Mandi Bahaud Din	11,590,902	113,234,196	434,624,400	13,288,136	54,384,000	815,109,480	-	1,442,231,114	14,422,311
11	Multan	50,887,389	1,483,809,222	1,021,442,400	813,559	561,744,000	901,368,000	-	4,020,064,570	40,200,646
12	Muzaffargarh	23,960,672	1,447,950,656	2,426,760,000	30,508,475	691,800,000	593,592,840	-	5,214,572,643	52,145,726
13	Narowal	-	118,272,000	206,766,000	813,559	61,368,000	270,957,960	-	658,177,519	6,581,775
14	Sargodha	-	314,048,000	778,485,600	1,084,746	195,168,000	990,867,600	-	2,279,653,946	22,796,539
15	Sheikhupura	-	66,528,000	287,744,400	-	125,688,000	735,545,880	-	1,215,506,280	12,155,063
16	Sialkot	6,468,104	335,047,792	192,088,800	35,661,017	57,816,000	656,292,240	-	1,283,373,953	12,833,740
17	12 Rain affected districts	-	-	-	-	-	1,279,324,800	-	1,279,324,800	12,793,248
	Sub-total Punjab	**206,676,019**	**10,956,327,963**	**10,851,440,400**	**216,000,000**	**2,723,808,000**	**15,945,554,160**	**250,000,000**	**41,149,806,541**	**411,498,065**
1	Bagh	85,344,000	100,710,400	-	725,760	3,450,000	50,160,168	-	240,390,328	2,403,903
2	Bhimber	54,454,400	5,868,800	-	767,880	240,000	254,246,040	-	315,577,120	3,155,771
3	Hattian Bala	12,051,200	5,756,800	-	856,440	570,000	68,999,472	-	88,233,912	882,339
4	Haveli	367,718,400	83,104,000	60,150,924	2,899,800	-	302,367,015	-	816,240,139	8,162,401
5	Kotli	47,107,200	30,374,400	2,937,600	1,402,920	1,140,000	123,407,280	-	206,369,400	2,063,694
6	Mirpur	7,235,200	6,204,800	-	237,600	-	8,093,528	-	21,771,128	217,711
7	Muzaffarabad	5,801,600	2,217,600	-	550,800	2,490,000	-	-	11,060,000	110,600
8	Neelum	2,643,200	0	-	7,516,800	1,320,000	43,479,786	-	54,959,786	549,598
9	Poonch	293,529,600	83,529,600	-	1,446,120	7,230,000	215,547,591	-	601,282,911	6,012,829
10	Sudhnuti	195,350,400	41,350,400	-	1,067,040	1,350,000	152,533,800	-	391,651,640	3,916,516
	Sub-total AJ&K	**1,071,235,200**	**359,116,801**	**63,088,524**	**17,471,160**	**17,790,000**	**1,218,834,680**	**100,000,000**	**2,847,536,364**	**28,475,364**
	GRAND	**1,277,911,219**	**11,315,444,763**	**10,914,528,924**	**233,471,160**	**2,741,598,000**	**17,164,388,840**	**350,000,000**	**43,997,342,905**	**-**

TOTAL (PKR)									
GRAND TOTAL (US$)	**12,779,112**	**113,154,448**	**109,145,289**	**2,334,712**	**27,415,980**	**171,643,888**	**3,500,000**	**-**	**439,973,429**

1. INTRODUCTION

The Recovery Needs Assessment describes the strategic basis for a response to the 2014 floods in Pakistan. The document identifies and estimates the cost steps to bridge the gap between emergency relief and rehabilitation by concentrating on interim, transitional and immediate actions to assist the affected population restore their lives and livelihoods. The projected timeframe for these activities is up to 24 months. This document briefly describes the event itself, as well as its impacts on priority sectors in the worst affected areas. It establishes the normative parameters under which recovery activities would be planned and implemented. It outlines existing and forthcoming institutional coordination and strategic and practical oversight mechanisms, and action plans for the priority sectors.

The framework projects the costs of two approaches, "replacement" and "build-back-better". The slightly more focused action plans for the priority areas of housing, agriculture, non-farm livelihoods and community physical infrastructure are included as annexes, as well as an annex on Disaster Risk Reduction. Costs reported in the document were established through a robust process undertaken by the government. The figures reflect needs and projected expenditures as of the third week of October 2014. These will be reviewed, refined and verified for the available data, and accounting for changes in physical and financial gaps resulting from the recovery efforts of the affected population.

An ideal recovery process would use this opportunity to further the vision of "Resilient Pakistan," as elaborated in the National Disaster Management Plan, especially in terms of physical infrastructure, though the actual form will be determined by the availability of financial resources and systemic efforts by all stakeholders to integrate DRR in the recovery and rehabilitation process.

2. BACKGROUND

In the first week of September 2014, heavy monsoon rains and floods in the catchment areas of the eastern rivers of Chenab, Ravi, Sutlej, and Jhelum, resulted in flash floods that collapsed homes in Punjab, Gilgit Baltistan and Azad Jammu and Kashmir (AJ&K). According to latest figures, 367 persons lost their lives, more than 2.5 million people were affected by the floods and rains, and 129,880 houses were partially damaged or destroyed. Over 1million acres of cropland and 250,000 farmers were affected, in most cases resulting in the loss of standing food, fodder or cash crops. Non-farm sources of livelihoods and services affected include many small enterprises, manufacturing and processing businesses and loss of wage employment due to disruption of the economy.

At the onset of the floods, the national and provincial/state authorities launched a large scale rescue and relief operation, thus minimizing the loss of lives. The emergency relief challenges included evacuation of stranded and vulnerable population, arranging for temporary accommodation, emergency food, shelter, Non Food Items (NFI) and emergency medical care, thus reducing the likelihood of disease outbreak or massive displacement of people over prolonged periods of time. The intensity of the floods and torrential rains, however, caused heavy losses to homes, crops, livestock, lands, community physical infrastructure (CPI), public sector buildings, roads and other access infrastructure, flood protection and irrigation structure and power supply installations.

The government responded by a targeted distribution of cash and relief items[1]in Punjab for meeting urgent shelter needs of the affected population in addition to targeted distribution of food and Non Food Items and provision of essential life-saving services. This resulted in a reasonably smooth return of the bulk of the population to their places of origin, with very few small pockets of land depressions still under inundation. The initial response by the government resulted in repairs and restoration of critical infrastructure.

The causes of devastation, though both seasonal and related, can be classified into two categories in terms of their impact. In Punjab, while 16 districts were primarily affected by the flooding in the eastern rivers (particularly Chenab) emanating from across the eastern borders, 12 additional districts also bore the brunt of heavy rainfall in the adjacent catchment causing flash floods and damaged mainly the physical infrastructure. For the former category i.e., the 16 flood affected districts, the preliminary statistics indicate that the major sectoral areas of recovery needs are: agriculture, non-farm livelihoods, physical infrastructure and housing. The challenges for achieving an integrated and sustainable recovery, with the introduction of elements of resilience or risk reduction across them, are more sizeable and complex in the flood affected 16 districts.

In AJ&K, all ten districts appear statistically affected, through a combination of localised flash floods and inflow of flood waters from across the line of control. The major brunt is in the sectors of farm-based livelihoods, non-farm livelihoods, physical infrastructure and housing, with less significant damage to livestock, forestry and fisheries.

[1]About Rs 1,890 million has been distributed to 80,000 households through a systematic and verifiable mechanism.

At present, the biggest challenge is that of restoring lives and livelihoods ideally to a level where they become more resilient to future disasters, and structural and non-structural disaster risk reduction measures are inculcated at all steps of recovery process.

3. RNA METHODOLOGY AND PROCESS

The RNA has been prepared by a team led by NDMA and UNDP, and including experts from FAO, ILO, UNDP, UN-Habitat, and WFP. Given the time constraints, it was decided the RNA will rely on the recovery needs data collected and cost estimates provided by the provincial/state governments of Punjab and AJ&K.

The governments of Punjab and AJ&K have employed multiple levels of validation and triangulation to ensure data accurateness and quality (see Sections 3.1 and 3.2 below). The NDMA and UNDP teams facilitated the provincial governments in data consolidation and analysis for the RNA.

The NDMA and the UN partners carried out sample spot checks in selected locations to get first-hand perspective of the reported data. A team of UNDP supported by Early Recovery and Data Analysts supported NDMA in consolidating and preparing the RNA document.

The RNA data collection, validations and preparation process was overseen by a federal Steering Committee, chaired by Chairman NDMA and including representatives from the provincial /state governments of Punjab and AJ&K, SUPARCO, and relevant UN agencies (FAO, ILO, UNDP, UN-Habitat, and WFP). In Punjab, the RNA process was overseen by a Steering Committee chaired by Chairman Planning and Development Board, Government of Punjab, and including representatives from P&D, PDMA and relevant line departments, NDMA and relevant UN agencies. In AJ&K, the RNA Steering Committee was chaired by the Chief Secretary and included representatives from the SDMA, provincial line departments, Deputy Commissioners, NDMA and the relevant UN agencies.

3.1. GOVERNMENT OF PUNJAB'S DATA COLLECTION AND VALIDATION PROCESS

Housing Damage Assessment Survey

Survey was conducted through teams headed by officer in BS 14 or above and comprised of patwari/ qanoongo, union council secretary, local head teacher and Imam of the local mosque. Survey guidelines and forms were issued by PDMA and included columns for, among other things, CNICs, family number, revenue estate (Mauza) and percentage damage. Teams were also required to take pictures of the house owners holding plaques displaying their names, father's/ husband's names, CNICs and the address with damaged house in the back ground. PDMA had also issued detailed guidelines for the assessment of the damage percentage. Concerned Revenue Officers carried out inspection of at least 50% while Assistant Commissioners carried out verification of 20% of the survey.

Once the survey had generated raw data, these multi-tier validation measures were undertaken;

- DCOs and Commissioners conducted periodic reviews of the survey data
- House Damage Assessment Survey was entered in Excel and in specially designed Android application
- Data was then shared with Punjab Information Technology Board (PITB) for uploading. Stakeholder could view it and correct in the event of any discrepancy. Data was also shared with NADRA for debugging
- This data was sent to the Urban Unit for TPV through remote sensing. Actual list of effected persons was generated at the end of this validation
- Grievance Redressal mechanism worked simultaneously with the survey and validation exercise

Crop Damage Assessment Survey

Assessment was done on the basis of field survey carried out by the Revenue and Irrigation Authorities. Yet again the survey form was designed by PDMA and circulated through Divisional Commissioners and DCOs for data collection. This form include columns on names of affected farmers, their CNICs, type of affected crop and its acreage and percentage of the revenue estate (mauza) affected. These are the validation steps that PDMA undertook;

- Urban Unit conducted first TPV through satellite imagery and field inspection of survey sample in all 16 of the programme districts
- NADRA identified the beneficiaries by cross matching the survey results with its data
- Second TPV was done through Divisional Commissioners. Teams were sent from one district to the other to verify the survey results. These teams visited each and every Revenue Estate (Mauza) in the district being verified. However, within each Revenue Estate 20% of the effected acreage was selected for verification. In case 10% or more of the acreage failed the validation guidelines, the whole of the Mauza was re-surveyed and again out through the validation
- Third TPV was carried out through Institute of Public Opinion Research (IPOR) and an Android application was developed for it

Livelihood Support

Data was received from BISP and CNICs were verified from NADRA. As an extra measure for the sake of accuracy, only those persons were selected for the receipt of cash support that inhabited the affected areas along river banks. These areas, in turn, were selected on the basis of imagery provided by SUPARCO and Urban Unit.

Community Infrastructure

CPI damage was assessed by Divisional Commissioners and communicated to P&D department. The department has hired independent consulting firms to carry out 100% verification of the schemes reported by Commissioners in each sector.

3.2. GOVERNMENT OF AJ&K'S DATA COLLECTION AND VALIDATION PROCESS

The Government of AJ&K followed a systematic process for data collection, whereby the SDMA prepared formats for the affected sectors – housing, agriculture and community infrastructure – and provided and provided those to the Deputy Commissioners for data collection. The Deputy Commissioners formed teams of revenue officials and line department staff who carried out site visits to the affected villages, collected data on damages and recovery needs and submitted to the Tehsil governments.

The tehsildars and line departments carried out visits to selected sites to verify the accuracy and completeness of the collected data as well as the recovery estimates. The Deputy Commissioners and the provincial line departments performed a second level of validation checks for selected areas. The final data was consolidated by SDMA and was approved by the AJ&K RNA Steering Committee before its submission to NDMA and UNDP.

3.3. SPOTCHECKS BY THE NDMA AND UN TEAMS

Six teams were fielded in four districts of AJ&K and Punjab to observe the data collection modality of the government. The teams were included members from UNDP, WFP, FAO, UN-Habitat, and NDMA. On the recommendations of the RNA steering committee, four most affected districts two each form Punjab and AJ&K were selected for spot-check. The districts included Multan and Jhang in Punjab and Haveli and Poonch in AJ&K.

It was observed that the Punjab government collected data in a systemic and organized manner using information technology. Teams were formed by the DCOs for data collection. Each team included an engineer, patwari, and IT person. The teams were given android phones for taking pictures. These pictures were used for transparency and to estimate the extent of damage. The data was further verified with the help of SUPARCO. The spot check team was informed that the same modality for damage assessment was implemented across all the affected districts. In AJ&K the damage assessment was conducted as per the government existing processes using the staff of revenue department (patwaris under the supervision of civil administration).

Key findings and recommendations of the spot-check team are as under:

- On average data quality was good. No wrong entry (inclusion error) was found during spot checking visits.
- In agriculture sector, it was observed that damage claims were mostly submitted by landowners, there was a chance that tenant/share-cropper will get less share in assistance.
- In few cases, people reported that they were displaced from their areas at the time of survey so they were not included in survey. There should be some mechanism to entertain such complaints.
- In few cases (less than 5%), over reporting of losses were noted.

- Some of the farmers, in order to cover the whole of the damaged area, filed claims in the names of their dependants and tenants. Consequently, compensation amounts are being paid out to these dependants and tenants but are, in actual, being taken by the landlord. This suggests that there exists a real possibility of tenants not getting compensated for their loss. This factor coupled with lack of support for next crop, may be adding to their vulnerability. Compensation is admissible to land's title holders only. This, however, does not reflect badly on the quality of the data on crops and the effected population itself. This issue rather relates with the administration of compensation process, which should be based on the CNIC of the affected farmer.
- There may be 1-2% farmers that might have been missed out during the survey process. These would be covered under grievance redress mechanism of PDMA.
- Some CNIC numbers were found to be wrong which would have been a data entry issue. Grievance redress and NADRA's verification are already in place for correcting this problem.
- In Haveli and Poonch, spot checks suggested that the categorization of houses in partially and fully damaged needed further validation before compensation.
- Punjab had developed an elaborate checklist for categorisation of the damage. This checklist could have been used in AJ&K as well.
- In AJ&K there is a possibility that some already damaged/ worn out houses might have been included as flood damaged.
- In Haveli, there has been considerable damage due to land slide which has rendered many houses perilous for habitation despite small damages to the structure itself. There are crack underneath the house and, in many cases, land slide site is too close to the structure. In this scenario mere investment into the structure would yield no results. These land slide affected houses should, therefore, have been categorized as fully damaged. AJ&K government may allocate alternate land sites for the construction of such houses. These cases can be flagged and passed along to the government with this suggestion.
- In Jhang, some people were missed out while the survey was going on. Also, some cases have been identified where local landlord had claimed compensation for the houses of people missed out from the assessment survey. These issues will need closer monitoring during the compensation process.
- There was a difference in the number of partially damaged schools reported by P&D in the assessment with that of reported by the education department in Punjab. The third party verification deployed by P&D Punjab is expected to filter out these issues.

4. RECOVERY NEEDS FRAMEWORK

The RNA is based on the premise that, as in the case of previous disasters, the federal and provincial governments are the principal responders and managers of the recovery and rehabilitation efforts for the flood affected population. Indeed, immediately after the floods, the provincial governments initiated large scale damages and needs identification campaign, involving the public sector functionaries at the grassroots level, to gather data on the extent of damages in the priority sectors mentioned above. The process of information collection, processing and collation includes a number of steps aimed at authentication and triangulation, elaborated in a later section of this document. The government's efforts were complemented by the Multi-sectoral Initial Rapid Assessment (MIRA) which was carried out in September 2014 with the support of the UN System in Pakistan.

Following the information collection and processing exercise, the government is considering a number of initiatives, aimed at supporting the spontaneous recovery efforts by the affected communities and households. In the area of housing recovery, the government has plans in place to disburse cash subsidies to the affected households in two categories viz., fully damaged houses (more than 40% damaged) and partially damaged (less than 40% damaged[2]).

For the agricultural recovery of farm-based livelihoods, the government is considering (cash or in-kind) subsidies for inputs for the upcoming Rabi crop, to be allocated per acre of the affected cropping area with an upper ceiling to the number of acres to be subsidised. A proposal to re-stock the flocks of large and small ruminants is also under consideration – through in kind compensation in Punjab and cash in AJ&K- which would involve optimal mix of male and female animals to enable the farmers to replenish and expand the stock over a couple of years.

In addition to the farm-specific and somewhat conditional proposition of granting subsidies to contribute to agricultural recovery and consequently the food security of the affected areas, the government is considering a targeted, unconditional cash transfer to virtually all the relatively poor households falling in a certain income bracket. This would be done in Punjab by using the household-specific poverty data being used under the targeted Social Safety Net mechanism of Benazir Income Support Programme (BISP). Roughly, the proposition is to transfer tranches of cash assistance to all the poor households (defined through the poverty scorecard already in use for the larger, generic BISP support) in all the areas notified as being flood affected. Similar, context appropriate mechanisms will be adopted for AJ&K. This is meant to provide additional financial space to the poor among the affected population to supplement their efforts towards spontaneous recovery of their means of livelihood.

[2]In view of the area specific qualitative baseline of the housing stock, the differing access infrastructure and geographical terrain of both Punjab and AJ&K, housing compensation packages are also peculiar to the respective regions. For Punjab, all types of houses are provided recovery support at Rs 80,000 per fully destroyed and Rs 40,000 for partially damaged house. In case of AJ&K, the fully and partially damaged concrete houses are to be supported by Rs 80,000 and Rs 60,000 respectively while the rates for the non-concrete fully and partially damaged houses are Rs 60,000 and Rs 40,000 respectively

In terms of physical infrastructure, emergency repairs of the most critical communication, access, water-supply and power-supply installations have been undertaken to restore their immediate and critical functions. The options for a full and resilient recovery of the damaged infrastructure, particularly the small, community-based infrastructure, are under consideration, including the initiation of Cash-for-Work and Food-for-Work programmes.

Cost of Recovery – Two Scenarios

The following is a summary of the government's projection of the total expenditure on recovery in the key affected sectors, in both Punjab and Kashmir, through the mechanisms described above.

Table 3: Cost of Recovery (PKR million)

Province/ Region	Housing	Crops	Livestock	Livelihoods	CPI	Total (PKR)	Total (US$)
Punjab	9,966.9	10,047.6	200.0	907.93	14,764.4	35,886.83	358.86
AJ&K	1,277.1	58.4	16.17	5.93	1,128.55	2,486.15	24.86
Total	**11,244.06**	**10,106.04**	**216.17**	**913.86**	**15,892.95**	**38,373.08**	**383.73**

Note: The figures appearing in the above table, as well as the one below, reflect the following schema: The amounts shown for Housing, Crop and Livelihood Support are the projected allocations for providing subsidies to the affected households. The amounts related to CPI, and Livestock show the estimated damages.

This document seeks to capture the recovery approaches being implemented or under consideration by the government and also the input from inter-governmental and non-governmental entities that seek to complement qualitatively and-where possible and appropriate- supplement quantitatively the governmental efforts. In the present context, the primary role envisaged for the non-governmental humanitarian and development organisations is on the basis of their comparative advantage in the form of their ability to rally global technical expertise and share it to help the government and affected communities recover in a sustainable, resilient and cost-effective manner. Their role as implementers of recovery programmes from their own or external sources would also be welcomed, under the regulatory and coordinating regimes that would be put in place at different levels, elaborated in a following section.

Under the scenario that the whole recovery programme would inculcate risk reduction and participatory approaches in it, and also that the targeted off-farm livelihood recovery through vocational training and enterprise development would also be included in the plans, the following table provides the financial projection for the entire spectrum of recovery:

Table 4: Cost of Recovery with Disaster Risk Resilience (PKR million)

Province/ Region	Housing*	Crops**	Livestock **	Livelihoods***	CPI**	DRR	Total (PKR)	Total (US$)

Punjab	11,163.0	10,851.44	216	2,723.8	15,945.55	250	41,149.79	411.5
AJ&K	1,430.35	63.08	17.47	17.79	1,218.84	100	2,847.53	28.47
Total	**12,593.35**	**10,914.52**	**233.47**	**2,741.59**	**17,164.39**	**350**	**43,997.32**	**439.97**

* With 12% additional cost for DRR/ Resilience features and management on the total. The actual cost may be calculated on the basis of caseload taken up
** With 8% additional cost for DRR/ Resilience features and management on the total. The actual cost may be calculated on the basis of caseload taken up
***Calculated based on the estimated absorbing capacity of the affected areas as well as a timeframe of up to 18 months

Table 5: Costing and Differential - Normal Recovery Vs. Resilient Recovery (US$)

Province / Region	"Normal" Cost	"Resilient" Cost	Differential
Punjab	358.87	411.50	52.62
AJ&K	24.861	28.475	3.6
Total	383.731	439.975	56.22

The table above introduces the additional costs – based on the previous experience in similar disasters in Pakistan- to supplement the "soft" components of community participation and DRR mainstreaming to the "capital support costs" of recovery of the "hard" assets. The table also includes a component that seeks to target, over and above the cash transfer programme already in place, to support non-farm livelihoods through employment creation, vocational training, enterprise development etc.

5. GUIDING PRINCIPLES AND APPROACH

5.1. GUIDING PRINCIPLES

A number of basic guiding principles form the normative basis for early recovery plans, programmes, projects, activities and modes of implementation. These are:

i. **Address the Needs of the Most Vulnerable and Socially Disadvantaged Groups:** Natural disasters affect the poor, disabled, women and women-headed households, children and orphans disproportionately and increase their vulnerability. Priority is given to the specific needs of these populations and to ensure that there will be no restriction on assistance based on gender, ethnicity, religion, age, social status, disability, etc.

ii. **Develop and Restore Capacities:** The early recovery strategy will ensure that local capacities for preventing and responding to disasters are strengthened. The government will encourage communities and local authorities in the worst affected districts to revisit their existing disaster risk management plans to integrate lessons learned from the latest disaster. The Government will also adopt a policy requiring all actors engaging in early recovery efforts to make optimal use of local building materials and to employ local people.

iii. **Secure Human Development Gains:** Recurrent crises in Pakistan's high-risk areas have the potential to push them into a downward spiral, where losses contribute to a steady and increasing erosion of already limited development gains. By implementing the early recovery strategy, the Government of Pakistan will focus on a policy of "building back better" to ensure that the challenges to human development and poverty reduction are not further exacerbated by recurrent natural disasters. To further secure future development gains, affected populations will be encouraged to acquire new skills with a view to diversifying their livelihoods to decrease the risk to local economies.

iv. **Reduce Crisis Risk:** A core principle in recovery is to avoid creating new risks. For example, where villages or parts of villages have been destroyed, proper risk analysis should be conducted and communities facing acute risks should be encouraged to relocate to safer locations.

v. **Promote Independence and Self-sufficiency/Community Participation:** Further elaboration of the early recovery strategy will draw on input provided by local and district consultation meetings. Local officials will be encouraged to work with communities to build consensus around priorities, roles, responsibilities and resources as their input will be repeatedly sought during the strategy implementation period.

vi. **Civil Society Participation**: The Government seeks to draw upon the assistance and advantages offered by all sections of society, including academia, media and civil society organisations (CSOs), and will encourage the establishment of appropriate CSO-Government partnership mechanisms to assist in planning and implementing recovery and rehabilitation in affected districts.

vii. **Establish Transparency and Accountability:** The Government is making a special effort to ensure that targeted and affected populations are adequately informed of timeframes, entitlements, sources of technical help and avenues for articulating their concerns and grievances during the recovery period. Robust quality control mechanisms, such as the involvement of the Space and Upper Atmosphere Research Organisation and the National Database and Registration Authority to verify the extent of damage and the lists of affected people, have been put in place. Databases have been established on the impacts of disasters, planned and ongoing recovery efforts, and independent entities appointed to provide third party validation (TPV). There is also close monitoring through conventional government machinery. The early recovery strategy will build upon these mechanisms to promote transparency at all levels.

viii. **Localising Support:** Planning, implementing and monitoring early recovery interventions will take place as close to the target populations as possible. The focus will be placed on building the capacities of the local institutional or social level, fostering partnerships and instilling a sense of ownership.

ix. **Mainstream Gender Sensitivity:** The Government will ensure that its early recovery strategy pays particular attention to the specific needs of women. Women will be encouraged to participate in assessing, planning, implementing, monitoring and evaluating recovery.

5.2. APPROACH

The vision of the early recovery programme is to complement efforts of affected communities to restore their lives and livelihoods by providing targeted subsidies and technical advice to integrate resilience into restored livelihoods and infrastructure.

Governance Mechanism for Recovery

Government will act as both the primary and principal provider of goods and services as well as a facilitator for non-governmental initiatives aimed at complementing Government efforts.

Most planning and implementation will take place at the district level. The provincial government, or State government in the case of AJ&K, will primarily implement recovery initiatives above the sanctioned financial limit of the district, implement large inter-district infrastructure recovery projects, undertake overall monitoring and evaluation and TPV, and coordinate district and federal government efforts. The federal government will facilitate

coordination among sub-national entities, interaction with international agencies and facilitation of inter-ministerial processes.

Approval and Financing Mechanism

Initiatives are already in place through notification of financial powers for approval of projects of certain sizes at various levels and the same would be continued. Existing public sector development management bodies such as the District Development Working Party, Provincial Development Working Party, and Central Development Working Party, will process initiatives at their respective levels of government and in accordance with their financial powers to expedite the recovery process.

Information Management, Monitoring and Evaluation

Similarly, robust federal and provincial information management systems have been put in place in the Punjab and AJ&K governments with the latter also having information and communication technical support from the provincial government's Urban Unit. The Government of Punjab has also engaged independent, private sector consulting firms for Third Party Validation (TPV) of the early recovery needs of flood-affected areas and populations. The Government of AJ&K is exploring opportunities for external technical support for their information system. Monthly progress reports will be generated by these systems for coordination forums.

Mechanism for Steering the Strategic Direction

Federal and provincial steering committees were set up in Punjab and AJ&K to oversee the recovery needs assessment process and provide strategic direction. These committees, expanded and enhanced, would continue to steer the implementation as well. Humanitarian and development agencies wishing to contribute to recovery efforts will also be represented in these forums. Steering committee meetings were frequent during the assessment phase, but will decrease during implementation.

The principal implementers and regulators of sector-specific activities will be the provincial or state line departments that have been mandated by their respective Governments. Suitable sector-specific coordination mechanisms will be jointly put in place by the lead UN agency in that sector and the respective line department. These sector-specific coordination forums will act as specialised sub-forums of the steering committees.

Sector Approaches

The guiding principles will form the normative operational framework for sector-specific strategies and actions. The five annexes elaborate sector-specific actions, budgets and management arrangements. After the RNA process is finalised, the summarised figures and actions can be expanded into sector strategies, programmes and projects, with area-specific measures and details. Appropriate appraisal, vetting and approval mechanisms will

be put in place to prioritise and select projects to be approved or recommended for external funding.

Community Participation

Experience in Pakistan as well as elsewhere in the world clearly indicates that Early Recovery phase offers a most promising opportunity to promote a culture of resilience and to inculcate structural and non-structural risk reduction measures in the recovered infrastructure, livelihoods and communities. Similarly, the experience from Pakistan Earthquake of 2005 and subsequent disaster responses indicate that community participation is one of the key factors towards ensuring sustainability of the initiatives as well as ensuring local ownership and the resulting quality assurance and downwards accountability.

Government of Pakistan has had some globally acclaimed experiences in Owner Driven Recovery, especially in housing, CPI and livelihoods sectors in the aftermath of disasters. These efforts were backed by equally renowned initiatives in peace-time participatory development in various parts of the country. The recovery framework treats community participation and reduction of risks from future disasters as fundamental guiding principles. With a view to translate these principles into practices, consultative mechanisms to involve the affected communities in planning and implementation of discreet schemes in all sectors. Appropriate safeguards and checklists will be promoted as integral part of all the project planning, implementation and monitoring mechanisms to mainstream risk-reduction and resilience across the geographical and sectoral spectrum.

Additionally, targeted capacity building and mainstreaming initiatives would be put in place to foster a culture of resilience at all levels of development planning and governance, in the government departments, civil society organisations, academia, media and communities at large. The lessons learnt from the recent floods would be captured and documented to analyse the underlying and overt, structural and non-structural factors behind the hazard turning into a disaster and identify the related capacity gaps, to inform the programming for future.

Inclusion of Needs of Vulnerable Groups

The NDMA's National Policy Guidelines on Vulnerable Groups has *Overarching Guidelines* dealing with all groups. Relevant points related to recovery are as under:

i. Promote participation of women, men, older persons and persons with disabilities in all phases of disasters, from disaster planning and preparedness to disaster response and recovery.
ii. System of relief and recovery needs should ensure inclusion of vulnerable groups – women (especially widows) children (especially Child Headed HHs), older persons and persons with disabilities.
iii. Utilize community knowledge, skills and local networks (such as Girl Guides, Boy Scouts and LHWs) and strengthen local leadership for DRR and DRM.
iv. Community based DRR should include Child Protection in Emergency (CPiE), gender and disability components.

v. The social protection measures of Government of Pakistan, such as BISP, Watan Cards, and land allocation for the landless rural population should be made accessible to the disaster affectees within vulnerable groups to facilitate their socio-economic recovery.

Gender	Children	Older Persons and Persons with Disabilities
1. Strengthen community based safety mechanisms by involving local community women in EWS, response and rescue. 2. Women perspective should be included in designing shelter and rehabilitation projects. For example by improving access and quality of shelters, reducing their burden to fetch water for families, and improving their health from reduced exposure to unhygienic conditions) 3. Develop gender sensitive indicators to monitor and measure progress. 4. Women headed households to be recognized/ registered for the provision various facilities during recovery.	1. Coordination with relevant sectors (food security, wash, nutrition, education, health, etc) for child appropriate services and assistance. 2. Service provisions are tailored for the needs of children with disability during disaster response and recovery. 3. Special measures are in place to ensure that all children-headed households have access to humanitarian services. 4. PDMAs should identify infrastructures prior to disasters as temporary shelters so that schools are not used as the only shelter areas. 5. Uniformly apply safe building codes and other important safety regulations to public and private schools.	1. Designated shelters and buildings should be made accessible for persons with disability and older persons. 2. Specific projects including livelihood programmes focusing on women, older persons and persons with disabilities need to be developed as part of disaster management programmes.

NDMA's Gender and Child Cell through various consultations with the provincial and district authorities have formulated the following general recommendations related to needs of vulnerable groups. Some recommendations related to early recovery are:

1. Livelihood training programmes and awareness programs including disaster preparedness should target women, especially women-headed households and child headed households and other vulnerable groups.
2. DDMAs as first responders should mobilize vulnerable communities for disaster response. This will encourage community involvement, strengthen their own efforts and also address the issue of dearth of human resources.
3. To better manage disaster response, more focus needs to be given to recovery and rehabilitation measures due to which people can acquire basic skills for better livelihood, cash for work programs, and compensation for their losses to be able to cope with future disasters.

6. SECTOR STRATEGIES

6.1. HOUSING

Context

Flash and urban floods ravaged north-eastern Pakistan when late and concentrated monsoon rains started on 4th September 2014. As of 2nd October, the floods caused 367 deaths and affected approximately 2.5 million people in Pakistan. In addition to the loss of life and injury, there has been a social and economic cost: the partial and total loss of homes, significant loss of livestock and livelihoods and massive crop damage. Authorities set up 527 relief camps in affected areas to provide immediate health care services, referrals, cooked food, water, and non-food items, such as tents, blankets, soap, and sleeping mats. Latest assessment carried out by PDMA in Punjab and SDMA in AJ&K shows that there are 101,515 houses are affected in 16 districts of Punjab and some 28,365 houses are affected in the 10 districts of AJ&K.

Key Challenges

Across the flood-affected districts, thousands of makeshift camps have been erected to facilitate aid to the needy, and thousands of schools, colleges and other government and private facilities are being used to provide temporary shelters to the affected households. The displaced people have also started to move back to their places of origin/ homes as the flood waters receded in most places. A rights-based approach and support for returnees is needed immediately to provide shelter support to these returnees. During different surveys while assessing the damages, households highlighted lack of financial means to rebuild as their top concerns regarding the current shelter and housing situation.

As per joint revalidation teams' visit to AJ&K, affected households are not adequately provided with tents/ camps due to limited resources. The affected communities are living in makeshift arrangements and for these households the upcoming winters will be an even greater challenge. The more scattered location of the houses is an even greater challenge in terms of reaching the affected communities for assistance. Access to delivering the construction materials in terms of transportation as well as availability and labour will both be economically and viability wise challenge.

The Strategy

The overall housing assistance strategy will focus on integration of DRR elements at various level of the construction process through establishing Housing Reconstruction Centres (HRCs), technical skill development trainings, construction of model houses, providing on site guidance to communities and distribution of technical information material on safer construction.

The affected communities, particularly those whose homes have been either partially or

fully damaged in the floods, will have access to shelter and that basic protection from the rain and (extreme weather) sun will be ensured, including their privacy and dignity. The early recovery phase will focus on providing a flood resistant housing solution with DRR elements and in minimizing vulnerability of the affected populations in a dignified and sustainable manner. Priority will be on assisting those whose homes have been destroyed (fully damaged) or heavily damaged (partially damaged) by providing appropriate means and structural materials for repair and rehabilitation, primarily based upon the use of traditional building materials enhanced with appropriate technical guideline for skilled worker and layman and support for revitalizing the supply chain of key construction materials. Skills development will also help in ensuring sustainability of the safer construction in future.

Stakeholder analysis, participation and ownership

The cornerstone of this recovery approach is "sustainable relief and recovery" – leveraging investments in the emergency and recovery phases into longer-term development of human settlements. In each phase following a disaster, strengthen people's own spontaneous efforts to enable them to recover. The strategy will also include providing policy solutions, technical guidelines and training support on issues related to housing needs and the recovery of settlements to partners across the sector.

The main stakeholders of this housing assistance are broadly identified in three categories:

a. federal/provincial governments and its line departments,
b. UN system in Pakistan, and,
c. Communities affected by the disaster.

The level of participation and ownership of the three groups varies according to their role identified in project implementation, with communities being the direct stakeholders of the process.

This strategic response is multi-pronged involving the following components:

- Technical and organisational support to the Government of Pakistan/AJ&K, NDMA, SDMA and PDMAs and state arms as well as district administrations.
- The UN system will provide technical policy support at both national and provincial level on safe housing reconstruction, planning, development and program development initiatives.
- The provision of direct assistance to victims of the monsoon floods through the provision of technical support in addition to people's own spontaneous efforts to help themselves not only to rebuild but to "*building back better*" this time.

Gender Considerations

Women and men are involved in the decision-making process to ensure addressing both their concerns in the process of housing construction. The programme will address the practical and strategic gender dimensions by ensuring that sex-disaggregated data are gathered and analyzed from the targeted households and communities.

Government of Pakistan and UN are committed to gender equality and empowering women in cities, towns and other human settlements. NDMA and UN both implements a gender policy, which emphasizes gender equality. Gender mainstreaming is promoted in all of NDMA and UN activities and programmes. This project also focuses on engaging women in project activities, such as training and construction.

This project aims at providing better living facilities physically and economically for women in returnee settlements, as well as empowering women within the decision making mechanisms inside the community.

Environmental Considerations

The strategic objective of the project also includes planning and implementing sustainable solutions with minimal environmental impact. Effects of climate change and disaster risk reduction will be considered.

Sustainability and Replication

The housing assistance is seen as a critically important initial phase of a potentially much larger reconstruction programme. At this time it is essential to initiate temporary shelter support to the affected households before harsh winters, especially in the context of AJ&K. The need for reconstruction support is enormous as is evident from the damaged (partially damaged) and destroyed (fully damaged) houses. It is anticipated that this initial project will provide a crucial 'start-up' and link to larger scale involvement in the reconstruction process in the post-2010 flood affected districts as well.

Expected Results

The technical and DRR support to the housing construction and rehabilitation will be extended to the 129,880 households in 26 severely affected districts in the two regions. Below caseload for housing has been extracted through the damages assessed and reported by PDMA Punjab and SDMA, AJ&K.

Table 6: Housing Caseload – Partially and Fully Damaged

	Districts	Partially Damage Houses	Fully Damage Houses	Total No. of Houses
1	Bahawalpur	75	1,320	1,395
2	Chiniot	89	7,720	7,809
3	Gujranwala	139	754	893
4	Gujrat	289	813	1,102
5	Hafizabad	992	4,911	5,903
6	Jhang	387	45,519	45,906
7	Jhelum	3	117	120

8	Khanewal	-	1,592	1,592
9	Khushab	58	445	503
10	Mandi Bahaud Din	207	1,011	1,218
11	Multan	909	13,248	14,157
12	Muzaffargarh	428	12,928	13,356
13	Narowal	-	1,056	1,056
14	Sargodha	-	2,804	2,804
15	Sheikhupura	-	594	594
16	Sialkot	116	2,991	3,107
	Sub-total Punjab	**3,691**	**97,824**	**101,515**
1	Bagh	3,100	483	3,583
2	Bhimber	1,199	76	1,275
3	Hattian Bala	255	75	330
4	Haveli	7,954	1,202	9,156
5	Kotli	1030	444	1,474
6	Mirpur	125	83	208
7	Muzaffarabad	109	37	146
8	Neelum	59	5	64
9	Poonch	6,352	1,151	7,503
10	Sudhnuti	4,074	552	4,626
	Sub-total AJ&K	**24,257**	**4,108**	**28,365**
	GRAND TOTAL	**27,948**	**101,932**	**129,880**

The specific locations for establishing Housing Reconstruction Centres (HRCs) will be selected in consultation with district/ tehsil/ subdivision authorities. The technical support to the targeted communities will be holistic in order to achieve maximum impact in relation to housing, CPI, agriculture and livelihoods. All efforts under the housing early recovery will be ensured linking it with other project partners, including Government, UN agencies, National and International NGOs. The construction and rehabilitation of housing assistance in Punjab will be 101,515 in 16 districts and similar assistance in the 10 severely affected districts in AJ&K will be provided to 28,365 affected households.

Technical training will be provided to both skilled and unskilled persons to advance their construction skills and learn the DRR elements through the basic technical trainings being organized through highly qualified teams of engineers, including selection of right material, appropriate reinforcements, selection of construction sites, etc. On the job training to both women and men will allow affected communities to get livelihood opportunities while learning new skills.

Monitoring and Evaluation

Field teams will undertake regular monitoring visits and physical verification of progress of activities, including spot-on checks from the technical teams. Joint visits with representatives from the district disaster management teams, donor(s) and implementing partners are highly encouraged.

Evaluation is the assessment, as systematic and impartial as possible, of project implementation. It will focus on expected and achieved accomplishments, examining the results chain, processes, contextual factors and causality, in order to understand achievements or the lack thereof. It will aim at determining the relevance, impact, effectiveness, efficiency and sustainability of the interventions and contributions of the project. Project evaluation will be undertaken by the relevant sector specific agencies.

Institutional/ management arrangements

- The districts are selected on the basis of damages reported under damage assessment done by PDMA and SDMA. Settlement locations have been identified based on monitoring information generated through the said technical assessments.
- Specific villages/locations will be further selected in consultation with district authorities.
- The assistance and support to the targeted communities including all vulnearable groups will be holistic in order to achieve maximum impact in relation to housing, CPI, agriculture and livelihoods, and basic services.
- Housing reconstruction centres will be established in the affected district's headquarters and execute implementation activities under supervision of technical teams.
- Technical Training (repair and reconstruction) to Implementing teams and stakeholders will be provided to own teams as well as to the partners.
- For direct implementation, field teams will identify, strengthen and train local NGOs/ contractors. Other modality is through suggested signed Agreement of Cooperation (AOC) with INGOs.
- Own teams will provide technical assistance and training at community level. Workshops and consultations are built-in the project, building capacity of stakeholders.
- Under direct supervision of technical teams constructed Model house at community level for better learning and understanding
- Once settlements are identified, recognized village committees (comprising women and men) will be mobilised to verify beneficiaries. Eligibility criteria for both fully and partially damaged categories has already been worked out to identify vulnerable and extremely vulnerable households in need of urgent housing assistance and lacking the social or economic capacity that is hampering self-recovery.
- Recognized Village Committees will receive training sessions (on construction) on the key defining features of vulnerability and extreme vulnerability based on social as well as technical criteria for qualifying for housing assistance and for sustainability. Training is a requirement in order to scale up early recovery.

Risks and Assumptions

A. Return is immediate but contexts and environments are many.

- The majority of households will attempt to return early, but the variety of materials (grass, frames, mud, brick, stones, RC) and the variety of damage to sites and water resources will lead to varied incremental household rebuilding strategies. Early recovery housing assistance will be confronted with continued social mobility, dispersal, multi-hazard environments, disrupted local markets and depletion of local natural resources.
- In this volatile environment, people still start rebuilding and repairing and the poor use their own 'transitional' means. The widespread use of salvage material and the fact that in many locations in both regions not all building materials were washed away are a further impetus to frantic but low-quality building activity.

B. Advocating housing assistance to extremely vulnerable households needs to be continuous.
   - In government sponsored cash programmes, equity is deemed important but the poorest and most vulnerable do not get first access to the resources. During early recovery, they have also least access to skilled labour and need to buy materials in the open market, which they cannot.
   - A technical assistance programme that delivers training to semi-skilled artisans can do on-the-job training for shelters of most vulnerable households, who can by no means even contribute their own labour.

Table 7: Housing: Indicative Intervention Budget (US$)

	Intervention Description	Unit	Qty.	Duration (Months)	Total Cost US$
1.	Housing Recovery Subsidies (Punjab and AJ&K)	No of Houses	129,880	12	112,440,678
2.	Additional grants for structural resilience	Number of Houses	129,880	12	6,746,441
3.	Establishing housing reconstruction centers (HRCs) at district level	No of HRCs	22	24	2,900,000
4.	Baseline surveys skilled and unskilled workers	Persons	2,000	4	150,000
5.	Technical skills development trainings addressing DRR elements in housing construction	No of trainings	45	12	3,000,000
6.	Construction of model houses and onsite technical advice to communities at village level in severely affected villages.	No of model houses	50	12	400,000
7.	Information and Community Material - technical guidelines and Information campaign	No of campaigns	26	12	250,000
8.	Lesson learned and experience sharing workshops in both regions.	Nos.	2	1	46,441
	TOTAL				**125,933,560**

6.2. AGRICULTURE AND FOOD SECURITY

Situation overview

The 2014 floods had devastating effects on food security and livelihoods, especially in terms of agriculture and livestock. Standing crops were destroyed, livestock were lost and livelihood activities were curtailed due to floods. Early warnings and well-organised rescue operations, prevented higher losses of lives, but sound planning, sufficient resources and time will be required for complete recovery in livelihoods and food security. The following overview provides a snapshot of the damage caused by floods and the recovery needs.

Agriculture

Agriculture is one of the most flood affected sectors. At the time of the flood, rainy season crops – especially cotton, rice and sugarcane – were ready to harvest. According to government estimates, around 1 million acres of standing crops were destroyed. Extensive damages were reported in Jhang, Muzzafargarh, Multan and Sargodha Districts

A Multi-sector Initial Rapid Assessment conducted in five of the worst affected districts indicated that agriculture was the prime source of income for most (55 percent) of the households. More than 70 percent of those reported loss of livelihoods. The Recovery Needs Assessment (RNA) estimates that around 250,000 farming households were affected overall. Loss of standing crops not only affected the income bases of farmers, but also impacted overall production, especially for rice and cotton. SUPARCO estimates[3] indicated around a 217,000 ton reduction in rice production, 726,000 in sugarcane production and 250,000 bales of cotton due to the 2014 floods. Along with this, loss of seed stocks and agricultural tools, destruction of irrigation channels and land erosion further deteriorated the agriculture sector. RNA indicated some 434 fully or partially damaged embankments, water harvesting schemes, reservoirs and secondary and tertiary irrigation channels were also affected due to floods. The following table shows district level details of flood damage.

Table 8: Agriculture Damages

District	No. of farmers affected	Crop area affected (acres)	Livestock perished
Bahawalpur	4,470	19,205	0
Chiniot	7,823	27,376	0
Gujranwala	6,629	49,170	182
Gujrat	2,965	9,783	111
Hafizabad	9,044	50,370	175
Jhang	72,158	294,512	0
Jhelum	5,384	14,471	5
Khanewal	7,264	30,672	0
Khushab	5,557	14,027	0
MandiBahaud Din	7,869	40,243	49

[3] PAK SCMS Bulletin, Vol. IV, Issue 10, SUPARCO.

Multan	28,013	94,578	3
Muzaffargarh	44,363	224,700	98
Narowal	5,695	19,145	3
Sargodha	27,415	72,082	5
Sheikhupura	5,319	26,643	0
Sialkot	4,364	17,786	123
Punjab Sub-total	**244,332**	**1,004,764**	**754**
Bagh	0	0	62
Bhimber	0	0	129
HattianBala	0	0	68
Haveli	6,005	1,165	292
Kotli	110	144	100
Mirpur	0	0	22
Muzaffarabad	0	0	9
Neelum	0	0	356
Poonch	0	0	50
Sudhnuti	0	0	83
AJ&K Sub-total	**6,115**	**1,309**	**1,171**
GRAND TOTAL	**250,447**	**1,006,073**	**1,925**

Rabi season in affected areas generally starts in mid-October. Delays in recovery activities can also affect the next rabi crop, further deteriorating the food security situation. According to the RNA estimates, 10,914 million rupees (PKR) will be required to ensure initial recovery activities.

Livestock

Livestock rearing is often considered a secondary source of income and also fulfils household food and nutrition needs. Significant losses in the livestock sectors were also observed due to the floods. Overall 1,925 small and large ruminants were reported to be lost due to floods, with higher losses in Neelum, Bhimber Haveli and Kotli districts in AJ&K and Sialkot, Gujranwala, Hafizabad and Gujrat districts in Punjab. Distress selling was also reported in some places, mainly due to unavailability of fodder/shelter for animals. The RNA estimates that 233.47 million rupees will be needed for recovery in the livestock sector.

Household food security

Household food security was also affected by the floods, mainly due to the loss of food stocks. MIRA findings indicate that 37 percent of households lost most of their food stocks. Livelihood losses further reduced their economic access to food and 62 percent of households reported that they didn't have sufficient resources to buy food after the floods.Other impacts, including losses in the fishery and forestry sectors, were also reported in the assessment.

Vulnerability

Poor/low income earner households are often more vulnerable in disasters. To assess the pre-flood vulnerability of affected household, two indicators were used, Benazir Income Support Programme (BISP) beneficiaries and percentage of small holders. BISP poverty score card assess the socio-economic status of a household on the basis of multiple indicators, including possession of assets, income, etc. A higher number of beneficiaries in any district indicate the presence of more poor and low income earners in that district.

Findings revealed that Multan, Muzzafargarh and Bahawalpur have highest proportion of vulnerable people. The proportions of BISP beneficiaries, as well as small land holders, are higher in these districts. Following these districts, Jhang, Jhelum and Narowal have higher numbers of vulnerable households. Sialkot, one of the major industrial cities of Pakistan, appears to be an exception where small holding is significantly higher, but where there are the least BISP beneficiaries.

Tableg: Vulnerability Indicators

	BISP Coverage			Land Distribution			
Districts	# of Households *	# of BISP Beneficiaries	% of BISP Beneficiary Households	Less than 1 Acre	1 to Under 2.5 Acres	2.5 to under 5 Acres	5 and above Acres
Bahawalpur	648,260	50,058	7.7%	21.0	28.0	18.0	33.0
Gujranwala	831,195	25,774	3.1%	7.0	27.0	24.0	42.0
Gujrat	474,209	14,321	3.0%	7.0	24.0	27.0	42.0
Hafizabad	192,077	13,643	7.1%	3.0	18.0	23.0	56.0
Jhang	688,102	66,776	9.7%	9.5	29.5	25.0	36.0
Jhelum	231,184	5,648	2.4%	17.0	28.0	23.0	32.0
Khanewal	491,585	30,925	6.3%	13.0	32.0	22.0	33.0
Khushab	218,043	12,528	5.7%	8.0	27.0	19.0	46.0
MandiBahuddin	271,904	16,908	6.2%	6.0	24.0	24.0	46.0
Multan	807,062	143,467	17.8%	18.0	33.0	19.0	30.0
Muzaffargarh	751,043	153,850	20.5%	25.0	18.0	17.0	40.0
Narowal	262,372	16,434	6.3%	16.0	38.0	22.0	24.0
Sargodha	622,638	54,499	8.8%	4.0	19.0	22.0	55.0
Sheikhupura	824,164	17,446	2.1%	8.0	33.0	22.0	37.0
Sialkot	656,750	19,585	3.0%	22.0	36.0	22.0	20.0

Sources: Benazir Income Support Programme and Pakistan Agriculture Census 2010

* Number of households is calculated by dividing projected population of NIPS till mid-2014 to the average household size from district PSLM 2012-13.

Needs Analysis

Keeping in view the above situation analysis, the following key priority areas are identified for immediate recovery activities.

Priority Area	Caseload
Support to farmers to restore farming with special focus on Rabi cultivation	Around 250,000 number of farmers with total estimated cost PKR 10,914 million.
Replenishment of lost livestock	Around 2,000 households with total estimated cost PKR 232 million
Compensation/CFW activities for non-farm based households	This caseload is also covered in non-farm livelihood sector
Rehabilitation of agriculture infrastructure specially irrigation and water storage facilities	434 number of schemes

Recommendations for resilience based recovery

During recovery and rehabilitation activities, it is imperative to incorporate mitigation and risk reduction measures to reduce the vulnerabilities of future disasters. Some key recommendations in this regard are given below to follow the build-back-better approach in recovery and rehabilitation activities.

Diversification in livelihoods portfolio

Diversification in livelihoods portfolio of rural populations can make them more resilient to natural disasters. The Livelihood Recovery Appraisal (LRA-2013) conducted in the areas affected by flooding in 2010-2012 showed that diversification in livelihoods was an important driving factor that increased the resilience of affected households by strengthening alternate means of income, supporting social safety nets and increasing adaptive capacity. Promotion of agro-pastoralist livelihoods, strengthening women's participation through home-based industry and support to alternate sources of income will be beneficial in this regard. Specifically, aquaculture is an important livelihood intervention and needs to be combined with raised bed platforms where the water is available. One of the initiatives to promote diversification in livelihoods may include imparting small enterprise/entrepreneurial skills development through skills training with an incentive whereby cash or food will be provided to meet the beneficiaries' opportunity cost for participating in skills development training. Moreover, promotion of kitchen gardening has been proven to supplement livelihoods so this will also be recommended, entailing provision of seeds and training. It could be in the form of a package which may include back-yard poultry raising training and incentives.

Improved crop systems and promotion of flood resistant crops

Promotion of flood resistant crops, like sugarcane and tall varieties of rice, in flood prone areas can significantly reduce crop losses in case of flooding. Some successful stories in this regard were reported by the farmers of northern Sindh during the Livelihood Recovery Appraisal (LRA-2013). The negative effects of floods can also be minimised by crop diversification and by focusing on alternate short duration crops (vegetable/pulses and legumes) and early maturing varieties of major crop like rice, maize, cotton, etc. This will include some piloting activities on crop diversification. This will be accompanied by awareness raising activities/seminars with farmers in the field.

Climate smart agriculture

Adaptation to climate change is vital for natural disaster prevention and risk reduction, especially floods. Agriculture and food systems must undergo significant transformations to meet the related challenges of food security and climate change. Mainstreaming climate-smart agriculture into national policies and programmes is essential in this regard. The FAO/WFP strategy on climate smart agriculture will be helpful in developing a green economy and preserving the ecosystem.

Resilience in the livestock sector

Diversity in livestock, rearing of improved breeds and improving animal health, including disease prevention and management, are a few important steps to increase the resilience of the livestock sector. Improving fodder and feed management and storage is also vital in this regard. To support affected communities, the programme will pilot, educate and impart skills in keeping diversified livestock and improving animal health and will introduce improved livestock management practices.

Flood resilient infrastructure

Community and agriculture related infrastructure – including raised roads (farm to market or village access roads), irrigation channels, water drainage schemes and flood protection bunds – should be constructed keeping in mind risk reduction measures. At the grassroots level cash/food for work programmes will also be employed to rehabilitate rural agricultural infrastructure. This will be supplemented with training for the farmers in the maintenance and upkeep of agricultural infrastructure.

Climate-resilient participatory reforestation and rangeland improvement

Deforestation increases the likelihood and magnitude of flooding. Strengthening forestry and improving rangeland is the key to reducing the risk of floods. A community based participatory approach for reforestation and range management will not only strengthen the forestry, but will also increase awareness/ownership among farming communities. Along with this, increasing the use of perennial crops and growing and maintaining shrubs and trees in the farm landscape will not only improve flood resistance, but will also improves soil resilience and provide diverse products (food, fodder, fuel, fibre, timber, etc.). Agro-forestry can also reduce erosion, enhance crop and fodder production and improve water quality, enhancing resilience to climate change by supporting eco-systems.

The affected farmers and villages will be encouraged to undertake agro-forestry and reforestation campaigns by incentivising these activities by providing training, food and cash as necessary. Special campaigns may also be launched with the participation of school teachers and children to raise awareness on plantation and reforestation.

Improved food storage

Losses of household food stocks during floods left prolonged negative impacts on food security. Improved food storage, particularly promotion of raised bed food go-downs can reduce food losses during disasters. Household training and awareness-raising in nutrition and other relevant areas through cash or food for work activities will improve practices and food security.

Micro insurance (Index based insurance):

As residual risk measures, micro insurance schemes, particularly for crops and livestock, are important. They can provide affected farmers a sense of economic security and can reduce government spending on relief and compensation packages.

Table 10: Agriculture - Indicative Intervention Budget (US$)

	Intervention Description	Unit	Unit cost	Total Cost (Rs)	Total Cost (US$)
1	Recovery grants for agri restoration	# of acres	10,045	10,106,045,300	101,060,453
2	Recovery grants for livestock	# of livestock	112,300	216,177,000	2,161,770
3	Diversification in livelihoods portfolio	2 centers at provincial level	40,000,000	55,778,900	557,789
4	Improved crop systems & promotion of flood resistant crops	25 districts	4,800,000	50,000,000	500,000
5	Climate smart agriculture	25 districts	80,000	50,000,000	500,000
6	Resilience in the livestock sector	25 districts	3,200,000	50,000,000	500,000
7	Flood resilient infrastructure	# of schemes	1,000	400,000,000	4,000,000
8	Climate resilient participatory reforestation & rangeland improvement with a focus on agro-forestry	25 districts	4,880,000	50,000,000	500,000
9	Improved food storage (go-downs & trainings)	# of trainings	2,800,000	70,000,000	700,000
10	Micro Insurance to small farmers	# of farmers	100,000	100,000,000	1,000,000
	TOTAL			**11,148,001,200**	**111,480,012**

6.3. COMMUNITY PHYSICAL INFRASTRUCTURE

Until recently, the major focus of the humanitarian response was on relief with very little early recovery support available to the affected communities. By the time early recovery activities got underway, most of the inundated area had already been cleared of flood water through human effort and due to the gradual flow of water and evaporation. However, community access to their houses, basic services, and marketplaces depends on rapidly implemented, emergency infrastructure restoration.

The majority of affected communities in the worst hit districts still need community physical infrastructure (CPI) rehabilitated to improve conditions in and around their dwellings. The Early Recovery needs for CPI is covered in this section. The following table illustrates the regions' recovery needs.

Table 11: Community Physical Infrastructure Caseload

No.	Districts	No of Schemes damaged	Rehabilitation Cost (PKR)	Rehabilitation Cost (US$)
1	Bahawalpur	51.00	81.00	0.81
2	Chiniot	136.00	333.23	3.33
3	Gujranwala	158.00	1,252.40	12.52
4	Gujrat	108.00	1,165.79	11.66
5	Hafizabad	163.00	1,218.37	12.18
6	Jhang	680.00	4,300.80	43.01
7	Jhelum	125.00	305.75	3.06
8	Khanewal	34.00	89.00	0.89
9	Khushab	60.00	237.46	2.37
10	Mandi Bahaud Din	84.00	754.73	7.55
11	Multan	185.00	834.60	8.35
12	Muzaffargarh	111.00	549.62	5.50
13	Narowal	85.00	250.89	2.51
14	Sargodha	114.00	917.47	9.17
15	Sheikhupura	143.00	681.06	6.81
16	Sialkot	171.00	607.68	6.08
17	12 rain affected districts	172.00	1,184.56	11.85
	Sub-total Punjab	**2,580.00**	**14,764.40**	**147.64**
1	Bagh	127.00	46.48	0.46
2	Bhimber	105.00	235.41	2.35
3	Hattian Bala	529.00	63.89	0.64
4	Haveli	126.00	279.97	2.80
5	Kotli	241.00	114.27	1.14

6	Mirpur	28.00	7.49	0.07
7	Muzaffarabad	71.00	-	-
8	Neelum	184.00	40.26	0.40
9	Poonch	533.00	199.58	2.00
10	Sudhnuti	700.00	141.24	1.41
	Sub-total AJ&K	**2,644.00**	**1,128.59**	**11.29**
	GRAND TOTAL	**5,224.00**	**15,892.99**	**158.93**

Major problems likely to result from damage to infrastructure, varying in magnitude and scale in various locations, are:

- Farmers cannot transport seeds and fertilisers, or harvested crops from market-to-farm or farm-to-market due to damaged link and access roads, jeopardising their income generation efforts;
- People and support organisations face difficulties transporting construction and other materials to rebuild houses and infrastructure due to damaged communication links;
- Women, children and people with disability and age cannot freely travel to health services and schools because broken streets are filled with mud and sewerage;
- Damaged drains obstruct the flow of water creating an unhealthy environment, especially for children around their homes and schools, making them vulnerable to disease;
- Damaged irrigation and flood protection structures have deprived the communities of irrigation water to cultivate their crops. Moreover, they represent another potential hazard, placing many communities at risk from any future floods.

Infrastructure repair will restore access and mobility to men, women, and children in the affected areas. It is estimated that around 7,550 micro, small and medium size basic CPI units are in need of partial or full repair in the worst hit districts. These include damaged link roads, culverts, embankments, irrigation channels, bridle paths, school buildings, health services, water supply facilities, etc.

Challenges

The impact of the floods has not been uniform across Punjab and AJ&K. A 'one size fits all' approach for all provinces and districts will not be effective. Tailor-made approaches need to be developed based on the actual impact of the floods in each location.

The conventional non-integrated approach by the line agencies and humanitarian organisations would limit the impact of humanitarian action. A bottom up participatory approach needs to be adopted to develop coherent plans to support early recovery needs in an integrated manner.

Strategy

The widespread nature of the disaster means that collaboration is needed between as many development partners as possible, including the affected communities. Ideally projects will be implemented by communities based on their abilities. Some larger projects are complex and difficult for communities to implement. Local NGOs and local government authorities will be engaged in such instances. This requires capacity development of district based NGOs and local authorities so they can successfully manage early recovery challenges.

Specific features and principles of the community infrastructure early recovery strategy are outlined below.

i. Priority activities include:
   - Repair access/link roads;
   - Restore drains;
   - Repair village streets and pathways;
   - Repair/establish protection walls, dikes and check dams;
   - Repair water channels;
   - Restore community centers (mosques, *hujras*, funeral places, washing pads for women, etc.).

ii. To revive the local economy in flood-hit areas, local communities will be involved in rehabilitation through Cash-for-Work initiatives where hiring preference will be given to local workers.

iii. The CPI recovery programmes will promote participation of the most vulnerable communities and closely coordinate with provincial and district-level government institutions to identify critical gaps.

iv. Poor women, children, the disabled, the elderly and minority groups are among the most vulnerable. Their needs will be prioritised.

v. The CPI recovery programmes will develop specific implementation strategies (including activities and monitoring and evaluation plans) for Punjab and AJ&K. There will be a targeted, area based and multi-sector approach to supporting the most needy and vulnerable populations.

vi. The CPI recovery programmes will strive to sensitise donors about CPI gaps, and the need for timely action. It will also strive to build trust among donors and members and promote close interaction by inviting donors to coordination meetings.

vii. From a sustainable development perspective and in line with the Hyogo Framework for Action (HFA), special emphasis will be placed on mainstreaming Disaster Risk Reduction into the early recovery process.

viii. The CPI recovery programmes will prepare guidelines and minimum standards to ensure quality, participation of communities in decision making and implementation and supervision, and mainstreaming disabilities and other protection and cross-cutting issues.

Table 12: Community Physical Infrastructure Indicative Intervention Budget (US$)

	Activities	Months	Units	Unit Cost	Total (PKR)	Total ($)
1	Rehabilitation of community infrastructure (5224 schemes)	24	# of schemes	3,042,296	15,892,952,600	158,929,526
2	Additional structural costs for disaster resilience (5224 schemes)	24	# of schemes	152,115	794,647,630	7,946,476
3	Constructing demo CPI schemes under "control" conditions showcasing DRR approach in CPI Construction	6	# of schemes	300,000	45,600,000	456,000
4	Technical advisory services	24		10,000,000	380,000,000	3,800,000
5	Preparation of DRR checklists and guidance manuals for CPIs	3		-	10,000,000	100,000
6	Trainings on incorporating DRR elements in CPI construction	12	# of trainings	500,000	25,000,000	250,000
7	Broadcast DRR related public service campaigns on electronic media	18			16,188,600	161,886
	Total				**17,164,388,830**	**171,643,888**

6.4. NON-FARM LIVELIHOODS

Background: Key Challenges

Floods in September 2014 have damaged the non-farm livelihoods due to loss of assets, damage to infrastructure and disruption due to non-accessibility to market and loss of services. The Multi-Sector Initial Rapid Assessment (MIRA) of September 2014, conducted jointly by NDMA and the UN indicates the following situation on ground:

- Around 40% of the markets across the impacted areas are not functioning.
- Only around 38% of the households surveyed have adequate resources to buy food.
- 55% of the households reported agriculture as their primary source of income. 12% have livestock as their main source of livelihoods. Non-farm livelihoods comprise 33% of total affected population.

The assessment of non-farm livelihoods was challenge due to the following reasons:

Diversity in nature

The Non-Farm Livelihoods encompass a broad range of economic activities in rural and urban settings - starting from formal businesses (industrial activities, shops and trading) down to home-based work, cottage industries and services sector. Therefore, it is hard to make a single strategy to recover the diverse nature of non-farm economic activities. A flexible strategy to accommodate the diversity of interventions is recommended.

Lack of detailed data

The lack of precise data on the exact nature of non-farm livelihoods at District level restricts the exact assessment in terms of pre-flood livelihoods and employment situation. In Punjab, the findings of Labour Force Survey (LFS) cannot be extrapolated to the District level due to its small sample size. The other forms of data (PSLM, MICS etc), though provide a District-level data for various indicators, but it does not cover the details of non-farm employment. In AJ&K, none of the aforementioned surveys take place, therefore, the systematic information is quite scarce. This situation warrants carrying out a detailed pre-intervention needs assessment in each District to determine a baseline which identifies specific groups of right-holders (or ultimate beneficiaries) and devise activities for rehabilitation of non-farm livelihoods in each District.

Lack of specific institution for Employment Promotion

There is no specific institution responsible for the promotion of non-farm livelihoods and employment opportunities in Punjab, Azad Jammu & Kashmir (AJ&K). Various departments are dealing with partial elements of non-farm livelihoods separately. In a recent development, the Labour Department in Punjab has designed a project to establish a network of 'Employment Exchanges' which used to exist in past but were abandoned due to technical reasons. Similarly, the Azad Kashmir Small Industries Corporation (AKSIC) in AJ&K has also worked in the past to support employment creation after the 2005 earthquake and has designed a similar programme under Annual Development Budget for 2014-15.

Key Statistics

Azad Jammu Kashmir

The caseload for non-farm livelihoods in post-flood 2014 for AJ&K has been precisely worked out by the State Disaster Management Authority (SDMA) which gives a total caseload of 230 persons – mostly comprising shops and water-mills in five affected Districts and the cost for rehabilitation (Rs: 5.93 million) has also been worked out as per standard Government guidelines. This framework is using the same figures without any change.

Punjab Province

The caseload for non-farm livelihoods support in Punjab Province has been extracted from various sources of data as follows:

PDMA Data for floods-2014, number of households for Livelihoods support=		101,551
Number of employed persons per household	=	1.5[4]
Total number of persons workers in 101,551 households (pre- floods)	=	152,326
According to MIRA, 67% are engaged in farming	=	102,058
According to MIRA, 5% are engaged in regular jobs (stable income)	=	7,616
According to MIRA, 28% are wage-labourers and small businesses	=	42,651

The Strategy

Job creation does not just happen as part of recovery and economic growth stemming from initial recovery efforts. Instead it has to be a clear and ever-present target that is part and parcel of short-term recovery efforts leading to longer term development.

Experience has demonstrated the effectiveness of employment-oriented strategies combined with local economic development recovery strategies for promoting a quick recovery from disasters. These strategies bring together employment-intensive reconstruction works, enterprise development, microfinance, skills development, social protection, capacity building of the government officials and social partners, such as representatives of employers and workers, CBOs and private sector.

The exact need for non-farm livelihoods support interventions would be derived from assessments, including pre-programme, gender and labour market assessments. These would require structured coordination amongst all stakeholders, building on comparative advantages.

Early recovery focuses on recovering livelihoods, building national capacities, ensuring national ownership and planning for longer-term recovery. Based on these four building blocks of Early Recovery and the given data set of the damages and existing caseloads, this strategy proposed setting up dedicated 'Employment Information Centers (EIC)' in each affected District of Punjab Province. For AJ&K, only two EIC are proposed keeping in view

[4]According to 1998 Census, Punjab had 1,053,712 housing units and 1,660,290 labour force which makes 1.5 workers per household

the small caseload in the Ten Districts. The EIC will provide the backward and forward linkages for carrying out detailed need assessment, reporting to relevant authorities and implementing need-based interventions in each District. It will also facilitate linkages with Training-providers, microfinance institutions, local employers and other relevant institutions.

While Phase-1 interventions would be mostly implemented at District levels, interventions in phase-2 (Local Economic Recovery) and phase-3 (Sustainable Employment Creation) would be implemented at Provincial/State level.

In view of the given situation, the following sets of interventions are proposed:

Period	Intervention Description	Quantity	
		Punjab	AJ&K
Immediate (First 3 months)	Establish Employment Information Centers at District level	16 units	2 unit
	Baseline Survey and Skills Profile	16 Districts	10 Districts
Phase-1: Short-Term (4-12 months)	Stabilizing income generation and emergency employment	42,651* persons	230
	1. Emergency Temporary Jobs/ Short-term Employment Creation (Cash-for-Work) (20% daily-wage laborers)	18,279 persons	Nil
	2. Targeted livelihood and self-employment start up grants		
	a. Assets replenishment for individual skilled workers	12,186	Nil
	b. Small and Medium-sized enterprise rehabilitation	12,186	230
Phase-2: (12-24 months)	Local Economic Recovery for Employment and Rehabilitation 1. Local Capacity Development 2. Community Driven Recovery 3. Local Economic Recovery	16 Districts	10 Districts

Employment Information Centers at Teshsil/Sub-District level

It is proposed to establish 'Emergency Employment Information Centers (EEIC)' in each area of concentration where affected families are residing. The EEIC will do the following activities:

- Registration of flood-affected women, men and youth (aspiring for employment)
- Carry out baseline survey to identify exact need of support and specific support activities
- Develop a mechanism for asset-replenishment and self-employment
- Referral of flood-affected women, men and youth to skills training and potential jobs
- Carry out short-term employment activities (Cash for Work and Labour Based Public Works)
- Develop a database of 'Employers' and engage them for understanding market demand

- Develop tools for productively engaging unemployed women and men in non-farm livelihood activities
- Coordinate with Government, private sector and other stakeholders (microfinance institutions, employers and relevant DMAs) for placement of flood-affected women, men and youth in short-term and long-term employments

The EEIC will identify employment needs and explore opportunities for the affected families and engage them in available productive employment. Each EEIC will have one Manager, two Employment Officers (one male and one female) and a Computer Operator with support staff. The Manager and Employment Officers will be provided mobility support for their access to the displaced families. Keeping in view the size of caseload, one EEIC per District will be established in Punjab with a specific target of flood-affected families engaged in non-farm livelihoods. For AJ&K, only two EEIC are proposed keeping in view small caseload. It will be established in two of the ten flood-affected Districts which are centrally located having smooth access to all Districts. The capacity of EEIC Staff will be developed in undertaking their employment and livelihoods interventions.

Baseline Survey and Skills Profile

The first activity for EEIC in each District will be to identify the specific flood-affected families with their previous employment records, skills levels and the support they require to restart their economic activities along financial layout for such support. A detailed list along with potential costs and timelines will be prepared as a baseline for the subsequent support.

Revival of Non-Farm Livelihoods to pre-flood situation

The following sequence of interventions has been proposed in line with the principles of early-recovery programme:

Phase-1: Stabilizing income generation and emergency employment

This is going to be first track of activities to be carried out immediately on short-term (within 3-6 months) bases. The following activities are proposed:

i. Emergency Temporary Jobs/ Short-term Employment Creation (Cash-for-Work) for daily-wage labourers (20.3%) of total caseload for livelihoods. Emergency temporary jobs would result from labour-intensive "Cash-for-Work" projects generating temporary employment usually lasting no more than six months. Cash-for-work projects would be employed in infrastructure rehabilitation projects or other similar temporary jobs such as raising embankments, plantation and de-watering, where labourers are paid in short-term intervals.
ii. Targeted livelihood and self-employment start up grants for (5.5%) of total caseload of livelihoods. It includes:

Assets replenishment for individual skilled workers

The EEIC will also provide necessary toolkits to the skilled families so that they can start their income generation by using their existing skills. Women will be provided the necessary tools to start their home-based income generation activities.

Small and Medium-sized enterprise rehabilitation

The EEIC will also support the local entrepreneurs in restarting their enterprise activities by provision of small grants.

Phase-2: Local Economic Recovery for Employment and Disaster Risk Reduction

At secondary level, there would be a need to strengthen local economic development and enhance employment opportunities for flood-affected communities. These interventions would last till 24th month of the floods. Major activities include:

i. Local Capacity Development of relevant Government authorities and private sector for restoring economic interventions at a broader level.
ii. Employment Intensive Infrastructure Programme (EIIP) for Disaster Risk Reduction (e.g. raising embankments) including an element of Climate Change which would include Tree Planting in selected locations. The latter will facilitate the participation of women and youth.
iii. Community Driven Interventions for rehabilitation of micro-enterprises and other economic activities
iv. Local Economic Recovery through skills development, enterprise promotion, micro-finance and investment promotion – particularly targeting young women and men as main beneficiaries. Short cycle skills training addresses the immediate labour skill needs of humanitarian and development agencies in implementing their construction, transportation, education, health and security projects

Institutional Arrangements

The following institutional arrangements for the rehabilitation of non-farm livelihoods are proposed at Punjab and AJ&K, after consultation with the related departments in the two regions:

Punjab

The overall responsibility for coordination and supervision for 'Recovery of Non-Farm Livelihoods' will be entrusted to the Secretary Labour & Human Resource Department Punjab to oversee the functions of a network of 'Emergency Employment Information Centres (EEICs)' across the 16 flood-affected Districts. The Secretary Labour will review the performance of each EEIC on a monthly basis and ask the relevant Executive District Officer (Labour) / District Labour Officer to monitor the progress of EEICs at the District level.

At District-level, each EEIC will report to the Executive District Officer (Labour) and will be facilitated by the District Coordination Officer for discharging its functions. In a recent development, the Department of Labour and Human Resource Punjab is considering a project to establish 'Employment Exchanges' in all Districts. The proposed EEICs could be converted into an Employment Exchange in the longer duration.

AJ&K

The overall responsibility for coordination and supervision for 'Recovery of Non-Farm Livelihoods' in AJ&K will be entrusted to the Secretary Industries and Commerce, Government of AJ&K – who will supervise the EIC through Azad Kashmir Small Industries Corporation (AKSIC). The EIC will directly report to the Managing Director, AKSIC.

It is also learnt that recently the AKSIC has proposed an ADP Project to establish three 'Employment Information Centers' to facilitate young women and men regarding job search and placement. The proposed EIC will serve to be one of the three such facilities to be merged in the Government for long term sustainability.

Budget Estimate

The following estimation for costs of various proposed components are based on experience and statistics on similar initiatives in the recent past and consultations with the relevant government departments in the two regions.

Table 13: Livelihoods - Indicative Intervention Budget (US$)

	Intervention Description	Months	Unit	Quantity	Unit Cost	Total (PKR)	Total (US$)
1	Livelihood cash grants (114,233 families)	6	families	114,233	8,000	913,866,000	9,138,660
2	Targeted grants for vulnerable women and youth	6	families	31,985	20,000	639,706,200	6,397,062
3	Targeted loans for small enterprises	12	enterprises	18,277	20,000	365,546,400	3,655,464
4	Short term employment (Cash-for-Work)	12	person days	1,000,000	500	500,000,000	5,000,000
5	Establish Employment Information Centres	12	Centres	17	40,000	68,000,000	680,000
6	Baseline Survey and Skills Profile	3				14,479,400	144,794
7	Skill development (technical/vocational) 50% females	12	persons	4,000	30,000	120,000,000	1,200,000
8	Technical assistance and support	24		24	5,000,000	120,000,000	1,200,000
	TOTAL					**2,741,598,000**	**27,415,980**

6.5. DISASTER RISK REDUCTION

Early Recovery DRR Needs and Strategy

It is important that recovery after any disaster takes into account the potential for future disasters/hazards. Early recovery work has to ensure that it does not exacerbate existing vulnerabilities or create new forms of vulnerability and, secondly, has to reduce vulnerability to future hazards. Anticipating and mitigating the likely risk of disasters not only saves lives but also reduces costs incurred on recovery and rehabilitation.

In the context of the 2014 floods, DRR in early recovery will be a cross-cutting theme in all sectors to ensure it is mainstreamed in all interventions and all the sectoral annexes include elements of community participation and DRR in them, amounting to no less than US$ 56 million. To buttress and facilitate this work, additional DRR specific interventions will be needed to strengthen the disaster management system, develop appropriate information systems for coordination and early warning, promote knowledge management for DRR, and create awareness and initiate community-based DRR programs.

The following specific interventions will be undertaken as part of the DRR Early Recovery Strategy:

i. *DRR Mainstreaming*
   - Review and support to context-specific generic and sector-specific DRR guidelines for the work of all other sectors, including the customisation of the DRR checklists being used at the Planning Commission;
   - Support and review of strategies and proposed interventions of all other sectors from a DRR perspective;
   - Sensitisation and advocacy for all during the ER phase to highlight the importance of mainstreaming DRR.
   - Testing, revisiting and simulation of district DRM plans;

ii. *Strengthening Policy and Organisational Structures*
   - Technical Assistance for streamlining structures and activities of NDMA and PDMAs and for strengthening DDMAs, especially for recovery coordination

iii. *Knowledge Management*
   - Support the integrated MIS with linkages to federal, provincial and district levels.

iv. *Capacity Building of stakeholders in DRR and DRM*
   - Arrange and facilitate training for the government line departments, humanitarian actors and other stakeholders in mainstreaming of DRR in recovery and development as well as DRM in collaboration with the specialised and generic training institutions

v. *Community-Based DRR*
   - Community-based participatory assessment, in coordination with other similar on-going CBDRM initiatives, in flood affected districts of the proposed multi-hazard EWS, processes, evacuation routes, designated evacuation sites, etc.,
   - Community Awareness Programmes through CBOs and schools.

The following table provides the budgetary estimates for DRR specific activities, aimed at supporting the vision, mission and action plan of the National Disaster Management Plan:

Table 14: Disaster Risk Reduction - Indicative Intervention Budget (US$)

	Activities	Months	Budget (PKR)	Budget (US$)
1	Technical Assistance for streamlining structures and activities of NDMA and S/ PDMAs	24	80,000,000	800,000
2	Support to an integrated MIS with linkages at Federal, Provincial and District level to ensure smooth flow of information at all levels	24	10,000,000	100,000
3	Technical assistance and support to NDMA and S/PDMAs for strengthening of DDMAs in the flood affected districts	24	80,000,000	800,000
4	Community Based Disaster Risk Management including community based early warning systems in the selected flood affected districts	24	100,000,000	1,000,000
5	Capacity Building of line departments and humanitarian actors in DRR/DRM	24	25,000,000	250,000
6	DRR Mainstreaming in priority sectors	24	25,000,000	250,000
7	Guidelines and manuals on DRR	24	30,000,000	300,000
	Total	24	**350,000,000**	**3,500,000**

Management Arrangement

NDMA will be focal counterpart for DRR activities at the national level while partnership will be developed with the SDMA and PDMA in Punjab to take the activities forward and to facilitate access to the districts. NDMA as well as other public and voluntary sector training institutions would be engaged for capacity building initiatives.

Annex-A

Disaster Risk Reduction Checklist

The following checklist used by the Planning Commission for Disaster Risk Reduction in construction would be customized and disseminated according to the specific area/ scheme contexts:

1. Which types of hazards have been considered as unavoidable for the project and thus a condition for its planning and design?

Indicate the relative order of importance of the hazards related to the project.

- ☐ Earthquake
- ☐ Drought
- ☐ Torrential Rains
- ☐ Fire
- ☐ Flooding Glacier Lake Outburst
- ☐ Windstorm
- ☐ Technological
- ☐ Landslides
- ☐ Locust
- ☐ Tsunami
- ☐ Intense Erosion
- ☐ Avalanche
- ☐ Cyclone
- ☐ Others

2. Has the brief history of the identified hazard(s) in the area included in the PC-I.

- ☐ Yes
- ☐ No
- ☐ Partial
- ☐ N/A

3. Is the project prepared keeping in view the Building Codes of Pakistan 2007?

- ☐ Yes
- ☐ No
- ☐ Partial
- ☐ N/A

4. Is the project prepared keeping in view the prevailing Building bye-laws?

- ☐ Yes
- ☐ No
- ☐ Partial
- ☐ N/A

5. Does the project incorporate the prevailing territorial planning regulations (e.g. hazard zoning, institutional jurisdictions)?

- ☐ Yes
- ☐ No
- ☐ Partial
- ☐ N/A

6. Have the components and activities of the project been designed to resist the impact of hazards, prioritized in Q. No. 1 above, and to contribute to the reduction of its vulnerability, and that of its surroundings and beneficiaries?

- ☐ Yes
- ☐ No
- ☐ Partial
- ☐ N/A

7. What facilities are available in the area for rescue and emergency relief in case of a disaster?

Sr.	Facility	Controlling Organization	Distance from the Project (approx.)
1	Fire Fighting Services		
2	1122 Rescue Service		
3	Edhi Service		
4	Other		

8. Are there adequate arrangements within the project site for firefighting?

- ☐ Fire alarms
- ☐ Fire extinguishers
- ☐ Fire hoses
- ☐ Automatic sprinkler system

9. Are there funds for mitigation and periodical maintenance of its components, incorporated and meant to reduce the vulnerability of the project and its surrounding population?

- ☐ Yes
- ☐ Partial
- ☐ No
- ☐ N/A

10. Does the budget and cash flow of the project include items allowing the coverage of structural activities for risk management?

- ☐ Yes
- ☐ Partial
- ☐ No
- ☐ N/A

11. Does the budget of the project include provision to respond to emergencies (e.g. alert, contingencies, mitigation, and rehabilitation)?

- ☐ Yes
- ☐ Partial
- ☐ No
- ☐ N/A

12. Does the project include a campaign of awareness raising, training and understanding to risk management for planners, workers and beneficiaries?

- ☐ Yes
- ☐ Partial
- ☐ No
- ☐ N/A

13. Does the budget and cash flow of the project include items allowing the coverage of non-structural activities for risk management?

- ☐ Yes
- ☐ Partial
- ☐ No
- ☐ N/A

14. Do service, transfer, concession and reclamation contracts incorporate provisions for risk management?

- ☐ Yes
- ☐ Partial
- ☐ No
- ☐ N/A

15. Does the project incorporate an adequate contingency plan for possible disasters?

- ☐ Yes
- ☐ No
- ☐ Partial
- ☐ N/A

16. Does the project incorporate any instruments for its financial protection during execution and after the completion of the project (insurance, indemnity, guarantee, contingency credit arrangements, etc.)?

- ☐ Yes
- ☐ No
- ☐ Partial
- ☐ N/A

17. Are there any financial or moral incentives to promote risk management?

- ☐ Yes
- ☐ No
- ☐ Partial
- ☐ N/A

18. Is there provision in the budget for the periodic training of workers and staff to use fire extinguishers, first aid kits, and light search and rescue equipment available within the project site?

- ☐ Yes
- ☐ No
- ☐ Partial
- ☐ N/A

19. Is the evacuation plan prepared, evacuation routes and safe assembly areas identified?

- ☐ Yes
- ☐ No
- ☐ Partial
- ☐ N/A

20. Is the communication system for emergencies established, including a warning system wherever appropriate?

- ☐ Yes
- ☐ No
- ☐ Partial
- ☐ N/A