

Multi-Agency Flood Impact Assessment Koshi River Flood – Nepal

IASC Emergency Preparedness and Response Cluster System
September 2008

Preliminary Results



Photo: Krishna Khanal, WFP

Disclaimer: This is a preliminary report prepared by the Food Security Monitoring and Analysis Unit of WFP Nepal. Many sections of the report are not part of WFP's area of expertise and should therefore be treated as an initial attempt to summarize the assessment findings. The full report will be prepared by IASC cluster system.

Preliminary Results of the Multi-Agency Koshi River Flood Impact Assessment

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HIGHLIGHTS

- An estimated 66,500 people have been displaced in Sunsari and Saptari due to flood. Approximately 42 percent are of Indian origin.
- About one third of the affected population is Muslim. Eighteen percent are Dalit. Only 35 percent have so far received a government identity card.
- Improvements in the shelter situation are of utmost importance. Camps are overcrowded, poorly maintained and more than half of the displaced people report that their current shelter provides insufficient protection against the weather.
- There is an urgent need for firewood or cooking fuel to enable households to cook.
- Displaced people place a large burden on the hosting families/communities. Only about 15 percent currently receive humanitarian assistance.
- The impact on housing, livelihoods, animals and assets was significant with most households reporting complete or partial losses.
- The most severe coping strategies are practised by households staying in spontaneous camps or with host families. Significantly, these also demonstrate the worst patterns of consumption. Humanitarian aid, however, is currently focused mostly on people residing in established camps.
- The acute malnutrition rate among displaced children under the age of 5 was found to be 13 percent. Furthermore, one-third of the children are at risk of becoming malnourished.
- The flood has caused a significant increase in commodity prices which were already at very high levels. This price rise will further compromise people's access to food.

1. BACKGROUND AND OBJECTIVES

On 18 August the monsoon swollen Koshi river (the largest river in Nepal) burst its banks and effectively changed its course. The river now flows through the broken embankment cutting through several VDCs in Sunsari district of Nepal before entering into the state of Bihar in India, where it has flooded up to 1,000 villages and affected more than one million people.

In Nepal the river completely inundated 2 VDCs, Haripur and Sripurjabdi, and partially flooded the western part of Laukahi VDC and about four wards of Paschim Kusaha (wards 3,4, 8 and 9) in Sunsari district. Other VDCs (Bhokraha, Madhuwan, Narsigha, Bashntapur and Dhuskighat) experienced limited flooding and/or are hosting displaced people. Saptari district which borders the Koshi river on the west was not flooded but has seen an influx of flood displaced people, in particular to Bhardaha and Hanumannagar VDCs.

The East-West Highway connecting the main commercial city of Biratnagar in the east with the rest of the country was severely damaged and remains impassable.

The Nepal Ministry of Home Affairs estimates that at least 70,000 people are affected by the flooding in the area. Estimates on the number of displaced people differ depending on the source. According to OCHA some 45,000 people are in need of shelter and humanitarian assistance.

Estimates of the number of Indian nationals from Supaul district in Bihar, India, seeking refuge in Nepal vary

considerably and range between 3,000-5,000 according to the Ministry of Home Affairs and 10,000 or more according to other sources.

Flood displaced people have found shelter in 28 government established camps in Sunsari, in numerous spontaneous camps along roads and embankments and with host families. According to OCHA, at the end of August there were approximately 21,300 people living in established shelters in Sunsari and Saptari.

Map 1 in Annex 1 provides an overview of the affected areas and the locations of camps for displaced people.

This assessment aims to assess and quantify the extent of damage and displacement caused by the flood and the initial impact it has had on household food security, nutrition and livelihoods. It also identifies key protection, health, water and sanitation issues.

Based on the outcomes of the assessment, the flash appeal document and the sectoral response plans will be revised and updated to ensure an evidence-based effective and co-ordinated response. In addition, the assessment will form the basis for further defining and planning a strategy for early recovery, livelihood support and disaster risk reduction.

The assessment builds on previous assessments undertaken and uses an adapted version of the inter-agency initial rapid assessment tool that was developed during 2008 by the IASC cluster process.

2. METHODOLOGY

Information presented within this preliminary report is based upon field data collected during the period 13 to 17 September 2008.

A one day training session for the field assessment teams was provided by WFP simultaneously in Sunsari and Saptari on 12 September. This involved field-testing of the survey tools in an affected community and temporary shelter camp.

The existing Initial Response Assessment (IRA) tool which had been developed during the course of 2008 by the IASC cluster system was used as a basis to develop situation specific survey instruments. In doing so, a community and household questionnaire was developed with input from all cluster agencies. The questionnaires were designed to allow for comparison of the situation before and after the flood to assess the impact on livelihoods, household food security, nutrition and the market situation and to identify the key protection, health, water and sanitation issues.

Four different locations were assessed:

1. Established IDP camps
2. Spontaneous IDP camps
3. Flood affected communities
4. Host communities

In each of these assessment locations a community focus group discussion was conducted with key informants, consisting of women, men, camp management, health workers, teachers, etc. Subsequently, household interviews were conducted with IDPs, affected households and households hosting IDPs, using the household questionnaire. In each affected community and in each selected camp (established and spontaneous) six households were randomly identified and interviewed. In each hosting community, three IDP households were identified and interviewed along with their hosting families.

In total there were six assessment teams, three in Sunsari and three in Saptari. Each assessment team covered two to three VDCs and consisted of a minimum of three people.

Data was collected by filling out the hardcopy household and community questionnaires which were subsequently inputted on the same day by the WFP assessor using a PDA and transmitted to Kathmandu.

In total 67 community questionnaires were completed (42 in Sunsari and 25 in Saptari) and 303 household interviews took place (195 in Sunsari and 108 in Saptari). Details are provided in Table 1. The focus of the assessment was on affected communities, spontaneous camps and IDPs living with host families. Given the information already available on established camps only 10 and 7 were included in this assessment in Sunsari and Saptari respectively.

	Sunsari		Saptari		All	
	No. of communities	No. of households	No. of communities	No. of households	No. of communities	No. of households
Established camp	10	60	7	43	17	103
Spontaneous camp	4	23	5	25	9	48
Affected community	9	52	1	0	10	52
Host community	19	60	12	40	31	100
All	42	195	25	108	67	303

Table 1

Each team was provided with a detailed map of the VDC, indicating roads, rivers, settlements and known locations of established camps. As a first step in the sampling process, the assessment teams – through discussions with key informants, e.g. VDC secretary etc. – identified and mapped out the geographic locations of any spontaneous camps and the approximate size of these camps, communities with a concentration of IDPs in host-families as well as any communities in flood-affected areas which were once again accessible and to which people had started to return. These maps were subsequently used as the sampling frame from which communities were randomly sampled.

The assessment is not intended to be representative for all locations assessed as the household sample is too small for this purpose. However, the household sample is large enough to allow for general conclusions for the total displaced population. The location assessment results are indicative only and may in fact vary considerably from location to location.

3. AN ESTIMATION OF THE NUMBER OF DISPLACED AND AFFECTED PEOPLE

According to the projected census data for 2008, the population in the 4 most affected districts is as shown in Table 2.

	Population 2008	
	Total	Estimated total population in affected area only
Haripur	10,214	10,214
Laukahi	5,676	2,374
PaschimKasuha	12,242	7,379
Sripurjabdi	15,911	15,911
Total	44,043	35,878

Table 2

Results of the households sample survey of displaced people found that the majority were from the four most affected VDCs in Sunsari. However, a little more than an estimated 42 percent of households originally came from Bihar in India (see Figure 1)

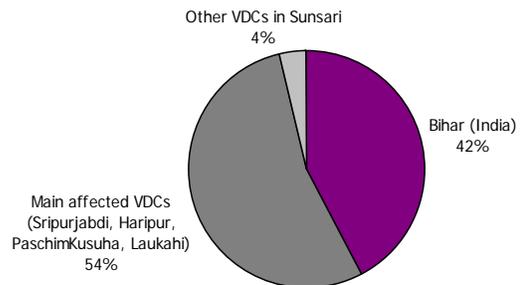


Figure 1

To estimate the total number of affected and displaced people, further analysis of the data is required. However based on the household survey results and assuming that most of the population in the affected area has been displaced - equaling 54 percent of the displaced population - a total estimate of the number of displaced people can be put at approximately 66,500 people, of which an estimated 27,900 people originate from India.

Most displaced people (70 percent) do not know or cannot say when they will be able to return home. Sixteen percent believe it will take more than six months and 8.4 percent hope to return between two and six months. A marginal number of displaced people (just over one percent) believe they will be able to return home within one month.

It is reported that during the survey period people were still arriving as shown in Table 3. On the other hand people have also started to leave which indicates that there is still a lot of movement going on and that people move from one place to another for shelter and essential supplies.

	Percentage of assessment locations	
	People still arriving	People starting to leave
Established camp	56	31
Spontaneous camp	44	-
Hosting community	30	25
Affected community	20	-
All	38 %	22 %

Table 3

The main reasons why people are still arriving include they are no longer able to stay in previous IDP sites and staying with host families (50 percent); attraction of relief distribution (17.9 percent); and the flooding of more areas (17.9 percent). The main reasons why people are leaving include flood area having again become accessible (33 percent) and they are no longer able to stay at their current locations (27 percent).

Of all displaced people only 34 percent so far have received a government identity card, while 44 percent report that they have received a beneficiary card for aid distribution. Table 4 shows the percentages by assessment location. It is evident that the registration of displaced people has been mostly concentrated in the established camps. Consequently most of the humanitarian relief has been directed to the established camps as will be discussed in Section 13. A little over 16 percent of Indian nationals have received a government identify card.

	Percentage of households who received	
	Government identity card	Beneficiary card for aid distribution
Established camp	59	74
Spontaneous camp	6	19
Hosting community	30	33
Affected community	23	47
All	33.7	43.5

Table 4

4. A PROFILE OF THE AFFECTED AND DISPLACED

Table 5 provides a selection of indicators regarding household demography and socio-economic status. As discussed, a substantial percentage of the affected and displaced population is from India. Most Nepali nationals originate from the four most-affected VDCs. A small percentage originates from elsewhere.

Among the affected and displaced, a little over 10 percent of households are headed by females. Many households are Muslim (29.5 percent) and a substantial number are Dalit (17.5 percent).

The average number of people sharing the same cooking pot is 7.4. Defecation in the open is commonly practiced by almost 62 percent of the displaced households. Most households rely on a tube well for their drinking water (91 percent) while 2.6 percent of the population get their drinking water from a river, stream or open well.

The principal means of livelihood before the flood for almost 60 percent of the households was crop farming. 17.3 percent depended on casual wage labour as their primary source of income. Livestock farming and casual wage labour were the second primary means of livelihood for the displaced population. Remittances were not a key means of livelihood in the affected area.

Selected indicators		
Place of origin:		
• India		42 %
• Nepal (4 most affected VDCS)		54 %
• Nepal (elsewhere)		4 %
Caste/ethnicity		
• Brahmin / Chettri		11.6 %
• Janajati		10.9 %
• Dalit		17.5 %
• Muslim		29.5 %
• Other		30.5 %
Percentage of female headed households		
		10.3 %
Average household size		
• Average number of children (6-18 yrs)		2.4
• Average number of children (<5 yrs)		1.4
• Average number of infants (<2 yrs)		0.6
Use of sanitation facilities (before flood)		
• Open defecation		61.7 %
• Water seal or pit latrine		33.3 %
Use of primary water source (before flood)		
• Tube well / hand pump		90.8 %
• Open water source		2.6 %
Primary means of livelihood (before flood):		
	First	Second
• Crop farming	59.8 %	14.6 %
• Livestock farming	1.0 %	28.0 %
• Casual wage labour	17.3 %	26.8 %
• Trade/business	9.6 %	14.6 %
• Remittances	0.0 %	2.1 %
• Other	12.3 %	13.9 %

Table 5

5. CONDITIONS IN TEMPORARY CAMPS

5.1 Shelter

Improvements in the shelter situation are of utmost importance. Camps are generally crowded with on average three households sharing a particular type of shelter whether tent, class room or other type of public building.

For the established camps, most people have taken shelter in a school or public facility. However, about 41 percent currently live in tents or under tarpaulins. For those in spontaneous camps, about 67 percent live in tents or under tarpaulins, while about 25 percent are now living in a school or public building. About six percent of households in spontaneous camps report having no shelter at all.

For most households, the shelters in which they are now living do not provide adequate protection against the elements. For all assessment locations, almost 52 percent of the households report that they and their belongings get wet when it rains. For established camps, this percentage is 44 percent, while 62 percent of households in spontaneous camps report that they and their belongings get wet when it is raining.

5.2 Ability to prepare food

It remains difficult for households within the camps to cook for themselves, particularly in spontaneous camps due to a lack of firewood, cooking stoves and utensils. Table 6 shows the percentage of displaced households who are experiencing a shortage in the availability of various items. An urgent problem needing to be addressed is the lack of

firewood or cooking fuel with almost all households complaining that there is not sufficient supply of either.

Shortage in availability (% of households)		
	Established camp	Spontaneous camp
Clean water	24 %	44 %
Firewood or cooking fuel	92 %	94 %
Cooking stove	75 %	86 %
Cooking utensils	76 %	90 %

Table 6

5.3 Water and sanitation

The average number of water and sanitation facilities per 100 people available in established and spontaneous camps is presented in Table 7.

Water and sanitation facilities per 100 people		
	Established camp	Spontaneous camp
Tube wells	0.7	0.3
Latrines	0.9	0.3
Bathing facilities	0.5	0.08

Table 7

People in established camps have somewhat better access to water and sanitation facilities than those staying in spontaneous camps. However, on average more than 100 people need to share one latrine and tube well. For spontaneous camps this goes up to more than 300 people. The cleanliness of established camps is generally poor for a third of the camps. Cleanliness in two-thirds of the spontaneous camps visited was unacceptable.

5.4 Protection

There are reports of gender-based violence and cases of sexual harassment. However, in general women did not feel comfortable sharing this information with the assessment teams. Referral systems for gender-based violence are non-existent in the camps.

More than 74 percent of households in established and spontaneous camps report that they feel generally safe. The percentages are a little lower for those households staying with host families and those residing in affected communities. The main threat is perceived as coming from criminal elements in the community and – in the camps – from other camp residents. People staying in host families sometimes perceive a threat from other family members. A small percentage (4.3 percent) feels threatened by the security forces. In affected communities, households feel the risk of renewed flooding as a major threat.

5.5 Health

All families in established and spontaneous camps report having access to basic medical care. The main health concerns of people staying in camps are cough, fever, diarrhoea and high fever as shown in Figure 2.

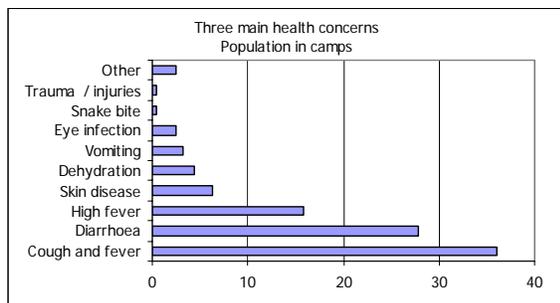


Figure 2

In the 12 established camps assessed, HIV- and STI-prevention services are mostly non-existent. Only in three out of these 12 camps, were condoms, testing and counseling services available. In none of the spontaneous camps were these services provided.

Some kind of family planning service is available in nine out of the 12 established camps. In three camps oral contraceptive pills were available. Two of those also had injectable hormonal contraceptives and offered counseling services and one camp provided a choice of intra-uterine devices.

6. HOST FAMILIES SITUATION

A significant share of people staying with host families originated from India (65 percent). Host families provide shelter to on average nine to 10 people. One third of host families reported that IDPs have started to leave. Most of them left for home or camps in India. Approximately one-third left the host family to seek shelter in an established camp.

Based on observations of the assessment teams it is often the case that poor displaced people have sought refuge with other poor families, thereby causing considerable strain and further impoverishing the host family. This is confirmed by the data collected. Table 8 shows the percentage of host families who reported a significant negative change in their access to food, savings, animal fodder, cooking fuel and firewood to the extent that it caused problems for the host family.

Percentage of host families who reported a significant decrease in their access to:	
Food	43.7 %
Savings	36.8 %
Animal fodder	21.8 %
Cooking fuel	35.1 %
Firewood	58.6 %

Table 8

To date only limited or no assistance has been provided to displaced people staying with host families or to the host families themselves (see Section 13).

7. THE EXTENT OF DAMAGE

The assessment teams could only visit those communities which were accessible. It can be safely assumed that the extent of damage in areas still submerged is of similar magnitude or worse.

The brunt of the impact of the flood was on housing, agricultural production and infrastructure. According to the community survey in affected communities, 80 percent of houses were completely damaged and 10 percent were partially damaged.

Rice production was heavily affected and farmers have incurred heavy losses. In the worst-affected areas, the crop has been completely lost. The average loss from all affected areas was 90 percent. A detailed crop assessment was undertaken by the Ministry of Agriculture who estimated the total loss at 16,800 Mt out of a total of 4,800 hectares of land affected.

The East-West Highway remains impassable and it will take considerable time to repair. The flood has caused significant

damage to phone lines and installations. In India, the electrical transmission facilities were damaged, causing Nepal to introduce a load-shedding schedule of 16 hours per week.

8. IMPACT ON LIVELIHOODS AND ASSETS

89 percent of households have not yet been able to resume their primary means of livelihoods and 79 percent have not been able to resume their secondary means. Many are unable to return home, either because they are prevented by the cost of return (boat charges to Bihar are around IC 1,000) or because they cannot yet return due to ongoing flooding.

Most households (87.5 percent) do not know or cannot say when they will be able to resume their primary or secondary means of livelihood again.

Table 9 shows the extent to which household assets - jewelry, electric appliances, furniture, kitchen utensils, food stocks and official documents - were affected. Property was badly affected with 66 percent of houses completely destroyed and 27 percent partially damaged. The impact was also severe on other household assets such as furniture, utensils and food stocks as indicated in Table 9.

	Asset ownership by households before the flood	Extent of loss (% of households)	
		Fully	Partially
House	99.7	66.0	27.0
Jewellery	86.1	56.8	17.5
Electric appliances	71.3	75.7	6.2
Furniture	95.7	69.4	13.7
Kitchen utensils	98.7	66.8	16.6
Food stocks	97.0	81.2	9.9
Official Documents	99.3	25.4	21.7

Table 9

Table 10 shows the average number of animals that households owned before and after the flood. The losses are extremely high. On average households lost 62 percent of their livestock in the flood affected areas. However, these figures are probably on the high side with the official record showing animal loss as a little over 14,000. Therefore, not all may have been lost; many families have brought part or all of their livestock from affected areas to the temporary camps. But, as fodder is in limited supply in the camps, many have been forced to sell their cattle in exchange for cash or food. Although the livestock prices were not covered in this assessment, the assessment teams reported sharp decreases in the price of cattle caused by people trying to sell off their domestic animals.

	Extent of loss		
	Before	Now	% change
Cow/Oxen/Buffalo	4.5	1.7	-62 %
Goat/Sheep/Pig	3.1	0.9	-71 %
Poultry	6.8	0.5	-93 %

Table 10

Table 11 illustrates losses in productive assets, including agricultural tools, machinery, fishing gear, crops etc. Again, the extent of loss is substantial with often more than 80

percent of affected households reporting that productive assets were completely lost.

	Asset ownership by households before the flood	Extent of loss (% of households)	
		Fully	Partially
Agricultural tools	89.8	79.1	4.6
Agricultural machinery	59.7	76.0	6.9
Agricultural crops	86.7	89.7	6.0
Crop seeds	67.9	87.6	3.6
Trees / Orchard	66.8	51.4	23.5
Fishing gear	30.8	81.2	3.5
Fish pond	14.7	87.5	-
Rickshaw/bicycle/van/motorbike	86.1	44.8	21.2
Workshop (repairs, cottage industry etc.)	4.3	63.6	18.2

Table 11

There has been a dramatic shift in the sources of income of affected households. Figure 3 compares the proportion of income from different sources before and after the flood in the affected population. As can be expected, sale of agricultural products has declined sharply as an income source, while income through relief/aid support has on average increased by up to 50 percent.

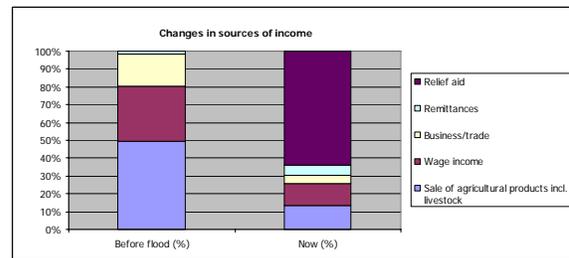


Figure 3

9. IMPACT ON HOUSEHOLD FOOD SECURITY

Given the loss of people's homes, livelihoods and assets as well as consequent drain on host families, the food security situation at household level is of particular concern and requires continuous monitoring over coming months.

As shown in Figure 4, affected households have switched their main source for food grains from "own production" and "market purchase" to "emergency relief" (49.5 percent) and "social networks" (30.2 percent).

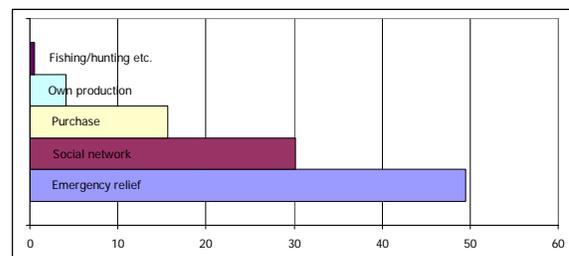


Figure 4

Figure 5 presents a list of coping strategies used by the displaced households. It shows the percentage of

households that have practiced these strategies at least once a week. For more permanent damaging coping strategies such as the sale of land and assets, out-migration and selling of labour in advance it indicates whether this activity has occurred since the flood on 18 August.

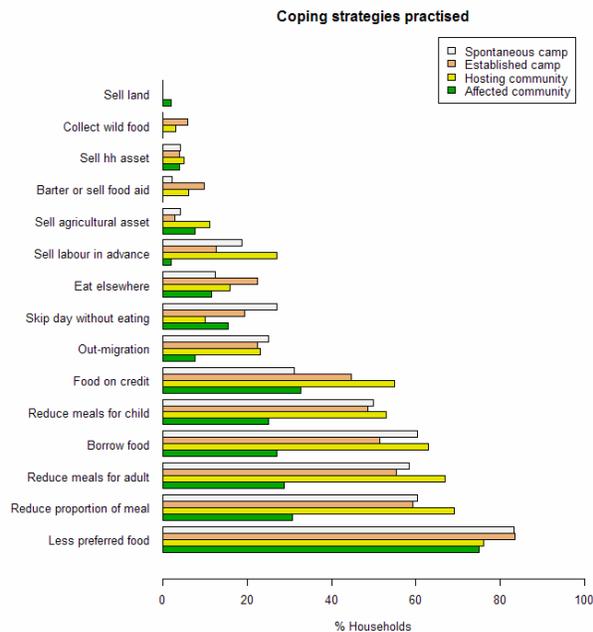


Figure 5

Overall, 80 percent of households shifted their consumption to less preferred and less expensive food. More than 52 percent had to borrow money for consumption purposes and almost 46 percent had reduced the food intake of their children. A very worrying fact is that 17 percent of the population experienced at least one day a week without any meal at all. Seventeen percent of the households have sold labour in advance and between four to seven percent of households are selling agricultural or household assets.

Out-migration of family members has been significant since 18 August. Twenty-five percent of households staying in established camps had at least one family member who migrated elsewhere. In spontaneous camps, hosting communities and affected communities these percentages were, 29, 29 and 9 percent, respectively. A significant higher-than-normal percentage of migrants were reported to be female (46 percent) and almost 49 percent of those migrated were below the age of 16.

A coping strategy index has also been calculated. It combines the extent and frequency of the adopted coping strategy by different households. Coping strategies with more severe long-term consequences were assigned a higher weight in the calculation of the coping strategy index. Table 12 shows the result for each assessment location. The highest concentration in the use of coping strategies is found in spontaneous camps and among those living with host families.

	Coping strategy index
Established camps	35
Spontaneous camps	41
Hosting community	45
Affected community	18

Table 12

The lower concentration in the use of coping strategies in established camps is most likely due to relief efforts which until now have been mainly focused on the established camps. However, even for these households, the impact on livelihoods has been huge and increased efforts need to be made to restore people's livelihoods so as to prevent a possible deterioration in household food security in coming months.

The relative low intensity of coping mechanisms in the affected communities cannot be readily explained. Further work by the assessment teams is required to clarify this.

The high intensity of coping mechanisms apparent in those living in spontaneous camps and those who reside with host families would justify expanding the external support to these affected populations. This would secure the families' food needs and prevent further deterioration in their livelihoods and well-being.

10. IMPACT ON FOOD CONSUMPTION, NUTRITION AND HEALTH STATUS

Results for food consumption, as measured by dietary diversity over the past week, indicate that 76 percent of households consumed cereals on a daily basis. Fruits, meat, fish, eggs and milk and dairy products were not consumed by the majority of the affected population (84, 93, 91, 99 and 88 percent, respectively). There were substantial differences in the dietary diversity between the different assessment locations as shown in Table 13, which shows the food consumption score (FCS) for each location using standard agreed threshold values.

	Acceptable	Borderline	Poor
Established camps	70.3	25.7	4.0
Spontaneous camps	48.9	25.5	25.5
Hosting community	64.6	24.2	11.1
Affected community	72.5	23.5	3.9

Table 13

Dietary diversity as measured by the FCS is worst in spontaneous camps and in host families. Most likely due to the delivery of food aid to established camps, the food consumption of displaced people in these locations is generally better. However, almost 26 percent of people in established camps fall in the borderline category with regard to food intake.

Almost 40 percent of the interviewed households had a child under 5 years of age. The nutrition status of these children was screened by taking Mid-Upper-Arm-Circumference (MUAC) measurements. The average MUAC measurement for children 6-59 months was 13.4 cm. Table 14 shows the incidence of malnutrition according to globally used threshold values.

Nutrition and Health status of children under 5	%
Nutrition status:	
Severe acute malnutrition (MUAC < 11cm)	1.7
Moderate acute malnutrition (MUAC between 11cm and 12.5cm)	11.7
At risk (MUAC between 12.5 and 13.5cm)	33.3
Global acute malnutrition rate	13.4
Health status:	
Fever	51.7
Cough or wheezing	56.1
Diarrhoea	34.2

Table 14

The nutrition screening using MUAC indicate wasting levels close to 14 percent and given high incidence of diarrhoea and respiratory infections among children 6-59 months, the situation may further deteriorate. Just under 2 percent were found to be severely malnourished and would require urgent treatment.

The morbidity situation is worrying with more than 34 percent of children suffering from diarrhoea, 52 percent from fever and 56 percent from cough or wheezing (with no differences noted by child's sex). About 51 percent of children received medical care for their ailment (76 percent in established camps, 50 percent in spontaneous camps, 40 in host communities and 25 percent in affected communities).

Access to complementary foods for infants was limited with 65.3 percent of households reported not having access to complementary foods. The situation is better in established camps where 62 percent reported to have access to complementary foods, however more than half of those reported that it was insufficient.

11. IMPACT ON EDUCATION

The impact on education seems to be substantial with most school buildings either fully or partially damaged or used for providing shelter. Table 15 shows the percentage of assessment locations where the school is either not affected, affected and not in use or where the school building is currently used for providing shelter.

	Not affected and in use (%)	Damaged and not in use (%)	Used for providing temporary shelter (%)
Established camps	6	41	53
Spontaneous camps	22	67	11
Hosting community	33	27	40
Affected community	11	67	22

Table 15

School and educational materials have mostly not been affected or only partially, however 56 percent of the community focus group discussions held in spontaneous camps revealed that school materials were mostly lost.

12. THE MARKET SITUATION

Prices of selected commodities were collected and compared against their price levels before the flood as presented in Table 16.

Commodity	Price (Nrs)		% increase	
	Before flood	Now		
Coarse rice (kg)	24	27	13.4	▲
Fine rice (kg)	30	33	12.5	▲
Wheat flour (kg)	21	23	10.6	▲
Mustard oil (Lt)	127	145	14.3	▲
Musuro (kg)	72	88	21.6	▲▲
Black gram (kg)	53	63	19.0	▲▲
Onion (kg)	20	31	50.5	▲▲▲
Potato (kg)	11	15	40.4	▲▲▲
Fire wood (bundle)	163	222	36.0	▲▲▲

Table 16

The flood has had a significant upward impact on commodity prices. The most dramatic price increase is in onion, potato and fire wood. In contrast, prices of perishable food items such as banana and vegetables have fallen sharply in Sunsari.

The inability of transporters to cross the Koshi River due to severe damage to the East-West Highway is one key factor that has contributed to the increase in prices.

With the sharp increases in basic essentials, access to food is likely to become increasingly difficult if no humanitarian assistance is provided. As access to the areas is difficult, the effect that local procurement of food aid may have on local prices will need to be carefully monitored. The joint market watch system of MoAC, WFP, FNCCI and the consumer protection forum is ideally placed to fulfil this essential monitoring requirement.

13. ASSISTANCE PROVIDED

Table 17 shows the percentage of households who have received and those who currently receive humanitarian assistance. It becomes immediately evident that more households in the established camps have benefited and continue to benefit from humanitarian assistance than households in spontaneous camps or those living with host families or in affected communities.

	Humanitarian assistance (% of households)	
	Received	Currently receiving
Established camps	48.9 %	61.6 %
Spontaneous camps	9.9 %	11.3 %
Hosting community	25.3 %	14.8 %
Affected community	15.9 %	12.2 %

Table 17

Table 18 shows the percentage of households who have received different types of humanitarian support. From the different assistance provided, ready to eat food and food aid were the most common. Supplementary food items for young children are provided to only one-third of the children. Only 10 percent of pregnant and nursing women receive supplementary food aid rations. At the time of the survey, general food rations were being received by almost 64 percent of affected households.

Free medical care is now available to most households (71 percent).

Only 4.4 percent of households have received cash and this has decreased to 1.6 percent at the time of the survey. Livelihood support programmes such as provision of agricultural inputs and tools have not yet started.

Sector	Relief item	Humanitarian assistance (% of households)	
		Received	Currently receiving
Food and nutrition	Ready to eat emergency food	73.7 %	22.8 %
	Cooked food	41.2 %	13.4 %
	Food aid	48.3 %	63.8 %
	Food aid for young children	29.4 %	31.5 %
	Food aid for pregnant and lactating mothers	21.9 %	10.2 %
Shelter	Tarpaulin	44.7 %	7.9 %
	Stove & kitchen utensils	42.1 %	7.1 %
	Blanket/clothing	38.6 %	6.3 %
Health	Hygiene kit	39.9 %	11.0 %
	Health kit	15.4 %	6.3 %
	Free medical care	25.0 %	70.9 %
Livelihoods & agriculture	Medical animal care	8.3 %	14.2 %
	Cash relief	4.4 %	1.6 %
	Construction material	5.3 %	3.9 %
	Agricultural tools/equipment	0.4 %	0.0 %
	Agricultural inputs	0.4 %	0.0 %
	Other	1.3 %	0.0 %

Table 18

A little over 54 percent of all affected households report that they have no information about the available assistance. There is no significant difference between the different assessment locations. Almost 60 percent of all affected households claim that the assistance provided has not been distributed fairly. More households in spontaneous camps, hosting communities and affected communities make this claim than those in established camps.

14. VULNERABLE GROUPS AND IMMEDIATE NEEDS

Community focus group discussions found that children, women, elderly and the ultra poor were most affected by the flood and in immediate need of assistance.

The two most immediate needs indicated by the communities are presented in Figure 6.

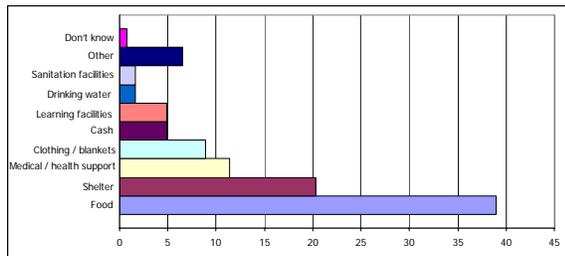


Figure 6

The most urgent needs expressed by community members include food and shelter, followed by medical support and clothing/blankets. Other needs include firewood and kitchen utensils.

Figure 7 looks at the most urgent recovery needs as indicated by community members. Housing, agricultural inputs and repair of the embankments were listed as the urgent recovery needs.

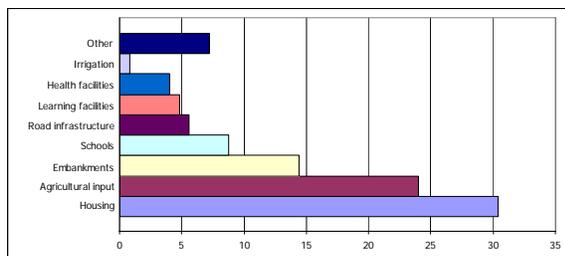


Figure 7

15. CONCLUSION

The flood had a severe impact on people’s homes, livelihoods and assets. Most people do not yet know when they will be able to return home and resume their livelihoods.

The prices of essential commodities have risen sharply from an already high level before the flood. It is expected that people will be needing shelter, food and other essential supplies for the foreseeable future until the embankments have been repaired, houses rebuild and a long-term solution found for improved disaster risk management.

Food and other essential aid deliveries can prevent a further deterioration in household food, nutrition and health security.

However, of immediate need is improvement in the shelter conditions and supply of cooking fuel or firewood. Furthermore, aid deliveries should immediately be extended to families living with host families and in spontaneous camps. These families demonstrate significant higher use of damaging coping strategies and have a much lower average consumption intake.

With the expected deterioration in the nutritional status of children over the coming months with one third of the children at risk of becoming malnourished, further food aid deliveries need to take into account the possibility of complementary feeding programmes directed at young children, pregnant women and nursing mothers.

The aid deliveries should support broader livelihood recovery programmes and disaster risk reduction strategies which will need to be set-up.

A follow-up assessment focusing on recovery needs is scheduled to take place at the beginning of November.

The Koshi River Flood Impact Assessment was a multi-agency coordinated activity that was implemented through the IASC preparedness and response cluster system.

The assessment was coordinated with assistance from the UNDAC team and technical leadership was provided by the World Food Programme.

The initial rapid response assessment tool which had been developed during 2008 by the cluster system was used as the basis for developing the survey instruments. The following cluster agencies provided technical input into this process:

- UNDAC and OCHA (coordination)
- OHCHR, UNHCR and UNFPA (protection)
- UNICEF (WASH, child protection, education and nutrition)
- NRCS and IFRC (shelter)
- IOM (camp coordination)
- WFP (food)
- FAO (livelihoods / agriculture)
- WHO (health)

Field work was undertaken by 26 staff from 10 different organizations including the Government of Nepal as follows:

- WFP
- UNICEF
- UNHCR
- WHO
- IOM
- Save the Children
- CARE
- ISDR
- RSDC
- Government of Nepal

The WFP Nepal Food Security Monitoring and Analysis System was made available to rapidly input, screen, organize, analyze and present the data.

Annex 1 – Map 1

