# Food Security Bulletin - 18





FS Bulletin, October 2007 Issue 18

#### **Editorial**

The monsoon created havoc in many of the Terai districts and caused landslides in numerous Hill and Mountain areas, severely impacting the food security status of poor households, many of whom lost their houses, food stocks, and assets. The monsoon rainfall had an overall positive affect on the food security situation due to good cropping conditions in most areas of the country.

This bulletin provides an update on the current food security situation in Nepal and identifies areas that require assistance and/or need close monitoring.

From 14-25 August an inter-agency (WFP, UNICEF, SC Alliance) flood assessment took place covering 13 flood affected districts in the Terai. A summary of the results of the assessment is provided on page 6 and 7.

Page 8 provides an explanation of WFP's drought response in the Far-and Mid-West in communities affected by consecutive years of drought.

The last section presents selected indicators providing an overview of some broad trends in household food security.

WFP in partnership with NDRI and with technical input from UNICEF and UNAIDS is currently undertaking a migration study. The aim of the study is to assess the viability of short-term migration as a coping strategy for poor households, with particular focus on communities affected by natural disasters. Field data will be collected from different locations in Nepal, at the border with India and within India.

## Food Security Hot Spots

#### **FOOD SECURITY PHASE MAP**

The food security phase classification map for the period July - September 2007, is presented on page 4 and 5. It is based on the latest information collected by WFP field monitors in 41 districts (during July-August), and in 36 districts, including Rautahat and Sarlahi (during September). Classification of the food security status is based upon a set of reference characteristics. A description of these characteristics and the alert level definitions are provided on the last page of this bulletin. Classifications are made by WFP field monitors who have been trained to ensure consistency in data recording. Verification is done through consultation with district government officials local and international NGOs and triangulation with other data sources.

#### **CURRENT HUNGER HOTSPOTS**

Although the total number of people at risk of food insecurity has increased (see Chart 1), in most monitoring clusters the number of people at risk of food insecurity has declined.

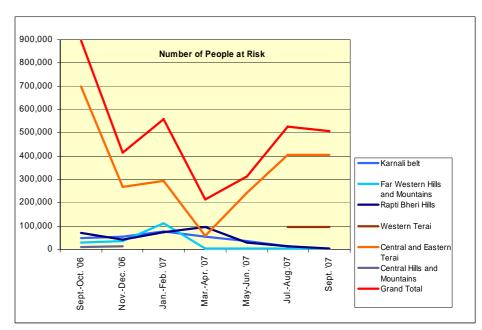


Chart 1 – Number of people at risk

This is indicated by the blue shaded lines in Chart 1. The Terai is the exception (see orange shaded lines). Due to the impact of the flood, the number of food insecure people has increased dramatically. With a higher population density in the Terai districts, the total number of people at risk of food insecurity increased to a little over

half a million people during the period July-September 2007.

Table 1 provides the breakdown of the number of people at risk of food insecurity by district at the end of September 2007. Landslides in the Hills and flooding in the Terai were the main shocks faced by households causing





increased food insecurity in several districts.

I. THE KARNALI

The overall food security situation in the Karnali districts has improved due to good monsoon rains. The production of wheat and barley was normal to good in most areas compared to last year. In addition, the maize harvest has been completed in the lower mountain areas, the production is better than last year.

In Kalikot the food security situation in the VDCs of Odanaku, Chhapre, Thirpu, Khina, Dhoulagoh, Nanikot, and Ramnakot improved from a warning to a seasonally food insecure status as a consequence of delivery of WFP emergency assistance and harvesting of maize crop. Although the maize harvest was lower than normal (10-20%) it was good compared to last year. The area has been affected by drought for three consecutive years and in April/May 2007 the production of wheat and barley was reduced by 40%. Last year's summer crop was lost as well in Odanaku and Chhapre VDCs due to hailstorm. The situation in Malkot, Kumalgaun, and Rupsa VDCs improved from acute to warning level of food insecurity. These VDCs were hit by a hailstorm in April, which resulted in crop losses by more than 50%. Prospects are however encouraging. In other VDCs, the maize production was normal and most households in the areas are expected to have sufficient access to food until the paddy harvest in December.

Dolpa district is mostly food secure. The winter crop production in middle and lower Dolpa was good and income from the *Yarchagumba* collection was good. More than 6,000 households earned an average of NRs. 50,000 from the collection of *Yarchagumba*. The maize production was normal to good in most VDCs. In Dunai and Narku the production decreased by approximately 20% due to insufficient rainfall. The outlook for Dolpa is good for this fall.

Most of **Mugu** district is food secure. However, the situation deteriorated in Bhie and Ruga VDCs where the winter crop failed due to severe drought. Signs of severe malnutrition were observed during July-August period. No updated information for September is available.

areas. Several VDCs were affected by landslides.

| SN              | District          | Warning of<br>deteriorating food<br>insecurity | Acute food and livelihoods crisis | Total Population<br>at Risk |  |
|-----------------|-------------------|--|-----------------------------------|-----------------------------|--|
|                 |                   | Phase 3  | Phase 4                           |                             |  |
| I. Karnali belt |                   |  |                                   |                             |  |
| 1               | Kalikot           | 1,468  | -                                 | 1,468                       |  |
| 2               | Jumla             | No data  | -                                 |                             |  |
| 3               | Humla             | No data  | -                                 |                             |  |
| 4               | Dolpa             | -  | -                                 | -                           |  |
| 5               | Mugu              | No data  | -                                 |                             |  |
|                 | Sub-Total         | 1,468  | -                                 | 1,468                       |  |
| II. Far Wes     | stern Hills and N | <b>l</b> ountains                              |                                   |                             |  |
| 6               | Bajura            | -  | -                                 | -                           |  |
| 7               | Achham            | -  | -                                 | -                           |  |
| 8               | Bajhang           | No data  | -                                 |                             |  |
| 9               | Baitadi           | 832  | -                                 | 832                         |  |
| 10              | Darchula          | 150  | -                                 | 150                         |  |
| 11              | Dadeldhura        | 225  | -                                 | 225                         |  |
|                 | Sub-Total         | 1,207  | -                                 | 1,207                       |  |
| III. Rapti B    | heri Hills        |  |                                   |                             |  |
| 12              | Dailekh           | 336  | -                                 | 336                         |  |
| 13              | Rukum             | No data  | -                                 |                             |  |
| 14              | Jajarkot          | -  | 2,400                             | 2,400                       |  |
|                 | Sub-Total         | 336  | 2,400                             | 2,736                       |  |
| IV. Weste       | rn Terai          |  |                                   |                             |  |
| 15              | Banke             | 49,500   | -                                 | 49,500                      |  |
| 16              | Bardiya           | 27,300   | -                                 | 27,300                      |  |
| 17              | Kailali           | 17,800   | -                                 | 17,800                      |  |
|                 | Sub-Total         | 94,600   | -                                 | 94,600                      |  |
| V. Terai ar     | nd Eastern Mid I  | Hills  |                                   |                             |  |
| 18              | Sunsari           | 30,400   | -                                 | 30,400                      |  |
| 19              | Saptari           | 141,500  | 6,600                             | 148,100                     |  |
| 20              | Siraha            | 71,300   | 21,600                            | 92,900                      |  |
| 21              | Udayapur          | 10,140   | -                                 | 10,140                      |  |
| 22              | Dhanusha          | 52,100   | -                                 | 52,100                      |  |
| 23              | Mahottari         | 32,800   | -                                 | 32,800                      |  |
| 24              | Sarlahi           | 14,100   | -                                 | 14,100                      |  |
| 25              | Rautahat          | 10,100   | -                                 | 10,100                      |  |
| 26              | Bara              | 5,500  | -                                 | 5,500                       |  |
| 27              | Parsa             | 9,900  | -                                 | 9,900                       |  |
|                 | Sub-Total         | 377,840  | 28,200                            | 406,040                     |  |
|                 | Grand Total       | 475,451  | 30,600                            | 506,051                     |  |

Table 1 – People at risk

In Humla, Limi, Muchu, and Simikot VDCs were at warning levels of food insecurity in August because the winter crops were badly affected by drought. Limi and Muchu VDCs were further hit by flood during the month of July which affected more than 300 people. Data for the month of the September are not available.

## II. FAR WESTERN HILLS AND MOUNTAINS

Most of the districts in the Far-West have changed from a seasonal food insecure phase in August to a food secure phase in September. On average, the winter crop production was better than last year. The maize production was normal in most of the

In Darchula and Bajhang districts, income from *Yarchagumba* collection largely contributed to improved household food security. The good maize harvest further improved the situation in Darchula. The maize production in Iyarikot and Khandeshwari VDCs decreased by more than 60% due to landslide and strong wind. VDCs in the southwest of Darchula were also affected by landslides. No data is available for Bajhang for September.

In Baitadi district, several VDCs were affected by landslides in August. Because of this, some pocket areas in the northern part of Baitadi are at warning level of deteriorating food insecurity.





III. THE RAPTI BHERI HILLS

The food security situation in Dailekh and Jajarkot districts has considerably improved since end August. The maize production in Dailekh was higher than last year. However in the northern part of the district, maize production was lower due to drought and late planting. For most households in Dailekh the food security situation is normal. In Jajarkot the maize production was good compared to the last two years and most households should have sufficient access to food in the coming months.

Maize harvesting has been completed in Salyan, Surkhet, and Rolpa districts. The production was normal or higher than normal in Salyan and Surkhet. In Rolpa, maize production decreased by 10-20% in Pachhawang, Iribang, Jankot, and Karet VDCs. In Mirul VDC maize production declined by 20-40%. These VDCs remain seasonally food insecure.

#### **IV. THE TERAI**

Most of the Terai districts in the West, Central, and Eastern Regions were affected by flood caused by incessant rainfall during July and August. In the West, flood impact was most severe in Banke, Bardiya and Kailali. In the East, the districts of Danusha, Mahottari, Siraha and Saptari were most affected. The districts of Saptari and Siraha were also hard hit by 2006 summer drought. Hence the population at risk of food insecurity is higher in these districts where the poorest population groups are struggling from compounded impact of drought followed by severe flooding.

Summary results of the inter-agency flood assessment are presented on page 6 and 7.

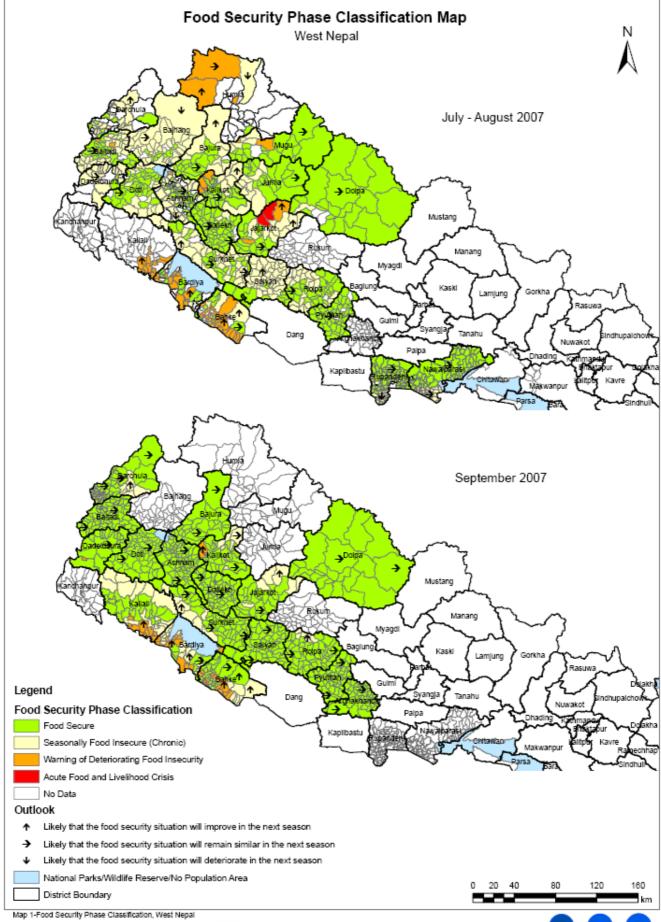
#### V. CENTRAL AND EASTERN HILLS AND MOUNTAINS

The food security situation in this monitoring cluster is normal in most of the areas with a good outlook for the coming months. There are a few areas which have been classified as seasonally food insecure in Sindhupalchowk, Kavre, and Makwanpur districts. The maize harvest has been completed in these districts. The production was normal except in a few VDCs in Kavre (Bhimkhori, Dhungkharka, Chhyasingkharka, and

Rayale), and Rasuwa (Laharepauwa, Dhaibung, Bhorle, and Saramthali). In Sindhupalchowk, the millet production in a few VDCs in the southwest is expected to be 10-20% lower than normal due to excessive rainfall. The situation in the northern part of Udayapur has further improved however some VDCs in the south were heavily impacted by the flood, pushing them into a warning phase. The food security situation in these VDCs is however not expected to deteriorate further as food supply is regular to these areas. The maize harvest has been completed and early harvest of paddy is going to happen shortly. In Makwanpur and Chitwan, the chronic food insecure areas are home to indigenous groups such as the Chepang, Bote, Tamang, Rai and Gurung.







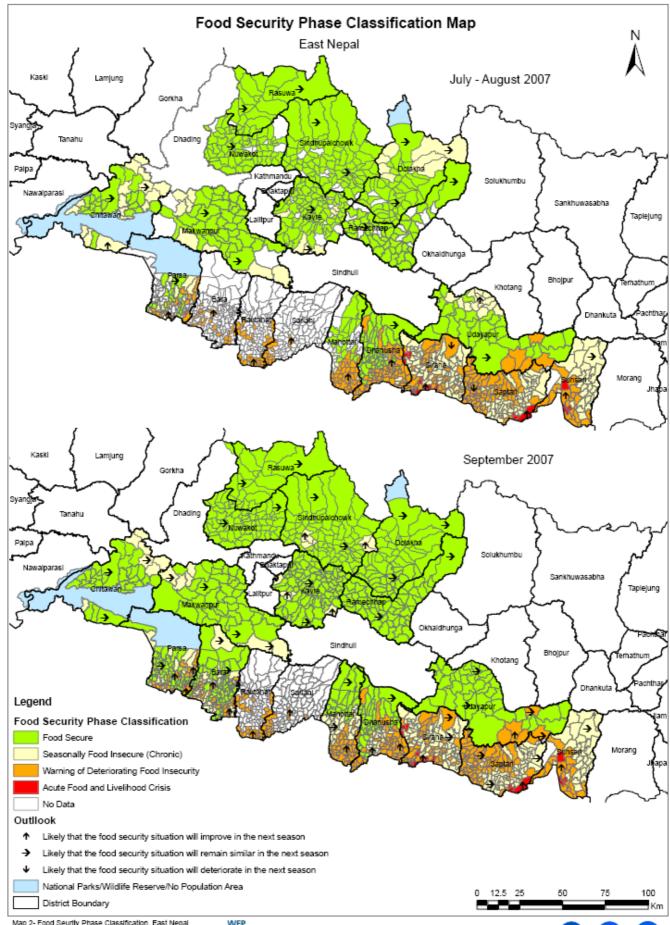
Cecurity Priese Glassification, West Nepal



September, 2007







Map 2- Food Seurity Phase Classification, East Nepal







## Inter-Agency Flood Assessment

Heavy rain for a period of two weeks caused major flooding in the Terai at the end of July. In mid-August, a second period of rain resulted in renewed flooding in many areas. By the end of August most flood waters had receded and areas were accessible again. Continued rain since then in some areas may have caused further flooding and hardship for poor Terai communities. From 14 - 25 August an inter-agency rapid flood assessment was conducted by WFP, UNICEF and Save the Children with field level support from the Nepal Red Cross Society. In order to assess the impact of the flood on people's livelihoods, food security, health, and nutrition status and to formulate appropriate short and longer-term responses an inter-agency assessment was organized by WFP, UNICEF and Save the Children Alliance with field level support provided by the Nepal Red Cross Society. The following provides a summary of the major findings.

- The flood affected a very large number of households. Across the 13 districts assessed, an estimated total of 25,254 households were severely affected; 40,000 were highly affected; and 17,236 moderately affected. With an average household size of 5.6 people per household, this translates in a total of almost half a million people affected by flooding. Most of the affected are amongst the poorest, marginalized and landless Dalits, Madhesi, Tharu, Muslim and Janajati groups. Map 3 shows the areas affected by the flood.
- The flood had the biggest impact on housing, particularly those of poor households made of bamboo, straw and mud. Crop land near the main rivers and in low-lying areas was heavily affected with high or total crop losses. In other areas the standing paddy crop has benefited from the temporary immersion and an overall surplus production in these areas is expected. Vegetable production has suffered the biggest impact and prices

of green-leaf vegetables have more than doubled.

- Malnutrition in the flood affected areas is acute and widespread. The flood emergency has caused an additional risk for further deterioration in the nutritional status of the already very vulnerable (child) population. However, beyond seasonal deterioration in malnutrition indicators, no increase in the number of severely acute children can be observed as yet. The underlying causes of the poor nutritional status include insufficient nutritious food intake, very poor sanitation and hygiene conditions, and an unhealthy environment. These contributing factors have been highly affected by the flood with a change in food composition towards less nutritious foods. concentration of defecation areas on higher laying foot paths near communities and high incidence of diarrhoea among the population.
- No health epidemics are reported as yet. The health system seems to be quite well prepared and is sending rapid response teams to areas with diarrhoea outbreaks to quickly contain further contamination. The potential spread in vector-born diseases need to be closely monitored as stagnant flood water provides a perfect breeding ground for mosquitoes.
- In almost all districts, health posts are functioning normally, although accessibility was a problem during the flooding and may still be an issue in some heavily affected areas. Most schools affected by the flood are functioning again. In some of the most affected areas education is affected due to lack of class rooms and teaching materials.

Based on the finding of the rapid assessment a series of short-term and longer-term response options were formulated. Some key recommendations include:

#### **Short-term response options:**

- Severely affected household should be provided with short term food rations of one to two months to cover their immediate food needs and prevent further deterioration in their nutrition status.
- A solution to re-build houses is urgently required. The issue is particularly relevant for landless people whose homes were completely destroyed.
- For small-farmers who have lost their crops, subsidies for seeds and fertilizer is recommended to reduce the huge additional investment that they have to make in order to re-plant and prepare land for cultivation. The MoAC has made an amount of NRs 5 million available for immediate relief to address these issues.
- Additional supplies of medicine for pre-positioning to contain potential outbreaks of dysentery, malaria and cholera etc. needs to be completed.

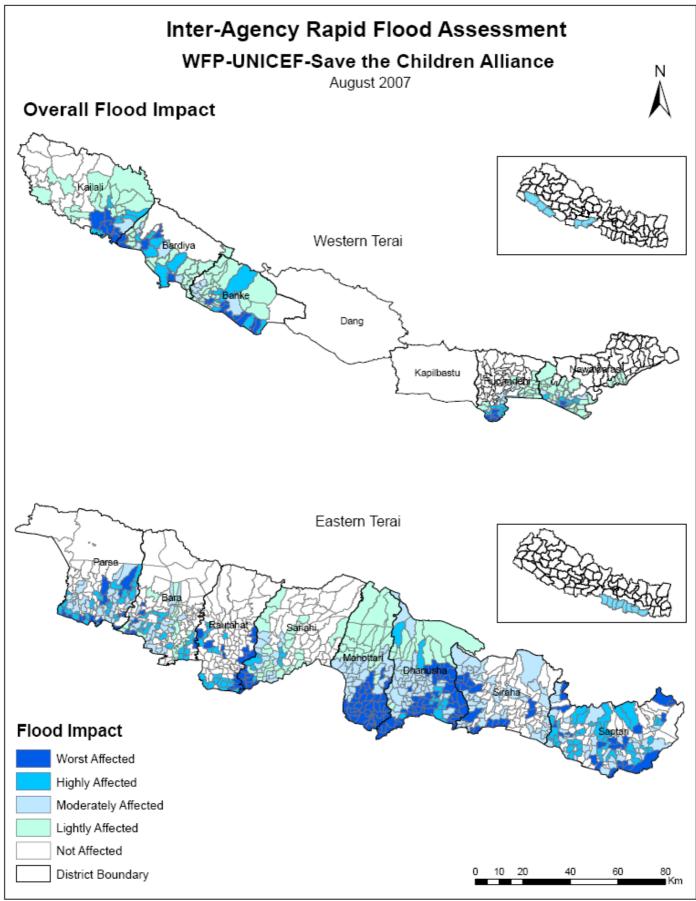
#### Longer-term response options

- A food-for-work or, where integrated markets exist in the affected areas of the Terai, a cash-for-work or food-voucher programme is recommended to address the longer-term reconstruction and flood mitigation needs. The priority requirements include river training and drainage, recovery and maintenance of embankments, homestead raising, road re-construction and irrigation rehabilitation.
- Improvement in the nutritional status of mothers and children is most urgent.

  An integrated mother and child health nutrition programmes, including supplementary feeding combined with nutrition and hygiene awareness training is strongly recommended.

The detailed assessment report is available and can be downloaded from the UN information platform at: www.un.org.np.

## Flood Impact Map



Map 3 - Flood impact Map





## WFP's Drought Response

With heavy rains across the country, flooding in the Terai and landslides in the Hill areas, it is easy to forget that many rural and remote communities are still suffering from the cumulative effects of consecutive years of drought. WFP approved an extension of its drought emergency operation until December 2007 in order to support communities that continued to suffer from consecutive crop losses due to drought and other adverse weather conditions.

A targeting exercise was conducted in June 2007 for the extension of the WFP emergency operation in six districts in the Mid- and Far-Western Regions — Humla, Kalikot, Dailekh, Jajarkot, Rukum, and Bajura where the extent of crop losses was the highest and the population suffered a severe deterioration in their food security status. This update explains how the final VDC and community level targeting was achieved to ensure that emergency food aid reached those most in need.

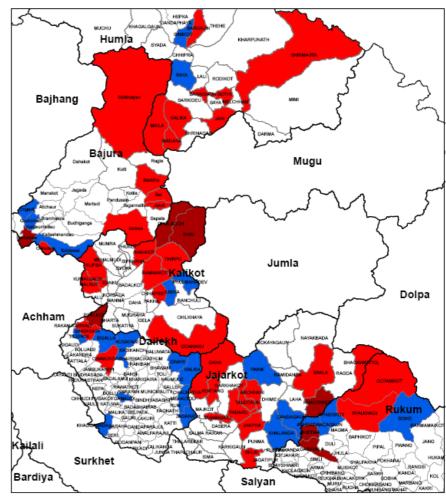
#### **DISTRICT VERIFICATION SESSIONS**

In each of the six districts, targeting workshops with participation from government officials, NGO, UN and civil society were organized to verify and update the information received from WFP field monitors regarding the food security situation at the VDC/ward level.

Participants were divided in small working groups and asked to rank the most food insecure VDCs/wards in order of severity. Results of the working groups were presented and a final ranking was agreed upon by all participants. Across the six districts, this result indicated 65 VDCs and an estimated total of 31,785 households needed food assistance.

Subsequently, workshop participants were asked to fill-out an indicator checklist based on their knowledge of the area. Although not a perfect method and susceptible to people's biased opinion and imperfect knowledge it allowed, to some extent, to compare the food security status in different VDCs across different districts. The

Map 4 - Targeting the drought EMOP



## WFP - Targeting EMOP Extension

June 2007

# Targeting areas Not targeted 1st Priority Excluded 2nd priority Targeting areas WFP World Food Programme Food Security Monitoring and Analysis System

## checklist contained the following indicators:

- 1. Winter and summer crop losses
- 2. Food sufficiency in normal year
- 3. Irrigation coverage
- 4. Unusual migration patterns
- 5. Coverage of development assistance
- 6. Availability of alternative income sources
- 7. Accessibility to markets
- 8. Signs of malnutrition among women and children
- 9. Use of coping strategies
- 10. Composition of the population

Workshop participants were asked to give a relative score for each of the indicators. Subsequently, total scores for each VDC were calculated and VDCs were ranked according to their score. VDCs were excluded if any of the following conditions held:

- Normal to good winter crop conditions
- 2. Availability of alternative income opportunities
- Good coverage of existing development projects

The top ranking VDCs/Communities were prioritized for continued EMOP assistance covering an estimated population of 140,000. The remaining bottom seven VDCs were classified as second priority to be covered if additional resources were made available (see Map 4).

To date, WFP's emergency operation has provided food aid to 375,000 drought-affected people in Mid and Far Western districts.





## Broad Trends in Household Food Security

#### **VULNERABILITY**

Vulnerability changes according to the time of the year when households are exposed to different sets of risks. Chart 2 shows the main shocks for each quarter that households faced so far in 2007. Consistently more than 20 % of households reported that unavailability of food is an ongoing problem they have faced. Unfavourable weather conditions such as drought or insufficient rainfall as a main issue dropped from 27% in the first guarter to 9% in the third quarter. When households were specifically asked about rainfall conditions, 56% in the third quarter responded that rainfall had been normal to good compared to 31% in the beginning of the year.

A worrying trend is the increased number of households that responded that the lack of employment is a key problem. When asked whether households find it more difficult to find employment compared to last year during the period July-September, 47.6% responded no and 41.9% responded yes.

Irrespective of the time of year, more than 50% of households responded that different shocks and hazards caused a food shortage in their household (Chart 3).

Food sufficiency, meaning whether the household has sufficient access to food to feed all household members, has become more problematic in the last quarter prior to the main harvesting which will start at the end of October. As a consequence, many households (42.1%) have food supplies that will last them less than 1 month, which is usual at this time of the year (see Chart 4).

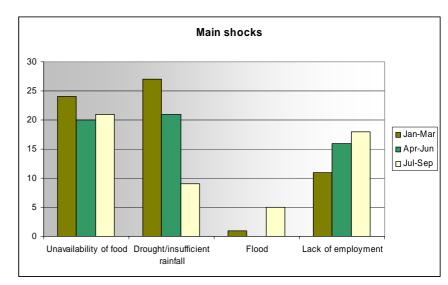


Chart 2 - Main shocks

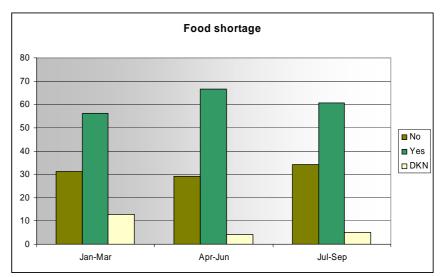


Chart 3 - Food shortage

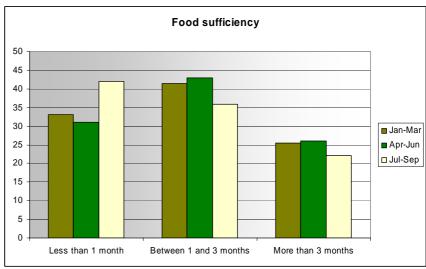


Chart 4 - Food sufficiency





#### **CROP CONDITIONS**

Chart 5 and 6 show the two main crops as reported by farm households in the 37 districts covered by the Food Security Monitoring and Analysis System. The inner circle show the percentage of households that produce a certain crop as their first or second main crop during the period January -March, the middle circle refers to the period April - June and the outer circle to the period July until September. During the winter season (Jan-Mar), wheat is produced as the first main crop by 84% of households. It is also important as a second main crop for 18% of households.

Although paddy is the country's most important crop in terms of production, for most households maize is the primary crop during the period April – June and July- September (50% and 52% respectively). Paddy is the most important second main crop during both these periods (45% and 44% respectively), followed by maize (20% and 27% respectively).

Current crop conditions are favourable. 77% of the households responded that the crop conditions for their primary crop is normal or good. For the second main crop this percentage is 83% (see Chart 7).

In case of poor crop conditions, 45% households responded that this is due to inadequate rainfall, 33% responded that it is due to pest or diseases and 13.5% of households reported flood and landslides as the main cause for poor crop conditions (Chart 8).

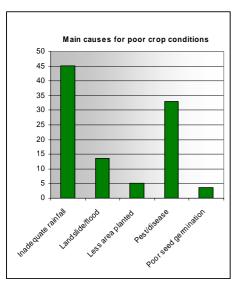


Chart 8 - Causes of poor crop conditions

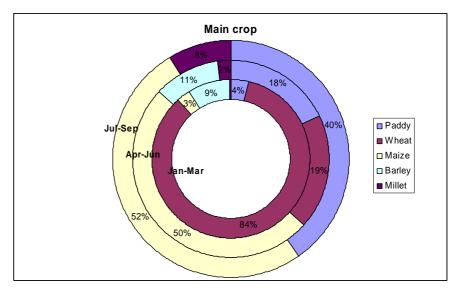


Chart 5 - Primary crop

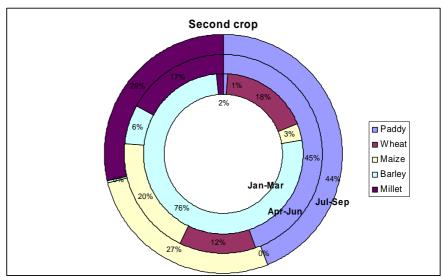


Chart 6 - Second main crop

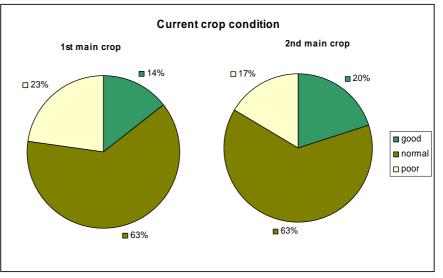


Chart 7 - Current crop condition

## Food Security Phase Classification

| Phase classification Alert Level Definitions and Reference Characteristics |                                    |   |   |   |  |
|--|------------------------------------|---|---|---|--|
|  |                                    | General<br>Food Availability<br>Food Access | : | There are no indications of global food security problems. Poverty levels are low/moderate. Crop situation is favourable/normal. There has been sufficient rainfall. There are sufficient food commodities in the markets. Households have sufficient food stocks to last until the next harvest. |  |
| 1.   | Food Secure                        |   | • | Markets are functioning and are accessible. Prices of main staples are stable. The employment situation is normal. No excessive in or out migration patterns.   |  |
|  |                                    | Nutrition and Health<br>Hazards             | : | Incidence of wasting is very low.  No major diarrhea outbreaks / or epidemics.  No natural disasters.   |  |
|  |                                    | Civil Security<br>Coping                    | : | General peaceful situation – no enduring bandhs / roadblocks.<br>No unsustainable coping strategies employed by households.   |  |
|  |                                    | General                                     | • | The area is experiencing seasonal food insecurity during the normal lean periods. Poverty levels are high.  |  |
|  |                                    | Food Availability                           | • | Crop harvests are low to normal. However, current crop is not sufficient to feed the population until next harvest.   |  |
|  | Consequelly for all                | Food Access                                 | : | Rainfall has been intermittent but acceptable.  The markets are functioning and accessible but are less well stocked.  Households have insufficient food stocks to last until next harvest, but this is generally   |  |
| 2.   | Seasonally food insecure (Chronic) |   | • | considered as normal.<br>Prices of main staples are higher than normal.   |  |
|  |                                    |   | • | There are limited employment opportunities during this time of the year. Out-migration is increasing.   |  |
|  |                                    | Nutrition and Health<br>Hazards             | • | Incidence of wasting is low. Indication of diarrhea outbreaks / or epidemics.   |  |
|  |                                    | Civil Security Coping                       |   | Occurrence of natural disaster with resulting crop, stock and asset losses.  General peaceful situation. Bandhs and roadblocks may cause additional hardship.  Indications of intensified HH coping behaviour (asset selling, borrowing, migration etc)   |  |
| 1  |                                    | General                                     | • | The food security situation is deteriorating in the area; food shortages are much more than   |  |
|  |                                    | Food Availability                           |   | acceptable/normal for the time of the year. Poverty levels are high.  Crop harvests are low. More than 50% of the crop is lost.   |  |
|  |                                    | Food Access                                 | • | Rainfall has been insufficient/late/non-existent for consecutive years.  Markets are non-existent due to no or limited supply.  |  |
|  | Warning of                         |   | • | Households have depleted or very low food stocks. Prices of main staples are increasing rapidly and are unstable.   |  |
| 3.   | deteriorating food                 |   | : | There are very limited employment opportunities during this time of the year.<br>Levels of out-migration are high.  |  |
|  | insecurity                         | Nutrition and Health                        | • | Incidence of wasting is moderate to high.  Evidence of malnutrition in women and children is easily observable.   |  |
|  |                                    | Hazards                                     | • | Indication of severe diarrhea outbreaks / or epidemics.  Occurrence of large impact natural disaster with resulting crop, stock and asset losses.   |  |
|  |                                    | Civil Security<br>Coping                    | • | Limited conflict situation with increasing civil security incidences.  HHs adopt irreversible coping behaviour (productive asset selling -tools, seeds, land-, large  |  |
|  |                                    |   |   | amounts of borrowing, etc).   |  |
|  |                                    | General                                     | • | There's an acute food crisis in the area. Extreme food shortages occur. Poverty levels are very high.   |  |
|  |                                    | Food Availability                           | • | Crop harvests are very low or have been lost. More than 80-100% of the crop is lost. Rainfall has been insufficient/late/non-existent for several consecutive years.  |  |
|  |                                    | Food Access                                 | • | Markets are non-existent due to no food supply.  Households have depleted their food stocks.  Prices of main staples are very high and unaffordable for a large portion of the population.  |  |
|  | Acute food and                     |   | • | No employment opportunities.  |  |
| 4.   | livelihood crisis                  | Nutrition and Health                        | • | People are out-migrating due to food scarcity. Incidence of wasting is high. Underweight levels of children are above 75%. Evidence of malnutrition in women and children is widespread.  |  |
|  |                                    | Hozordo                                     | • | Occurrence of severe diarrhea or epidemic outbreaks.  |  |
|  |                                    | Hazards                                     | • | Occurrence of large scale impact natural disaster with resulting crop, stock and asset losses.  Extended coefficient situation, no agricultural activities possible.  |  |
|  |                                    | Civil Security<br>Coping                    | : | Extended conflict situation – no agricultural activities possible.  HH adopt crisis coping strategies (productive asset selling -tools, seeds, land-, large amounts of borrowing, etc).   |  |