

**EVALUATION OF  
UNICEF'S FLOOD EMERGENCY RESPONSE  
IN BIHAR AND UTTAR PRADESH**

**FINAL REPORT**

**Prepared for**



**By**



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## ABBREVIATIONS

AD	Auto Disposable Syringes
ALS	Alternative Learning Spaces
ANM	Auxiliary Nurse Midwife
ARI	Acute Respiratory Infections
ASHA	Accredited Social Health Activist
AWC	Anganwadi Centres
AWW	Anganwadi Worker
BCC	Behaviour change Communication
BDO	Block Development Officer
BIPARD	Bihar Institute of Public Administration and Rural Development
CBDP	Community Based Disaster Preparedness
CBO	Community Based Organisation
CCC	Core Commitments for Children in Emergencies
CD&N	Child Development & Nutrition
CDPO	Child Development Programme Officer
CMO	Chief Medical Officer
CRF	Calamity Relief Fund
CRS	Catholic Relief Services
DFID	UK Department for International Development
DHNTC	Divisional Health and Nutrition Technical Coordinators
DM	District Magistrate
EPRP	Emergency Preparedness and Response Plan
GoB	Government of Bihar
HFL	High Flood Level
IAC	Inter Agency Cooperation
ICDS	Integrated Child Development Services
ICT	Information & Communication Technology
IDSP	Integrated Disease Surveillance Programme
IEC	Information, Education & Communication
IFA	Iron Folic Acid
INGO	International Non Government Organisation
IRA	Initial Rapid Assessment
MoHA	Ministry of Home Affairs
MOIC	Medical Officer in Charge
NDMA	National Disaster Management Authority
NDMI	National Disaster Management Institute
NGO	Non Government Organisation
NRC	Nutritional Rehabilitation Centre
NRHM	National Rural Health Mission
OBC	Other Backward Caste
ORS	Oral Rehydration Salt
PHC	Primary Health Centre
PHED	Public Health Engineering Department
PIP	Programme Implementation Plan
PRI	Panchayati Raj Institution

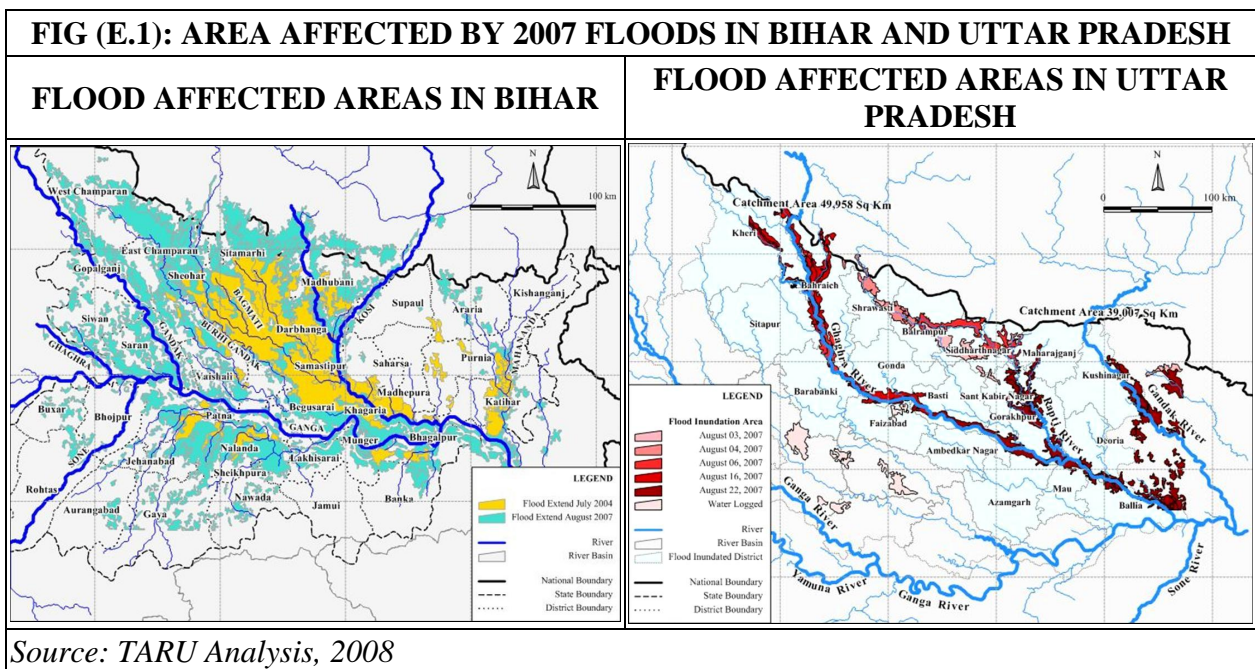
SAM	Severe Acute Malnourished
SC	Schedules Caste
SITREP	Situation Report
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
UNICEF ICO	United Nations Children's Fund India Country Office
UP	Uttar Pradesh
URCR	Unified Response Control Room
URS	Unified Response Strategy
WRD	Water Resources Department

## EXECUTIVE SUMMARY

### BACKGROUND

The Floods of 2007 caused widespread damage in Northern Bihar and Eastern Uttar Pradesh and are reported to be among the worst in recent decades. The Bihar floods of 2007 caused severe damage and are described by many as the “worst in living memory”. As per the Bihar State Department for Disaster Management Report, the floods affected 11,850 villages in 22 districts out of total 38 districts. A total of 24.8 million persons were affected and over a million persons were evacuated. It is estimated that 960 lives were lost. Already frail surface road networks were badly damaged rendering a large number of the affected villages inaccessible for considerable period.

Three major spates of flood were observed in Bihar, the first starting in late July, followed by mid- August, and the last one in early October. Some people were displaced more than once and had to spend considerable time in spontaneous displacement on high grounds (river or road embankments) or relief camps.



The Floods of 2007 affected 1.2 million people mostly in 22 districts of Eastern Uttar Pradesh in late July. It affected more than 2,546 villages out of which about 1350 villages were marooned. Approximately about 60,000 children below the age of 5 years were reported to be affected. Most affected districts in terms of severity were Bahraich, Gorakhpur, Maharajganj, Barabanki, Gonda, Shravasti, Balrampur, Basti and Azamgarh and Kushinaga

The flood response in Bihar and Uttar Pradesh was the first time intervention at this scale for UNICEF state teams both in Bihar and Uttar Pradesh. The government response in both the states was reported to be significantly better than in the past and particularly so in the context of Bihar. Several United Nations (UN) agencies and Non Governmental Organisations (NGOs) also responded to the needs of the affected population. UNICEF’s response has been

analysed against the emergent needs in both the states and governments' response. The government responses in the two states were of different nature, given their capacities and the extent of damage caused due to flood.

The principle goal of UNICEF's interventions had been to complement the government in its efforts to keep the incidence of preventable disease to a minimum through focused interventions in key sectors, guided by the Core Corporate Commitments (CCCs) for emergency response.

### ***UNICEF's Core Corporate Commitments (CCC) in Emergencies***

*In response to widespread recognition of the increasing threat of natural disasters for children and women - a perception shared by the government of India and the UN community - UNICEF has developed strategies for natural disaster preparedness and response.*

*In 2003, UNICEF clarified what it would do to protect and assist children and women caught in disaster situations by revising its **Core Commitments for Children in Emergencies (CCCs)**.*

*The CCCs distinguish between those vital, life-saving interventions that should be done straight away in the first six to eight weeks of any crisis, and the broader spectrum of activities that may be added, once that initial response is in hand. Guiding the response of UNICEF in humanitarian situations is the principle that children in the midst of armed conflict and natural disasters have the same needs and rights as children in stable situations.*

#### ***CCCs in the Initial Phase***

*In the first six to eight weeks following the outbreak of a crisis UNICEF, with its national, United Nations and NGO partner organisations, will therefore work to:*

- *Assess, monitor, report, and communicate on the situation of children and women: **conduct a rapid assessment**, including severe or systematic abuse, violence or exploitation, and report through the appropriate mechanisms.*
- *Provide measles vaccination, Vitamin A, essential drugs, and nutritional supplements; provide essential drugs, basic and emergency health kits, oral rehydration, fortified nutritional products, and micronutrient supplements. Provide other emergency supplies such as blankets, tarpaulins, etc.*
- *Provide child and maternal feeding and nutritional monitoring with the World Food Programme (WFP) and NGO partners, support infant and young child feeding, therapeutic, and supplementary feeding. Introduce nutritional monitoring and surveillance.*
- *Provide safe drinking water, sanitation, and hygiene: emergency water supply and purification, provision of basic family water kits, safe disposal of faeces and hygiene education.*
- *Assist in preventing the separation and facilitate the identification, registration, and medical screening of children separated from their families; ensure family tracing systems are put in place and provide care and protection; and prevent sexual abuse and exploitation of children and women.*
- *Initiate the resumption of schooling and other child learning opportunities: set-up temporary learning spaces and re-open schools, start re-integrating teachers and children (with a focus on girls), and organize recreational activities.*

## **The Current Evaluation Exercise**

With aggrieved flooding situation in Bihar and Uttar Pradesh and in order to respond to emergency needs of poor and vulnerable children especially with respect to CCC, UNICEF was able to quickly mobilise funds to the tune of US\$ 4 million for flood response interventions in Bihar and Uttar Pradesh.

In order to contribute to UNICEF's overall commitment to accountability and improved performance, it was felt necessary to evaluate the UNICEF's emergency response in Bihar and Uttar Pradesh to enrich future emergency response and recovery programme of UNICEF in general and to develop a comprehensive understanding of the relevance, effectiveness, efficiency, impact and sustainability of the flood emergency responses in Bihar and Uttar Pradesh.

The scope of the assignment included both desk review and consultations with different stakeholders in the flood affected areas of Bihar and Uttar Pradesh. It included discussions with UNICEF staffs at Delhi and at the state offices in Bihar and Uttar Pradesh, reviewing of existing documents and materials, discussions with NGOs and Government functionaries at state, district and block level and visits to select sample villages for discussion with affected population.

Following the above, this report is based on discussions with UNICEF staffs, government officials, NGO representatives and visits made to a sample of affected villages in Bihar and Uttar Pradesh. In Bihar, a total of 30 villages spread across 10 blocks in the 4 most flood affected districts (Muzaffarpur, East Champaran, Khagaria and Samastipur) were visited. And in Uttar Pradesh, 19 villages spread across 9 blocks in the districts of Maharajganj and Bahraich were visited. The selection of districts was done in consultation with UNICEF State teams.

## **THE KEY EVALUATION FINDINGS**

UNICEF's Emergency Preparedness and Response Plan (EPRP) for 2007 were last updated in July 2007 in both Bihar and Uttar Pradesh. It provided basic vulnerability mapping, and identified the most vulnerable districts, which are in turn selected for pre-positioning of emergency supplies in Bihar. Bihar pre-positioned supplies for 40,000 families, however, there was no pre-positioning done in Uttar Pradesh. Supply of these materials was available with local partners by the last week of July 2007. In Bihar the local NGOs partners swung in to action much before the local administration and reached out to affected population with available supplies.

In adherence to CCC, both the UNICEF state teams largely targeted its interventions to children through sectoral interventions in the area of water and sanitation, health, nutrition, education and child protection. Despite large-scale flood devastation and high risk, the objectives had been achieved – no major outbreak of diseases was reported in either Bihar or Uttar Pradesh.

The overall response in Bihar and Uttar Pradesh can largely be categorised in two phases i.e. the initial response phase which started with pre-positioned materials and lasted for maximum of two weeks and which followed by intensive response phase which lasted for almost four months in case of Bihar and little less in case of Uttar Pradesh. The following section details

out the conclusions for each of the states separately and also draws out the recommendations for future emergency response for UNICEF.

### **The UNICEF's Flood Emergency Response in Bihar**

In Bihar, UNICEF flood emergency response literally began within 48 hours of the first incidence using through distribution of pre-positioned materials which included 865 tarpaulin sheets to provide temporary shelters, 130,000 oral re-hydration solution (ORS) sachets, halozone tablets for purifying water, temporary toilet sets, family hygiene kits, bleaching powder, disposable delivery kits and other relief items. The distribution was arranged through UNICEF's partners NGOs working with over 40,000 families in approximately 1,000 selected villages in seven worst affected districts.

UNICEF was among the first international organisations to respond to the crisis. UNICEF in its initial response focused only on the selected most affected/vulnerable districts. However, in the intensive response phase, the UNICEF's flood emergency response activities were expanded to 12 severely affected districts namely Muzaffarpur, Sitamarhi, East Champaran, Madhubani, Darbhanga, Samastipur, Sheohar, Begusarai, Saharsa, Supaul, West Champaran and Khagaria. After the initial response, rapid assessment was undertaken to assess the situation and fine tuning of strategy through sectoral assessments, the intensive response phase started in the area of water and sanitation, nutrition, health, education and child protection. The details of which includes:

- Water and sanitation interventions focused on villages and camps in 12 most affected districts as mentioned above with the objectives of ensuring safe drinking water, promoting hygiene behaviour, and providing necessary supplies for treatment and storage of drinking water and personal hygiene. The key interventions included disinfection of 180,000 hand pumps in 842 relief camps and 3,444 villages by using 675 MT of bleaching powder through the government and NGOs functionaries; ensured household level disinfection of the drinking water using 12 million halozone tablets supplied to 210,000 families; 25,000 family hygiene kits provided to the displaced in relief camps and affected families in villages; promotion of key hygiene behaviours catering to 160,000 families covering 1,641 villages and 341 relief camps; installation of 920 temporary toilets and 320 bathing cubicles; provision of 10,000 buckets and 50,000 soaps and water quality testing with 500 chloroscopes.
- Health interventions focused on children (0-5 years), pregnant and lactating women, and displaced communities. UNICEF deployed a health technical specialist in every affected district to provided technical support to the District Health Administrations in rolling out the medical relief efforts. The medical relief efforts included mobile medical teams, responsible for treatment of minor ailments, measles immunization and Vitamin A supplementation. All the medical teams were provided essential drugs for distribution. Over a million patients were treated by 619 medical teams and a comprehensive disease surveillance system was established with daily data flow to state level on the National Integrated Disease Surveillance Project (IDSP) format. This helped in timely response to control all impending disease outbreaks. More than 140,000 children were immunised with measles and 98,243 were given Vitamin A supplementation. The measles immunisation campaign was a collaborative effort between the Government of Bihar and UNICEF, with UNICEF providing the technical support and supply of auto disposable (AD) syringes. Around 100 Primary

Health Centres (PHCs) in Bihar returned to normal functional unit with technical support from UNICEF in operationalising these facilities with a special emphasis on improving maternal and new born health services. UNICEF also assisted the Government of Bihar in setting up maternity huts in areas with large agglomerations of displaced people and in areas where health facilities have been damaged.

- In the nutrition sector, over 60,000 children were examined from 10 districts to identify severe acute malnourished (SAM) children. Of those, 1800 SAM children were identified and finally UNICEF could trace and treat 1200 children through provision of nutritional supplements and also through establishing Nutrition Rehabilitation Centres (NRC) in eight district hospitals for rehabilitation of severely malnourished children. In addition to these, 2,400 Community Kitchens were setup with the help of NGOs & CBOs for children and mothers. Iron Folic Acid (IFA) supplements were distributed among mothers and adolescent girls in flood affected districts areas apart from counselling mothers for protection of breast feeding and special feeding for severely and acutely malnourished children.
- In education, Alternative Learning Spaces (ALS) in 11 districts were set up and notebooks, portable black-boards, learning charts, stationery to 16,000 schools were provided. This impacted about 3 million children who were imparted accelerated hygiene/ health education.
- Child protection psychosocial care and counselling support were provided in Muzaffarpur and Samastipur districts in ALSs and relief camps.
- UNICEF also helped setup the Unified Response Control Room (URCR) in the Centre for Disaster Management situated at Chief Minister's residence for coordinated response by Government, UNICEF and other NGOs. UNICEF also led the coordination with all NGOs and international agencies especially in the area of water and sanitation and health.

Most of the flood emergency response in Bihar was found to be relevant, appropriate and timely, well coordinated and in accordance with CCC guidelines. UNICEF's interventions were targeted on most vulnerable population. In general, interventions targeted children and mothers as the sectoral focus groups, which is in line with the existing sectoral commitments of UNICEF. Some delays on account of local transportation constraints in accessing worst-affected pockets were observed and remained a major challenge.

The interventions were built on the existing programmes and with existing partners. Most of the above interventions were made in coordination and collaboration with UNICEF's counterpart i.e. the government line departments in the state and in partnership with local NGOs. The institutional partnership with local NGOs in selected vulnerable districts was in place long before the floods, however, further ground level partnerships, e.g. district-level NGOs with other NGOs and Panchayat Raj Institutions (PRI) for extension of relief support, were developed in the course of intervention. Partnership with local organisations has helped in effective extension of support to the affected population and particularly in terms of its targeting the beneficiaries.

Some of the interventions made by UNICEF were quite unique and innovative and sets standards for any future relief operations. Among those were the UNICEF's interventions

towards Behaviour Change Communication (BCC) which was able to cover a much larger segment and that too on a very crucial, yet ignored, component of relief measures. Similarly rebuilding measures like assessment and restoration of Anganwadi Centres (AWCs), assessment of SAM children and setting up NRCs, setting up maternity huts and operationalisation of PHCs through lobbying and setting up ALSs were some of the innovative relief measures tried out which were sectorally quite appropriate and was the need of the hour.

While the magnitude of UNICEF's relief support was less than 5 percent of the State Government's relief, it set an example for supply of critical items and also setting the standards for government on the aspects of effectiveness, priority setting, relative timeliness and overall responsiveness. UNICEF's support to setting up weekly coordination meetings conducted with NGOs and Government counterparts through Unified Response Control Room (URCR) in the Centre for Disaster Management guided the overall relief operation by all agencies including the State government.

UNICEF took lead in streamlining and coordinating its efforts with government, International NGOs (INGOs) and other donor agencies through Inter Agency Cooperation (IAC) meetings, which was very well appreciated by all stakeholders. This helped in reducing the incidences of duplication of efforts by various agencies, and attracted support from many new donor agencies who had never even visited Bihar earlier. This included agencies such as OXFAM, ACTED, Action Aid, CRS, MSF, Save the Children, CASA and many others and resulted in about 25 INGOs to work together. UNICEF played a key role in coordination through joint meetings at the state level and developed process of joint mapping exercise. This created a platform for sharing of information and spreading the relief across the region.

No instance of social exclusion in terms of dominance of socially powerful castes/class in distribution of relief support was reported in any of the villages visited. In fact, the need for targeting vulnerable communities has found fair acceptance among dominant groups in some of the villages visited. Association with NGO partners has particularly been helpful in achieving this objective.

In order to lend sustainability to its interventions, UNICEF needs to further strengthen its existing programmes with State institutions. The lesson from 2007's intervention needs to be incorporated in to regular state interventions. UNICEF has made significant strides on this account. Some of these are:

- **Operationalisation of PHCs for delivery of newborn care services** – In the 2007 floods UNICEF had partnered with the Department of Health, GoB, for rehabilitation of the PHCs in the flood affected areas and 100 such PHCs were rehabilitated and quickly resume immunization services and cater to the increasing demand for delivery services for the Janani Suraksha Yojna (JSY) beneficiaries. This has been now mainstreamed into the GoB routine programme and is part of the National Rural Health Mission Project Implementation Plan (NRHM - PIP).
- **Supplementary Immunization with Measles and Vitamin A** – This was also incorporated in NRHM-PIP to provide supplementary immunization with Measles and Vitamin A in flood affected areas.
- **Mobilisation of Medical Teams for Health Relief** – Learning for the experience of 2007 floods, GoB placed a separate budget head with US\$ 250,000 in the NRHM –

PIP for this.

- **Pre-positioning of essential supplies for floods** – UNICEF provided technical support in developing list of essential supplies to be pre-positioned by the Health department. This was also incorporated in NRHM-PIP.
- **Nutrition Rehabilitation Centre (NRC)** – The state NRHM programme now proposes to ensure that every district hospital has at least one NRC and plans to cover them in phased manner.
- **Community based care of SAM Children** – Community based care was initiated as a special intervention jointly by Integrated Child Development Services (ICDS) and health functionaries at the household level. In this regard in 2007 floods, ICDS Directorate (GoB) with the help of UNICEF took the lead to ensure co-ordination between the three key functionaries i.e. AWW, ASHA and ANM at the grass root level and gave training to community based care on SAM management. The ICDS-IV project has now included this effort in their PIP.
- **Setting up Alternate Learning System** - ALS being institutionalized by Government through an order to schools remains opens in all flood affected areas (wherever possible and not inundated) and school teachers to attend schools. Their non-adherence of running the ALS being marked as absence from service.

The impact of Community Based Disaster Preparedness (CBDP) exercise piloted on a small scale post-2004 floods was not very visible. There is a need for sustained efforts on internalizing its values by the community. State Government has learnt to have undertaken this exercise in partnership with UNDP in this regard. UNICEF may share its learning with the government so as to strengthen this effort.

### **The UNICEF's Flood Emergency Response in Uttar Pradesh**

Interventions started with an Initial Rapid Assessment conducted within a week of the crisis (first week of August). State Government was prompt in deploying its resources and personnel in affected areas as soon as the floods started. EPRP for 2007 was updated in July 2007 by the UNICEF Uttar Pradesh State team which also indicated preparedness in terms of basic relief materials. The partnership with local NGOs was developed during the initial fortnight of intervention. Identification of target beneficiary in vulnerable pockets was done in the third week of August 2007 by partners based on their local knowledge.

Maximum interventions were focused in the villages along the banks of Ghaghara and Rapti rivers and its tributaries. This largely falls in Bahraich, Maharajganj, Gorakhpur and Barabanki districts.

The UNICEF relief support was provided through State Government (i.e. through District Administration) and local NGO partners identified in early August 2007. This relief support was made in adherence to CCC and in the area of water and sanitation, health, nutrition, education and child protection. This included:

- Tarpaulin for temporary shelter and safe drinking water to 25,000 displaced families, supply of 27,000 jerry cans and one million halozone tablets for water purification

apart from disinfection of water sources in 1050 villages. In addition, 83 India Mark II hand pumps were provided in 80 villages and constructed of 83 ECOSAN models of toilets and more than 700 poorest families were provided with hygiene kits.

- In order to address the survival issue, UNICEF adopted a three-pronged strategy. Firstly, flood posts, health camps and relief camps were organised at 389 places in which a total of 319,665 patients were treated, including 87,128 children. Secondly, over 100 mobile clinics were operationalised, through which a total of 128,983 patients were treated, including 44,069 children. Mobile clinics also carried out immunisation, chlorination, ORS distribution and health-hygiene education; Measles Vaccination and Vitamin-A supplementation was provided to 21,698 children. And thirdly, disease prevention, management and medical supplies were ensured at critical places. Essential drugs such as Paracetamol, Neomycin, Syrup Sulphamethoxazole and Trimethoprim were distributed in 13 most-affected districts. More than 1.5 million ORS packets were provided to district health authorities. Other supplies included 10,000 Impregnated Bed nets for Malaria prevention and 20,000 IEC leaflets on Diarrhoea Management were distributed.
- In education, 700 schools were provided with rehabilitation material to resume functioning. Alternate learning spaces (ALSs) were developed at 65 locations for psycho-social counselling. Behaviour Change communication (BCC) interventions were implemented in 900 villages in 6 districts, in parallel to distribution of UNICEF's supplies. The BCC interventions focused on improving the health and hygiene behaviour practices and ensuring environmental sanitation. About 900 trained volunteers-cum-communicators were mobilised through partnership with 6 NGOs, who reached close to 200,000 families.

The Uttar Pradesh Government was prompt to respond to the relief requirements, hence UNICEF intervened on remaining need gaps given initial delays in responses. The supply of essential support materials reached late (a fortnight later). Though it focused on essential items and benefited the community, by reaching a bit late and after the Government relief, it reported to be redundant in some cases. However, UNICEF's main contribution has been in supporting operational management of health interventions during this period. The surveillance system has reported to have helped in preventing disease outbreaks. In addition, the trust building and the environment of cooperation developed has been the major impact of the interventions made by UNICEF.

The operational cost has been minimal, as it required low deployment of staff. Transportation overheads and delay was minimized by having regional stock points and direct transport to most of the relief locations.

UNICEF led the initiative for Inter Agency Cooperation in Uttar Pradesh for information sharing and reducing duplication of efforts. This, however, seemed to have tapered off in the later stages of relief operation. Though the BCC was delayed and started only in October when much after flood water had receded, the impact of BCC and health interventions was visible and recounted by different stakeholders.

Most of the local partners had past experience in community development and some of them are actively involved in CBDP efforts promoted by UNDP and other INGOs. Strengthening of local capacities and building upon the existing capacities of some of the current partners

may be a key intervention in future.

## **KEY RECOMMENDATIONS**

The key recommendations of the evaluation exercise are as follows:

- The Emergency Preparedness and Response Plan (EPRP) as a document recognises the risk posed by flood and indicate UNICEF's preparedness to respond to such eventuality. This, however, is currently not informed by the spatial diversity in frequency of floods across the state. Given the recurrent nature of flood, it is advisable that UNICEF details out the EPRP in such a manner that it can also be used as a contingency plan. The plan, besides recognizing the flood vulnerability of the region, can include the operational aspect of the intervention. This is one issue which requires further attention, especially for pre-positioning and managing operations during emergencies.
- UNICEF needs to further develop and strengthen its partnership with local NGOs. This is essential in view of high recurrence of floods in both states. Similarly, the nodal NGOs have to be provided with sufficient time to develop partnerships with other local NGOs, Panchayati Raj Institutions (PRIs) and communities for an efficient relief operation. Timely sharing of its commitments on flood response with local partners including local NGOs would be very helpful in micro level planning of interventions.
- In view of the delay reported during the initial emergency supplies (though orders were placed timely with the vendors), UNICEF may think of providing some flexibility by allowing state level procurement in times of emergency, identifying vendors nearer to high risk states and finding ways to minimize lead time between supply order and the actual supply at the destination. Such changes will of course have to be within the quality control and other procurement norms of UNICEF with flexibility granted where ever feasible.
- The role of district based coordinators for cross sectoral liaison and logistic coordination with the Government departments and civil society organizations at the time of emergency requires further strengthening. This is applicable particularly in the case of Bihar. Deputing a nodal person at the district level to coordinate all relief efforts including being made by various sectors may help strengthen this aspect.
- Data management on stocks and movement during emergencies by both UNICEF and its partners provides for space for further improvement. Another critical gap is on account of lack of district level consolidated documentation of UNICEF emergency support intervention that may be useful for future reference.
- A suitable data base structure may need to be developed for efficient monitoring of relief operations. This can be made applicable for recording local requirements as well as stock and movement of relief materials and efforts. Similarly a proper database structure may also be developed for disease surveillance. Sharing the same with district teams may facilitate in producing analytical reports for informed decision making and better coordination of relief operation.

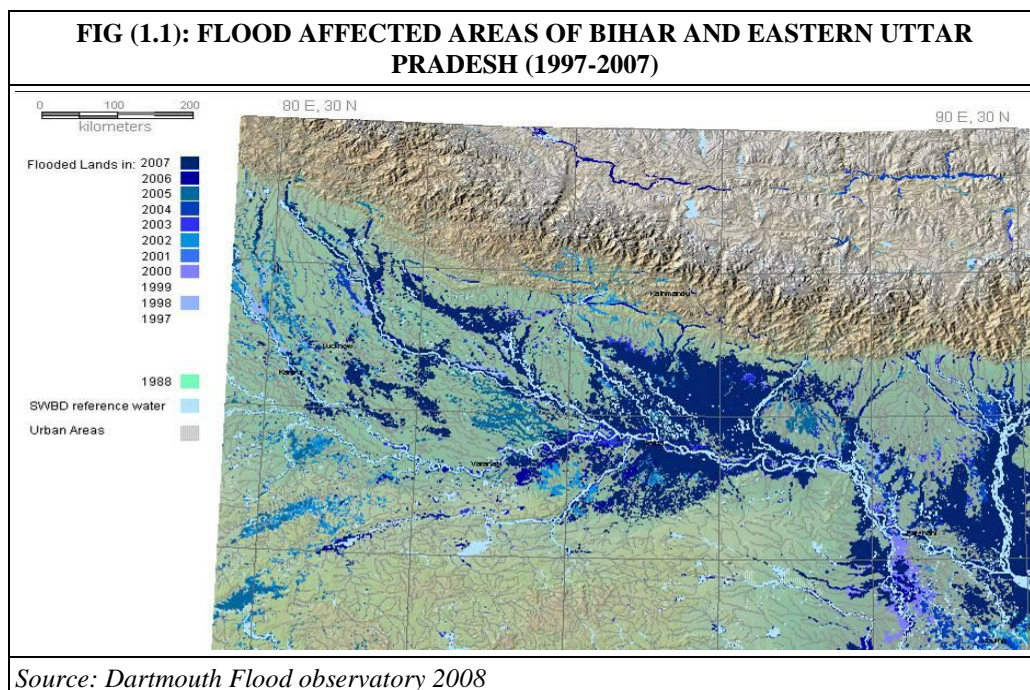
- Certain operational guidelines on approaches and practices for engagement of local partners with other NGOs and volunteers are necessary so that the NGOs do not short-change the inputs of volunteers especially in times of stress. To build continued support at local level, it may be essential to implement clear guidelines of engagement, code of conduct and basic support like safety gear, group insurance for the period of their engagement. This may increase interest and motivation among local partners.
- Government being the major role player during the emergencies, UNICEF should continue to share its learning and advocate for necessary modification in intervention policies and norms. Some positive outcomes have already been achieved in Bihar and the constructive pressure needs to be sustained.

# EVALUATION OF UNICEF'S FLOOD EMERGENCY RESPONSE IN BIHAR AND UTTAR PRADESH

## 1.0 INTRODUCTION

The Gangetic plains of Bihar and Uttar Pradesh have been known for frequent floods affecting millions of people, especially in the region north of Ganges. The area comprises of rich alluvial plains of Indo-Gangetic plain. The major rivers of this area originate from Himalayas and a considerable portion of their catchments lie in Nepal. They receive very copious rainfall during monsoon when discharge of these rivers is about 80 to 90 times larger than fair weather flows. This region is one of the flattest regions on earth and drains the mighty snow and rain fed rivers with large catchments in Nepal and Himalayan regions in northern India. The flood waters also carry large amount of sediments, which get deposited when the river velocity drops when the Mountain Rivers reach the Gangetic plains. Rapid change of river courses across the flood plains is common due to sedimentation of river channels, especially in case of Kosi River. This region is one of the most fertile agricultural regions and also has some of the highest rural population densities in India with 880 persons per square kilometre compared to national average of 324 persons per square kilometre. Flat terrain, high sediment load and very high population density are some of the major issues that cannot be addressed by conventional flood control measures. The state of Bihar has particularly borne the brunt of recurrent monsoon floods for decades in memory.

Several flood control measures have been taken by the governments in both States since independence. The impacts of these measures, however, have been the issue of contest among experts and government functionaries. Bihar has been particularly unfortunate in having to face nature's wrath very frequently. Major floods since independence were in the years 1954, 1976, 1987, 2004 and in 2007. Strikingly, in the reports each of these major floods in Bihar have been claimed to be more devastating than the preceding one. Whatever be the veracity of these claims, the frequency of highly devastating floods and the population affected seems to have undoubtedly increased in recent decades.



The 2007 monsoons were marked by several high rainfall events and resultant floods in India affecting more than 50 million people in 42,279 villages spread across 241 districts. Bihar and Uttar Pradesh were the two of the worst hit states. By the end of July nearly 10 districts in Bihar were already under the spate of flood. The situation got worse in subsequent weeks taking additional toll on human lives and property.

### ***Extent of Flood Damage in 2007***

Heavy spell of rains at the onset of monsoon resulted in major rivers crossing respective danger levels at multiple points along the river course. And by July end, the incessant rains worsened the situation to its saturation. In Bihar, the major rivers and tributaries including Baghmata, Budhi Gandak, Kamala- Balan, Bhutahi Balan, Kosi, Ganga and Gandak have reportedly crossed respective high levels recorded in the past.

A similar situation was witnessed in Eastern Uttar Pradesh where the rivers Rapti and Ghaghara in particular were the most devastating. Breaches in embankments, canals, roads and railway tracks at several points led to flooding of a much larger area than reported during the recent past. Congestion in the escape routes resulted in further stagnation of flood waters for months. The stagnation of flood waters caused greater property and crop loss to the people. The affected population had also to brave the threat of water borne diseases amidst scarce food and contaminated drinking water sources.

<b>TABLE (1.1): EXTENT OF DAMAGE IN BIHAR AND UTTAR PRADESH DURING (2007)</b>			
<b>States</b>	<b>Bihar</b>	<b>Uttar Pradesh</b>	<b>All India</b>
<b>Particulars</b>			
Date when updated	14 Oct 07	21 Aug 07	Not Applicable
Population affected (in millions)	24.6	1.2	59.3
No. of human lives lost	967	216	3,339
No. of districts affected	22	22	241
No. of villages affected	11,850	2,546	52,499
No. of cattle/ Live- stock lost	988	157	103,341
Cropped area affected (in Ha)	1,662,000	162,566	6,415,288
<b>No. of houses damaged</b>			
1. Fully	327,316	300	657,262
2. Partially	363,044	1,136	1,272,390
<b>Total value of damage (US\$ in millions)*</b>			
1. Crop Damage	333	305	
2. Houses Damaged	248	127	
3. Public Property	395		
<b>Total (US\$ in millions)</b>	<b>976</b>	<b>432</b>	<b>2,714</b>
<i>Source: SITREP No. – 137/ 2007 Dated 16th October 2007. Disaster Management Division, Ministry of Home Affairs. Government of India</i>			
<i>* Calculated @ 1 US\$=40 INR</i>			

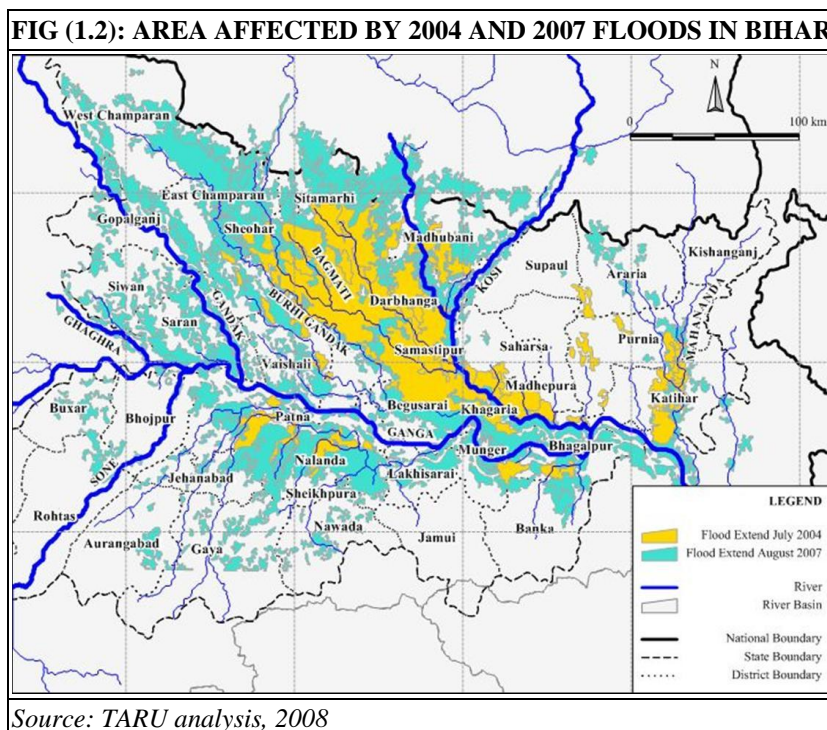
The extent of damage in Bihar accounts for more than a third of the total losses caused by floods during 2007 in India. The cumulative human casualties of 2007 floods stood at over 3,300 (around 30 percent in Bihar) and affected about 60 million people (around 40 percent in Bihar).

In Bihar, the floods started in mid -July and about 0.1 million people were affected by the end of second week July. The figure rose sharply (14 millions in 19 districts as on 9 August 2008) during the early weeks of August mainly due to incessant rains in the plains, Terai and catchments of Nepal. Intermittent heavy rains during the following days kept the figure ballooning up to 25 million by October 2007.

In Uttar Pradesh the worst affected districts included Bahraich, Shravasti, Maharajganj and Gorakhpur. By July end, the flood waters had invaded the low lying villages in these districts. The figure for affected population as per government estimate stood at 2 million people on 5 August 2007 which later increased to 3 millions in another two weeks time. About 2500 villages in 22 districts were affected by last year flood causing 216 human deaths (Table 1) besides other losses. During this period hundreds of villages remained cut off due to water logging and breaches in the approach roads. The situation however crawled back to normalcy as flood water began to recede from third week of August.

### 1.1 Bihar: 2007 Floods

The Bihar floods of 2007 caused severe damage and are described by many as the “worst in living memory”. It rained three to four times more than the average for weeks together and districts such as Samastipur, West Champaran and Khagaria were virtually cut off from rest of the world for a considerable period. Three major spates of flood were observed, the first starting in late July, followed by mid- August, and the last in early October. Some people were displaced more than once and had to spend considerable time in spontaneous displacement on high grounds (river or road embankments) or relief camps.



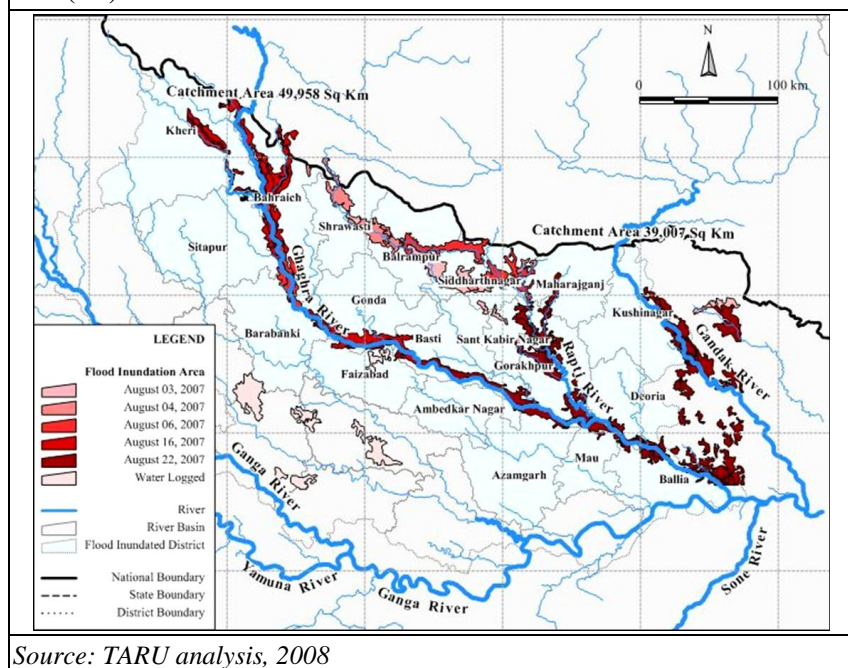
Out of a total of 3,480 km. of embankments, thirty four major breaches (*source: Bihar Floods of 2007: some lessons for every one; SANDRP, Nov-Dec 2007*) were reported. In the first phase of rains, around 40 villages of Sitamarhi and Muzaffarpur districts were inundated due to a breach of embankment on Baghmata River. Basahi embankment breach in Begusarai

District was the worst one affecting Begusarai and Khagaria districts. The State received about 1,293 mm of rainfall in three to four wet spells depending on the region. As per the State Department for Disaster Management Report, the floods affected 11,850 villages in 22 districts. A total of 24.6 million persons were affected and a million people were evacuated. Already frail surface road networks were badly damaged rendering several of the affected villages inaccessible for considerable period. A brief account of the damages and government immediate relief efforts during 2007 flood is presented in Annex (A). The map showing area affected by 2004 and 2007 Floods is shown in Fig (2) above.

## 1.2 Uttar Pradesh: 2007 Floods

The Floods of 2007, affected 1.2 million people mostly in 22 districts of Eastern Uttar Pradesh in late July. It affected 2,546 villages out of which about 1,350 villages were marooned. About 60,000 children below the age of 5 years were reported to be affected. Most affected districts in terms of severity were Bahraich, Gorakhpur, Maharajganj, Barabanki, Gonda, Shravasti, Balrampur, Basti and Azamgarh and Kushinagar. The map of the area affected by 2007 Floods is presented in Fig (3).

**FIG (1.3): AREA AFFECTED BY 2007 FLOODS IN UTTAR PRADESH**



This flood caused 216 human deaths, and affected about 162,566 ha of crops. About 300 houses were fully damaged and 1,136 houses were partially damaged. The total damage was estimated at US\$ 432 million as per the last available assessment in October 2007.

There were two major spates of floods of which the first one in late July was the most damaging. In most of the places, the flood lasted only for a week or less due to comparatively well drained and very gently undulating terrain. The water flow was fast and shifting of rivers caused undercutting and breaching of embankments in many places. Some settlements were destroyed. The inundation was however longer by two weeks in the lower reaches of the Ghaghara, Rapti and Rohini Rivers.

About 185 relief camps were catered to more than 67,000 persons, while actual number of displaced population was estimated to be about 176 thousand as per the UNICEF's Uttar Pradesh State office assessment. Over 600 medical teams provided medical support in camps as well as in partially affected villages. The Health and Family Welfare department was asked by the Relief Commissioner to continuously monitor the supply and availability of essential drugs. Unlike Bihar, Uttar Pradesh Government initiated the relief within days and

was fairly efficient in dealing the crisis. The scale of disaster was much smaller compared to Bihar and was restricted to Eastern regions of Uttar Pradesh.

### **1.3 The Rationale Behind UNICEF's Emergency Response In Bihar and Uttar Pradesh**

Both Bihar and Uttar Pradesh are the two most populous States of India and known to have poor socio-economic indicators like education, health and nutrition among others. The per capita income in Bihar is 60 percent less than that of India with large proportion of population living in absolute poverty. The frequent disasters exacerbate the existing situation where vulnerabilities of people are already high and additional pressure from loss of livelihoods, contaminated drinking water and disease outbreaks. In these distress situations, the women and children are most vulnerable. The prolonged breakdown of road network further complicated the problem due to lack of access to relief in many areas.

The principle goal of UNICEF's interventions had been to complement the government in efforts to keep the incidence of preventable disease to a minimum through focused interventions in key sectors, guided by the Core Corporate Commitments (CCCs) for emergency response.

The Government emergency response in both States were reported to be significantly better than the past and particularly so in the case of Bihar. Several UN agencies including UNICEF and NGOs also responded to the needs of the affected population. The 2007 flood response in Bihar and Uttar Pradesh was the first large scale emergency response intervention by both UNICEF Bihar and Uttar Pradesh teams. The details of these have been discussed in the subsequent Chapters.

## **2.0 THE CURRENT EVALUATION EXERCISE**

With aggrieved flooding situation in Bihar and Uttar Pradesh and in order to respond to emergency needs of poor and vulnerable especially with respect to CCC, UNICEF was able to quickly mobilise funds to the tune of US\$ 4 million for flood response interventions in Bihar and Uttar Pradesh, in addition to small-scale investments in preparedness measures.

In order to contribute to UNICEF's overall commitment to accountability and improved performance, it was felt necessary to evaluate the UNICEF's emergency response in Bihar and Uttar Pradesh to enrich future emergency response and recovery programme of UNICEF in general.

### **2.1 Objectives**

The objective of the evaluation is to develop a comprehensive understanding of the Relevance, Effectiveness, Efficiency, Impact and Sustainability of UNICEF's flood emergency responses in Bihar and Uttar Pradesh. The Terms of Reference is provided in the Annex (N).

## 2.2 Scope and Methodology

The scope of the assignment includes both desk review and consultations with different stakeholders in the flood affected areas of Bihar and Uttar Pradesh. The assessment included:

- Discussion/ briefing by UNICEF ICO at Delhi and State Offices
- Review of existing documents and materials including strategy documents, plans, proposals, monitoring data, mission reports, and previous UNICEF evaluations that focus on emergency response.
- Discussions with NGOs/ Government functionaries at District and Block level involved with relief
- Affected population in representative villages

The desk review was done based on documents provided by the UNICEF ICO at Delhi and the two UNICEF State offices in Bihar and Uttar Pradesh. Following the desk review and the discussions with Government officials and UNICEF State office staffs, field visits were made to Bihar and Uttar Pradesh. In Bihar, a total of 30 villages spread across 10 blocks in the 4 flood affected districts (Muzaffarpur, East Champaran, Khagaria and Samastipur) were covered. In Uttar Pradesh, 19 villages/hamlets spread across 9 blocks in the districts of Maharajganj and Bahraich were covered. The selection of districts was done in consultation with UNICEF State teams.

## 2.3 Limitations

- The study was conducted almost six months after the main interventions. Most of the respondents had already forgotten the interventions except for materials directly received by them. They could not recollect many operational and management aspects of the flood response activities.
- In many cases, the key nodal persons at the district level and their government counter parts had been transferred to other regions and the new person was not aware of the interventions done earlier. This is true for both Government and UNICEF's personnel. At district level, in Bihar, the State Government had placed Special District Magistrate as an in-charge for all the coordination of relief operation in the district. They were placed temporarily for around three months with special powers and returned to their earlier positions once the relief was over. In case of UNICEF, District extenders and nodal person monitoring the UNICEF relief operation in 2-3 districts were placed and many of them were from different UNICEF's State Offices who went back after the relief operation was over.
- Lack of sufficient district level documentation of the work done was a major constraint. In addition to that wherever some documentation was done, the lack of uniformity in documentation practices among partners was another limiting factor. In the districts visited, there was no consolidated documentation of what was done in that particular district with details of relief operations done, details of villages, the magnitude of relief effort and problems faced. Though some of this information was available with UNICEF sectoral team, but there was no clear documentation presenting the consolidated details of relief operation in that districts. This in addition

to shifting of people after relief operation and loss of memory due to gap evaluation exercise posed limitations in building the exact picture.

- Limitation arising out of sample selection that might not be sufficient to observe the entire set of interventions carried out during the floods
- Secondary documents provided from UNICEF were not adequate to make detailed cost effectiveness analysis of interventions
- As reflected from documents shared, the documentation at UNICEF field offices, especially the procurement and surveillance system was locally prepared and was rudimentary.

### 3.0 THE FLOOD EMERGENCY RESPONSE BY UNICEF IN BIHAR AND UTTAR PRADESH

In Bihar around 14 million people including 1.5 million children below 5 years of age in 22 districts were badly affected by floods. Similarly, in Uttar Pradesh, around 2.5 million people including 350,000 children below 5 years of age were affected in 21 flood affected districts. The flood caused heavy damage which resulted in widespread temporary displacement, including massive spontaneous settling along the roads and embankments. Some people were displaced more than once due to subsequent spates of flood and had to spend considerable time on the embankments or relief camps. Among them, women and children were the worst affected.



Submerged houses in Katra block of Muzaffarpur district, Bihar

Despite exceptionally widespread flooding in 2007, the state and district authorities have, in general, have been able to provide essential life-saving and other emergency support to the affected population. In complement to the Government, NGOs and CBOs at local level provided additional valuable support to Government structures. The immediate concern was the threat of vector borne epidemics among the vulnerable population in the flood affected areas. Controlling epidemics was the top priority for both State and District authorities. UNICEF played an instrumental and critical role in complementing efforts of the Government and other humanitarian players in dealing with flood response.



People displaced from flood affected blocks of Muzaffarpur living in makeshift arrangements along the damaged highway.

#### 3.1 UNICEF's Flood Emergency Response in Bihar

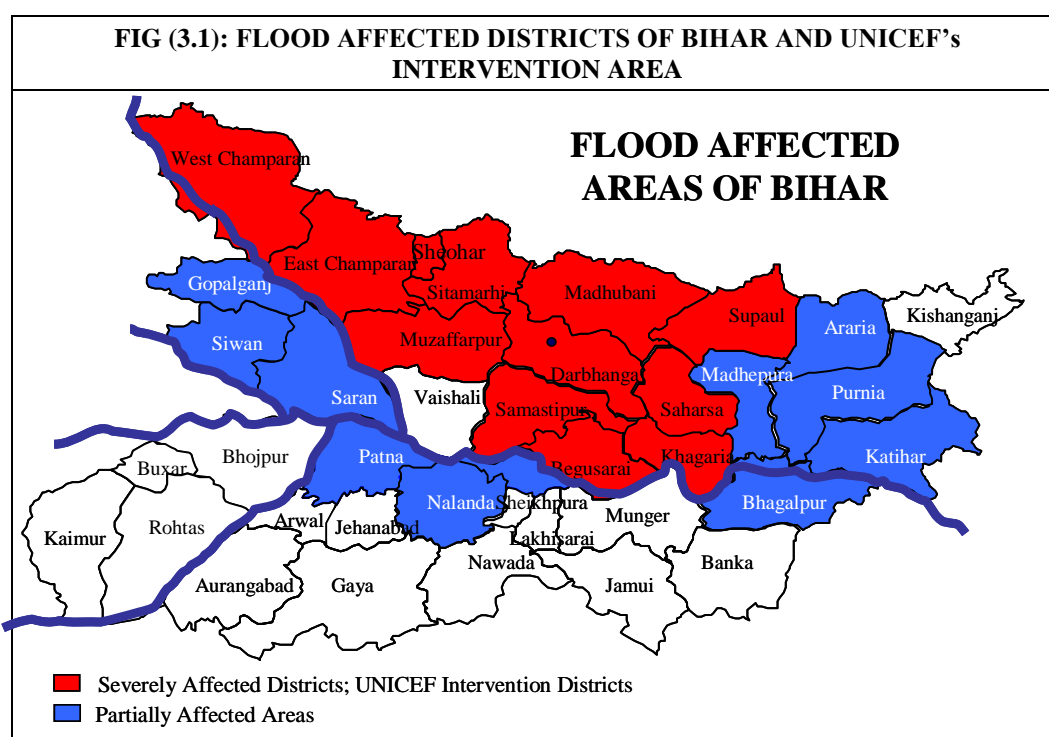
##### 3.1.1 Initial Preparedness and Pre-Positioning

As a part of flood preparedness, the partnership with local NGOs was established in seven most vulnerable districts i.e. East Champaran, Darbhanga, Muzaffarpur, Sitamarhi, Samastipur, Madhubani and Khagaria. The NGO volunteers were trained about flood preparedness and response. In these seven districts, UNICEF pre-positioned supplies which included 865 tarpaulin sheets to provide temporary shelters, 130,000 oral re-hydration

solution (ORS) sachets, halozone tablets for purifying water, temporary toilet sets, family hygiene kits, bleaching powder, disposable delivery kits and other relief items. The distribution was arranged through UNICEF's partners NGOs working with over 40,000 families in approximately 1,000 selected villages in 7 districts. The details of pre-positioned items are presented in Annex (C) of this report. In addition to this, UNICEF had supported community based disaster preparedness (CBDP) at a small scale in a few villages in the seven most flood vulnerable districts. As part of initial response, the pre-positioned materials were used.

### 3.1.2 Intensive Response

After the initial response and rapid assessment was undertaken, the intensive response phase started. This was further fine tuned with sectoral assessments undertaken in water and sanitation, nutrition, health, education and child protection. UNICEF was among the first international organisations to respond to the crisis. UNICEF in its initial response focused only on the selected most affected/vulnerable districts. However, in the intensive response phase, the UNICEF's flood emergency response activities were expanded to 12 severely affected districts namely Muzaffarpur, Sitamarhi, East Champaran, Madhubani, Darbhanga, Samastipur, Sheohar, Begusarai, Saharsa, Supaul, West Champaran and Khagaria.



In keeping with the Core Corporate Commitments in Emergencies during the intensive response phase, UNICEF focused the interventions in water and sanitation, health, nutrition, education and child protection sectors which are described below.

#### Water and Sanitation

The water and sanitation interventions focussed on improving the water and sanitation situation in severely affected villages and camps in 12 most affected districts with the objectives of ensuring safe water and sanitation provisions to affected population and to

promote hygiene behaviours. The key interventions in water and sanitation were as follows:

- Disinfection of 180,000 hand pumps in 842 relief camps and 3,444 villages by 675,000 kg bleaching powder through the Public Health and Engineering Department (PHED) of Government of Bihar (GoB), Panchayati Raj Institutions (PRIs) and the NGOs.
- In ensured household level disinfection of the drinking water, 12 million halozone tablets supplied to the PHED, medical teams, NGO volunteers and covered approximately 210,000 families in 842 camps and 3,444 villages.
- Family hygiene kits provided to 25,000 displaced families in camps and the flood affected villages.
- Promotion of key hygiene behaviours catering to 160,000 families covering 1641 villages and 341 camps
- Provision of sanitation facilities through installation of 920 temporary toilets and 320 bathing cubicles
- Provision of 10,000 buckets and 50,000 soaps,
- Installation of more than 50,000 temporary shelters in camps,
- Ensuring water quality testing with 500 chloroscopes
- Advocacy with PHED for installation of 590 hand pumps and raising of 2000 hand pumps

## **Health**

The health interventions focussed on children (0-5 years), pregnant and lactating women, and displaced communities. In order to fill up critical gap to provide outreach services (especially in cut off areas); UNICEF was able to set in position a health technical specialist in every affected district. These personnel provided technical support to the District Health Administration in rolling out the medical relief efforts. In addition, these specialists were also instrumental in conducting the rapid assessments in health and nutrition sectors.

- The medical relief efforts included mobile medical teams (responsible for treatment of minor ailments, measles immunization and Vitamin A supplementation). The measles immunization campaign was a collaborative effort between the Government of Bihar and UNICEF, with UNICEF providing the technical support and supply of AD syringes. UNICEF also assisted the Government of Bihar in setting up centres/ sites for provision of the essential maternal health services in areas with large agglomerations of displaced people and in areas where health facilities have been damaged.
- UNICEF provided technical support to the Government of Bihar in setting up a system of passive surveillance for tracking 5 major syndromes, i.e. fever, fever with rash, acute diarrhoeal disease, acute jaundice, acute respiratory infections. A daily coordination meeting was held under the leadership of the Department of Health during which suspected outbreaks if any are discussed and immediate response was initiated.

The specific accomplishments of health interventions are as follows:

- Over a million patients treated by 619 medical teams in Bihar throughout all flood affected area.
- A comprehensive disease surveillance system was established. Daily data flow was ensured up to state level on the National Integrated Disease Surveillance Project (IDSP) format to help timely response to control all impending disease outbreaks
- More than 140,000 children have been immunized with measles and 98,243 were given Vitamin A supplementation
- 8 maternal health service centres (delivery hut) were established
- 100 PHCs on Bihar return to normal functional unit. Technical support was also provided to help operationalize these facilities with a special emphasis on improving Maternal and new born health services. UNICEF provided midwifery kits and essential medical drugs to these PHCs.
- ORS was distributed in all the flood affected districts in coordination with District administration and local NGOs.
- 70 ILRs and 30 DFs provided to the flood affected PHCs to replace the damaged equipment

## **Nutrition**

In order to reduce the looming threat of malnutrition due to acute food shortage, targeted food assistance was supplied to most vulnerable children and lactating or pregnant mothers. The key interventions in the area of nutrition are as follows:

- Over 60,000 children examined from 10 districts for malnutrition. Of these 3 percent (1,800) were found to be severe malnourished. Among these severely malnourished children around 1,100 could be traced back and were provided with further nutritional inputs.
- Eight Nutrition Rehabilitation Centres (NRC) were established for case management and rehabilitation of severely malnourished children
- 2,400 Community Kitchens with setup with the help of NGOs and CBOs
- Iron Folic Acid (IFA) supplementation given to mothers and adolescent girls
- Counselling for protection of breast feeding and special feeding for Sever and Acute Malnourished (SAM) children
- Helped in restoring 1,075 Anganwadi Centres in 10 flood affected districts.

## **Education**

The key interventions in education sector included:

- Setting up of Alternative Learning Spaces (ALS) in 11 districts
- Provided notebooks, portable black-boards, learning charts, stationery to 16,000 schools
- About 3 million children were imparted accelerated hygiene/ health education

## **Child Protection**

The key interventions towards child protection are as follows:

- Psychosocial care and counselling support to children in Muzaffarpur and Samastipur districts in Alternative Learning Centres and camps
- Counselling to children who have dropped out from schools an integral part of the programme
- Study conducted on child protection concerns and impact of psychosocial care on children and their families

### **3.1.3 Institutional Strengthening and Monitoring for Coordinated Response**

Regular weekly coordination meetings were conducted with NGOs and Government counterparts through Unified Response Control Room (URCR) in Centre for Disaster Management situated at Chief Minister's residence. UNICEF led the coordination with all NGOs and international agencies. UNICEF also led the thematic coordination at state and district level with all the NGOs and Government counterparts on water and sanitation and health. In water and Sanitation, UNICEF coordinated with OXFAM, ACTED, Action Aid and National NGOs. In Health, UNICEF also coordinated a thematic group, which included NGOs like CRS, MSF, Save the Children, CASA and other local NGOs.

In Bihar, UNICEF continued collaboration and coordination with its Government and Civil society counterparts in order to monitor the situation on the ground and take corrective measures when necessary.

A data management centre was established in UNICEF office to compile all the information from all the affected districts and daily report was prepared and shared with all the staff which helped in cross-sectoral coordination.

## **3.2 UNICEF's Flood Emergency Response in Uttar Pradesh**

In Uttar Pradesh, the immediate response was to provide tarpaulin for temporary shelter and safe drinking water to 25,000 displaced families. Given that the provision of water supply was taken care of by Uttar Pradesh Jal Nigam (Government of Uttar Pradesh), UNICEF supported safe storage through supply of 27,000 jerry cans and one million halozone tablets for water purification and disinfected water sources in 1050 villages. In addition, 83 India Mark II hand pumps were installed in 80 villages and constructed of 83 ECOSAN models of toilets. More than 700 poorest families were provided with hygiene kits.

In order to further address the survival issue, UNICEF adopted a three-pronged strategy. Firstly, flood posts, health camps and relief camps were organised at 389 places in which a total of 319,665 patients were treated, including 87,128 children. Secondly, over 100 mobile clinics were operationalised, through which a total of 128,983 patients were treated, including 44,069 children. Mobile clinics carried out immunisation, chlorination, ORS distribution and health-hygiene education in addition to Measles Vaccination and Vitamin-A supplementation to 21,698 children. Thirdly, disease prevention, management and medical supplies were ensured at critical places. Essential drugs such as Paracetamol, Neomycin, Syrup Sulphamethoxazole and Trimethoprim were distributed in 13 most-affected districts. More than 1.5 million ORS packets were also provided to district health authorities. Other supplies

included 10,000 Impregnated Bed nets for Malaria prevention and 20,000 IEC leaflets on Diarrhoea Management were also distributed.

Education sector reached to 700 schools in which rehabilitation material was provided so that schools could resume functioning. Alternate learning spaces (ALSs) were developed at 65 locations for psycho-social counselling. Behaviour Change communication (BCC) interventions were implemented in 900 villages in 6 districts, in parallel to distribution of UNICEF's supplies. The BCC interventions focused on improving the health and hygiene behaviour practices and ensuring environmental sanitation. About 900 trained volunteers-cum-communicators were mobilised through 6 NGO partnerships, who reached some 200,000 families.

## **4.0 MAIN EVALUATION FINDINGS FROM BIHAR**

### **4.1 Relevance**

#### **4.1.1 Vulnerability Assessment**

The Emergency Preparedness and Response Plan (EPRP) prepared before the floods of 2007 is quite comprehensive with respect to CCC and details out broad strategy for the response. Though it provides broad outline of vulnerability at the state level, the geographic distribution of risk is not sufficiently covered. This is especially in the context of Bihar where different districts/ regions have different risk pattern such as the region affected by Kosi river which is relatively unpredictable as it keeps changing its course and amount to sudden flooding with little time to respond, than that of Muzaffarpur or Samatipur districts which largely get inundated due to stagnation of flood water. Identification of these geographic risk patterns may help further fine-tune the response strategies.

The first report on the floods came in third week of July 2007 and within a week after that UNICEF conducted the first initial rapid assessment. In the context of flood response, vulnerability needs to be viewed both in terms of geographic location of a habitation and the socio-economic status of the community/families affected. In the districts visited, the local NGO partners had the advantage of local area knowledge in identifying the vulnerable locations and locating the affected population particularly those displaced from their homes. The micro level identification of vulnerable families particularly in the non-operational areas of the local NGO partner was done during the relief support exercise. The field visit to various villages and discussions therein suggests that UNICEF had provided informal guidelines to partners on prioritizing the vulnerable communities.

#### **4.1.2 The Initial Rapid Assessments**

Soon after the report of flooding, a rapid assessment was conducted by UNICEF team during last week of July 2007. This was quite timely and identified list of affected blocks across 12 districts. Consultants were hired from RedR<sup>1</sup>, an international NGO and an institutional partner of UNICEF India, to help identify key needs. Throughout the relief phase, UNICEF staff visiting the field was asked to fill the forms developed for Initial Rapid Assessment (IRA) that helped in identified health & nutrition needs on regular basis. This provided significant information and helped in validation of data from various sources.

#### **4.1.3 Appropriateness and Timeliness of Response**

The immediate relief support was extended through pre-positioned items and largely in the critical sectors like drinking water, health and education to poor and vulnerable. Village communities in all the villages visited reported of receiving such support albeit in varying extent. Immediate flood relief response was appropriate and timely given the lack of access to clean drinking water at the temporary relocation sites and before government relief could reach them.

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<sup>1</sup> RedR – Registered Engineers for Disaster Relief - is an international NGO ([www.redr.org](http://www.redr.org))

During the intensive response phase UNICEF focused its intervention on areas such as water and sanitation, health, nutrition, education and child protection. The intervention, though limited in coverage, has been found to be relevant in its context. The interventions made by UNICEF were an outcome of informed decision taken by sectoral assessments, and hence, were quite appropriate to the needs of the target community and were considered as gaps in larger relief response by the State Government in meeting UNICEF's CCC. Some of the interventions were quite unique and innovative and set standards for any future relief operations. Among those were the UNICEF's interventions towards Behaviour Change Communication (BCC) which was able to cover a much larger segment and that too on a very crucial, yet ignored, component of relief measures. Similarly rebuilding measures like assessment and restoration of Anganwadi Centres (AWCs), assessment of SAM children and setting up NRCs, operationalisation of PHCs through lobbying and setting up ALSs were some of the innovative relief measures tried out which were sectorally quite appropriate and was the need of the hour.

While the magnitude of UNICEF's relief support was less than 5 percent of the State Government relief, critical items like supply of bleaching powder and water purification tablets was very critical and timely in containing waterborne diseases.

In majority of the villages visited during the evaluation exercise, the respondents acknowledged UNICEF's role in being the first to respond to their emergency needs. However, three out of its four partners (except in Khagaria district) in the four districts visited, felt that response time can still be improved by a week to plug the crucial time gap for clean drinking water and medical relief operations.

#### **4.1.4 Coherence of Responses**

The emergency response from UNICEF was based on their ongoing activities in water and sanitation, health and nutrition, and targeted children and women. Great care was taken to prevent breakage in the ongoing programmes like polio and measles vaccination, child nutrition support as well as education. Additional measles vaccination covering children up to 14 years was done to prevent measles outbreaks. However, there has been some delay in polio vaccination due to accessibility constraints. Beneficiary communities reported that the limited interventions like community kitchens were helpful in preventing malnutrition among the children and pregnant women. By focusing on eight worst districts, UNICEF seems to have made optimum use of its resources.

One of the important aspects of UNICEF response was to help coordinate weekly coordination meetings with NGOs and Government counterparts through Unified Response Control Room (URCR) in Centre for Disaster Management which guided the overall relief operation by all agencies including the State government.

## **4.2 Effectiveness**

### **4.2.1 Focus on CCC**

Most of the UNICEF's interventions were targeted keeping CCC in mind. Interventions undertaken in the area of health such as provision of essential medicines, measles vaccination, distribution of IFA and vitamin tablets, distribution of ORS packets and diseases surveillance are directly responding to the focus mentioned in the CCC. Similarly in case of

nutrition, attempt towards provision of nutritional supplements, running community kitchens for children and lactating/ pregnant mothers, screening done for identification of SAM children and establishing nutritional rehabilitation centres (NRCs). In case of water and sanitation, distribution of water purification tablets, and bleaching powder for cleaning of hand pumps, provision of temporary toilets at relief camps on embankments and IEC towards hygiene behaviour is directly responding to CCCs. Similarly in education, setting up ALSs and provision of education materials to children were directly responding to CCCs.

As a focus towards CCCs, most of these interventions are found to be directly in line with approach mentioned in CCCs, however their intensities varies across districts.

#### 4.2.2 Adequacy of Preparedness Measures

The preparedness with respect to pre-positioning was done in seven most flood affected districts of Bihar (i.e. East Champaran, Darbhanga, Muzaffarpur, Sitamarhi, Samastipur, Madhubani and Khagaria) for 20,000 families and that was very useful for the immediate relief measures. However, the scale and geographic extent of 2007 flooding in which more than 5 million persons were affected in the initial spate was too large to respond through this small amount of supplies. Given the nature of flooding in Bihar and level of severity varying every year, it is rather difficult to preposition to meet all the immediate needs of relief and in this light pre-positioning for 20,000 families is a moderate decision by UNICEF. Also, the items pre-positioned are directly in line with the CCC focus.

UNICEF had carried out CDBP exercises at a small scale in a few villages in the seven most flood vulnerable districts. Of these CDBP villages, four villages were visited by evaluation team in East Champaran and Muzaffarpur. The interactions with community in those four villages indicated that few people who were trained had neither shared their knowledge with the larger community nor set-up response groups. As part of CDBP, grain bank concepts were floated (post 2004 floods), with focus on vulnerable communities. Grain banks were seen in all the four villages visited, and of these, only two were found to be functional. Even in these, the seed grain amount of 2 quintal provided by UNICEF has remained constant with no additional beneficiary contribution.

*Devendra Sahni (Muzaffarpur) recounted the fervour with which grain banks were started in this block in several villages in 2004. Many families joined in to take up this initiative under the promise of being benefited with other schemes in future, like SGRY schemes. These were, however, shattered when no such additional favours came their way in the last two years. Further, none of the grain bank members were trained on its management. As a result, in some of the cases grain got spoilt due to fungal infection and the grain bank closed down.*

*In Fulhatta village of Samastipur, despite understanding the utility of the bank, the villagers decided not to bolster the existing buffer with their own contribution. Instead, expectations were being nursed that UNICEF would contribute more grain to add to the stock. In one village, a woman member told that she was refused her share of grain during the flood period. She told that she would not contribute any further.*

The discussions indicated that the concept of the grain bank has not been properly taken or internalised by the people. The beneficiaries also felt that one time response with no oversight and limited efforts in managing group cohesion by the local partners has led to decay of the system. More sustained efforts are necessary, until the group becomes self

reliant.

The field findings regarding the preparedness are presented in the Annex (D). Of the 30 villages covered by the team, preparedness in terms of CBDP training or pre-positioning of supply was found only in 6 villages. Similarly for food security, grain banks were observed at different level of functionality. It is understood that the initial CBDP training was done on an experimental basis in a limited number of villages and the experience from this can be used for a better CBDP exercise, the responsibility for which largely rests with the state.

In many of the villages for which the pre-positioning was done by UNICEF, supply of materials like ORS, halogene, bleaching powder, tarpaulin sheets to the beneficiaries coincided with the supply of fresh stocks that were supplied by UNICEF. For many of these villages, boats were the sole means of transportation. To reach many of these villages required changing different modes of transport including boat with six to seven hours of travel. For such inaccessible villages with high flood frequency, it is advisable to preposition at least a week's stock of critical items.

Local partners have undoubtedly proved to be the critical links in UNICEF's flood response. Among the districts visited, except in Khagaria, most of these NGO partners had been associated with UNICEF during the 2004 flood. Existence of district level partnership has helped in reducing support extension delay. Similarly meetings with these partners on flood preparedness and intent of support by UNICEF has further helped the process. However, in its hindsight, certain limitations as Samajik Shodh Evam Vikas Kendra (SSEVK), the local partner for East Champaran pointed out that they were in dark about the nature and volume of support they would be receiving from UNICEF. This uncertainty hindered planning and identification of locations and prospective local level partners. With the result, the ground level partnerships emerged only after the materials were received.

*Ekta Parishad and Hanuman Prasad Gram Vikas Seva Samiti (HPGVSS) were 2 of the 26 local NGO partners engaged for flood relief work by Muzaffarpur Development Agency (MDA). These partners were also partner to other International NGOs active in flood relief operation in Kudhani block of Muzaffarpur. The NGOs have targeted their interventions primarily on the poor community in the villages mostly in their existing operational areas.*

*On the process leading to their engagement with the UNICEF, Mr. Ram Praveh Kumar, the secretary of HPGVSS, terms it to be an informal understanding that developed after a meeting about a fortnight after the flood started in the area. In his opinion, the field operation could have been more systematic, if an understanding to this effect had emerged before the floods. Due to urgency, much of the interventions were done within their own operational area and in their earlier target communities. This in a way explains Musahars<sup>2</sup> as being the major beneficiaries in villages like Chhajan Dardha and Chandrahathi who also form the target community for these organizations in their regular programmes. This caused some amount of acrimony among other scheduled caste communities in the village who were also poor..*

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2 *Musahars* (meaning: rat killers) are the schedule caste community considered lowest in the social and caste hierarchy and are target communities for many regular interventions by International NGOs.

### 4.2.3 Alignment with Government Response

UNICEF was quite successful in having a fair degree of understanding with the state government. The relationship with district administration was built from the concurrent programmes of UNICEF. UNICEF was quick to place extra human resources at the district level who were responsible for coordinating and aligning UNICEF efforts with state response. Some exemplifying instances to this effect have been reported where district line departments have made demands to UNICEF to support their initiatives.

Even though UNICEF routed nearly two thirds of the relief materials through NGOs, it kept district authorities well informed, which enabled them to requisition these materials, when necessary. This step helped in initiating trust building process between stakeholders and can potentially benefit in any future relief operation.

The initiative of UNICEF in providing additional team of doctors has found special mention from various health department staff in the study districts. Besides, support by the local UNICEF staff placed for health interventions and coordination has been appreciated by the state and district level government officials. These interventions were particularly aimed at maintaining surveillance and interventions through appropriate channels on the outbreak of diseases. UNICEF also supported with logistics and conveyance support to the state medical staff requisitioned from other non-flood districts.

*The level of coordination between UNICEF health team and the local administration received special praise from Dr Bhairav Prasad, the Chief Medical Officer (CMO) of Samastipur district. The level of mobilization and sustained deployment of health professionals and substantial material supply have been very useful to the district administration in flood relief operation.*

*The team of doctors mobilized from Patna and other non-flood districts of Bihar by UNICEF was also extremely helpful to the district administration in addressing the health care requirements of the marooned people. Similarly, the local NGOs were very helpful in the drive to disinfect hand pumps. The nodal NGO, with bleaching powder supplied from UNICEF, was also reported to have provided the bleaching powder to the local Primary Health Centres (PHCs) and Community Health Centres (CHCs) for disinfecting drinking water.*

### 4.2.4 Partnership Management

UNICEF also contributed through deployment of human resources with Unified Response Control Room (URCR) in Bihar Institute for Public Administration and Rural Development (BIPARD) created for coordination of flood related response across the state. The URCR has done excellent job in not only coordinating both the state and non state response at the state level. The URCR was able to collect and validate up-to-date information especially on disease outbreaks that prevented the situation going out of hand. The UNICEF state office acted as the constant feedback channel for other state departments on the ground level issues.

At district level, an appreciable degree of coordination with the health department was reported. Feedbacks from other departments across the study districts indicate varying level of coordination maintained by UNICEF or its implementing arms at the ground level. UNICEF worked in partnership with PHED and local NGO partners on essential supplies, water treatment and behaviour change. District authorities were kept updated on stock status

and support extended in the field. However, line department like PHED have complained on restricted information sharing and dilly-dallying by NGO partners. On the other hand, NGO partners in Khagaria and East Champaran revealed about cuts demanded by PHED department for fund release against BCC & ECOSAN toilets works executed by them. Such instances need to be viewed in the backdrop of existing Government - NGO relationship across India, and hence, would require sustained efforts on trust building. In Samastipur and Khagaria district, the local NGO partner apparently developed a good coordination with the district administration and more importantly at the block level. In these districts, the feedbacks from the line department officials also speak positively of the effort made by UNICEF.

*Patori a block situated in the western Samastipur was least expected to be affected by floods last year. The Ganges, a potential threat, had its water level much below the danger mark. In late September 2007, a breach in embankment of Gandak's river caused floods, while water had already started receding from most parts in north Bihar. The entire block administration and the people were caught unprepared for an event, in an area otherwise considered safe.*

*The local administration had diverted their resources to other flood affected blocks by that time. Before the external assistance from district administration could arrive, the local SDM and the BDO mobilized local businessmen and other informal organizations to meet the crisis. The UNICEF nodal NGO, CARD extended help to the local administration. As Mr. Sanjay Sharma, the BDO, narrates- "the NGO offered its entire resources including their workers to be utilized by administration". Soon even the NGO's supplies were nearly exhausted, when the supplies from elsewhere started pouring in. Under such resource crunch, a focused intervention with a selective targeting the relief operation could reach out to the vulnerable population. Such level of coordination has been reported with other CSOs too.*

Most of the stakeholders including the government officials appreciated the sheer degree of dedication by the UNICEF staff, quality service delivery, relative timeliness and its non-partisan nature. Seen in the context of limited ground level relief and reported apathy during the past flood events, this example has given hope for the affected and also evoked interest of other INGOs in Bihar.

#### **4.2.5 Interagency Cooperation**

In streamlining and coordinating its efforts coordination with Government, NGOs and other international donor agencies through Inter Agency Cooperation (IAC) meetings were well appreciated by everyone. This interagency coordination seems to have reduced the incidences of possible duplication of efforts and attracted support from many new donor agencies who had never even visited Bihar earlier to this. This included agencies such as OXFAM, ACTED, Action Aid, CRS, MSF, Save the Children, CASA and many others. This has been appreciated both by Government and the INGO representatives.

The interagency coordination resulted in many new International NGOs (INGOs) taking up activities and for the first time in Bihar and attracted about 25 INGOs to work together. UNICEF played key roles in coordination through joint meetings at the state level and developed process of joint mapping exercise. This created a platform for sharing of information and spreading the relief across the region. The interagency coordination also resulted in many of the INGOs taking long term partnership and new activities on ground, to improve service delivery and build capacities of local NGOs. UNICEF took the lead in convening these agencies along the thematic areas of health, Water and sanitation, and

nutrition.

The state level inter agency cooperation was however not observed to be translated sufficiently at the ground level as each of the agency were guided by their own priorities and interests and lack of IAC monitoring at ground level. Instances of duplication were observed in the districts of East Champaran, Muzaffarpur and Khagaria. In many of the cases, the NGOs were found to be limiting their interventions in their existing operational areas and focus communities.

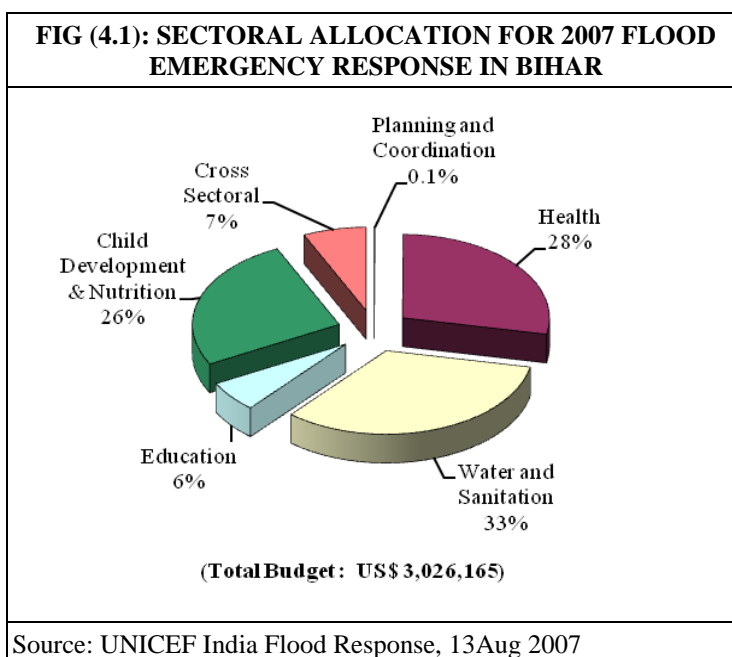
#### 4.2.6 Internal Coordination

One of the major efforts of UNICEF was to bring in staffs from other UNICEF state offices to help manage the multi-sectoral response. The Bihar State UNICEF office appreciate all the cooperation extended by other UNICEF state offices and the UNICEF country office at Delhi in launching and managing the large scale flood relief operation in Bihar. They reported that the supplies were made available within a fortnight, and the stock position was sufficient to meet demands most of the times. Considering the fact that UNICEF was able to raise USD 5 Million (USD 3 million for Bihar) within two weeks shows the effectiveness of coordination between state, national and Regional offices. Once the funds were raised, the procurement and deploying staffs for relief operations were addressed fairly effectively. There was shortage and delay in actual delivery of some of the items, especially tarpaulin and family hygiene kits, most of which reached late and distributed well through October 2007. Many of these delays were owing to the delays at supplier end because of sudden demand of such items by all agencies including government leading to shortage of supply.

### 4.3 Efficiency

#### 4.3.1 Allocation and Spending

Of the total 5.9 million USD raised by UNICEF for emergency response in 2007, around 3 million USD was allocated for the Bihar Flood response. Fig 4.1 presents the sectoral break up of the emergency response in Bihar in 2007. The main items procured for distribution were bleaching powder, water purification tablets, ORS, Reinforced nutrition biscuits, IFA and Vitamin A tablets, Medical kits, Family hygiene kits, Tarpaulin and School kits. The total value from purchases up to end of August was of the order of 1.6 million USD from central procurement at Delhi and USD 164,865 from local procurement at Patna (Bihar) indicating that only about 10 percent of the items procured were from local sources in Bihar.



The local purchases in Bihar (amounting to USD 164,865) included tarpaulin (41 percent of total local purchases) and bleaching powder amounting to 31 percent and the rest for Jerry cans, buckets and soap etc. The prices of local purchases were very similar or lower than the costs of centralized supply from Delhi. Details of latest purchases were not available, but the UNICEF Bihar state procurement staff informed that about USD 2 million was spent on procurement, which is in accordance with the budget for purchase of components.

### **4.3.2 Complementary Role to State Efforts**

The secondary information indicates an extensive outreach of UNICEF health and hygiene intervention. Of the 22 districts (as reported by Government of Bihar), UNICEF focused its interventions in 8 worst affected districts initially and extended to 12 worst affected districts in the course of emergency response. Some of its support like measures to control water borne diseases has come in for wide appreciation. More than 2.5 million ORS sachets were distributed in the affected villages. Similarly the health and surveillance team were efficient enough to consult more than a million patients. These activities complemented the government medical relief efforts.

The daily surveillance data analysis shows a total of 17,669 cases of diarrhoea with several peaks, with a single day maximum of about 3,000 cases reported. This has been a commendable achievement with more than 15 million people affected in those 12 districts. Khagaria, Madhubani, Samastipur, East and West Champaran reported more than 1,000 cases during the three month period. Maximum single day fever cases of 600 cases only on 26<sup>th</sup> August across the whole flood affected region. No major incidence of large scale diarrhoea reported due to adequate distribution of ORS packets.

The second most important reason for limited cases of diarrhoea was disinfection of wells and hand pumps. The State Government was not able to requisition large quantities of bleaching powder from relief funds and UNICEF's help is appreciated for providing it in time. Awareness generation on appropriate hygiene behaviour was also undertaken by local NGO partners across November and December after flood water receded. UNICEF has done well to focus on this aspect which often is overlooked in normal relief support extended by most of the agencies including government.

### **4.3.3 CCC Framework and Spending**

UNICEF emergency response is guided by its Core Commitments to Children in emergencies. In this context, 2007 flood emergency response in Bihar was in adherence to the CCC guidelines. It has followed the operational approach by carrying out the Initial Rapid Assessment and establishing a monitoring and reporting system. Similarly it functioned as sector coordinating agency with its partners including the government. A system for flow of supply and technical assistance was maintained. All sectoral programme interventions in health, nutrition, education, water and sanitation and child protection seem to have been given prime importance. Further, the interventions focused mainly on children and mothers.

Of the total fund (US\$ 5 million) raised by UNICEF for emergency flood response in India in 2007, around 60 percent was allocated and spent to Emergency response in Bihar and in accordance with the CCC framework. Table (4.1) presents the details of sectoral allocation of funds allocated and spent.

<b>TABLE (4.1): SECTORAL ALLOCATION OF FUNDS FOR EMERGENCY RESPONSE</b>			
<b>Sector</b>	<b>Fund Raised By UNICEF ICO (Delhi) for Emergency Flood Response (2007)</b>	<b>Fund Allocated &amp; Spent for Flood Emergency Response in Bihar (2007)</b>	<b>Remarks (Focus with CCC)</b>
Reproductive and Child Health & Child Development and Nutrition	48%	53%	Directly responding to CCC
Child's Environment	36%	33%	
Child Protection & Education	8%	6%	
Planning, Monitoring and Evaluation	2%	2%	Important for formulating strategies to focus on CCC
Cross-sectoral and BCC, Advocacy and Partnerships	7%	6%	Important for sustainability of the interventions made
<b>Total</b>	100%	100%	
<b>Total Emergency Response (US\$)*</b>	<b>5,065,000</b>	<b>3,026,165</b>	
Source: UNICEF ICO, Delhi * Emergency Preparedness such as CBDP etc are not included			

#### 4.3.4 Cost Effectiveness

The procurement done by the state team has been in accordance with the set norms of UNICEF. Procurement has been done at various levels depending on the value and the type of items of the purchase. There has been report of some relaxation provided in purchase which was a welcome step in view of the magnitude of the crisis. UNICEF may revisit its procurement guidelines in view of its experience with the local teams and reconsider some relaxation in it for the State offices. This will certainly enable a speedy supply of materials needed particularly during the initial response to emergency situations. All these steps would definitely have to be weighed against the set procurement standards and quality control. Further, a contingency plan for various scenarios of flood can be put in place so that supply constraints are minimized.

UNICEF has clear guidelines for emergency local procurement along with limits on the total amounts that can be spent for procurement. No issues were identified related to State level procurement and prices.

NGO partners distributed more than two thirds of the relief material except medicines as is evident from the Annex (E). This support has been widely appreciated by government functionaries and the communities. With road network cut off in most places, the NGO partners used their informal channels for a significant part of the transport. This significantly reduced the costs of distribution.

Discussions with UNICEF's NGO partners involved in emergency relief operation suggest that the transport costs were higher than anticipated and they had to adjust it from other

sources (including their internal sources). An NGO worker from Khagaria said, “*The movement of materials required change of modes at three or more points. Each transfer process required labourers to offload and reload resulting in the overall transport cost being three times than the non flood situation. Similarly, this also resulted in extra work load and time spent by many volunteers.*” The partners while appreciative of support extended by UNICEF have expressed the need for a more realistic budgeting in of transportation cost for similar emergency support in future.

#### **4.3.5 Timeliness in Context of Security and Threats**

The flood of 2007 was most damaging also in terms of its sudden spread in geographical areas and in less than a week’s time it affected most of the districts in North Bihar. This also posed challenge to reaching out with immediate relief to all flood affected areas in time. This was further accentuated by the breakdown of road and rail transport networks to reach to many flood affected areas.

Discussions with UNICEF’s staffs, NGO partners in the four districts visited and the secondary data for distributing relief suggest the following:

- Overall the relief reached the target community in time, irrespective of basic security threat to relief materials being looted, or the threat posed by flood water itself to reach to many areas. Except a few cases reported from Muzaffarpur and East Champaran, there was no major incidence of looting relief materials reported. Such threats though very common in the past were dealt effectively by respective agencies through support of the local police and the members of Panchayati Raj Institutions.
- A similar fear of looting and way laying was there at Patna among those who were managing the warehouse where lot of the relief materials were stored and being sent through trucks to different areas. Again support from local administration and police were sought to avoid any such incidence.
- Even though efficient movement and distribution of the material was hampered to some extent due to fear of mid-way looting and way laying, an analysis of UNICEF stock and supply data indicates that majority of the Tarpaulin sheets, IFA tablets, Jerry cans to store water etc were supplied in the month of August and September. Of which, 19 percent of the total Tarpaulin sheets supply could be made by the mid- August 2007. This took few more days due to transportation constraints to reach to the actual beneficiaries. Further in this context it was also learnt that the procurement of tarpaulins was delayed due to inability of the vendors to meet the enormous demands made by various agencies (including State Governments) at the same time. UNICEF made a timely decision to meet this shortage through local procurement till the requisitioned stocks arrived.
- Items such as water purification tablets (PUR and halozone), Tarpaulin sheets and Hygiene Kits supply in the initial phase could not match up with the demand. The supply of bleaching powder, ORS and other health related support has been reported to be timely and appreciated by all stakeholders. Despite the initial delays, the agency has been able to ensure regular supply thereafter. The activities undertaken during this period has been reported to be relevant and useful by stakeholders. This is particularly in the context that this was first experience by the state team in handling emergency response at this scale. This has been affected through optimum coordination with government and existing local

NGO partners.

#### **4.3.6 Cost Comparison with Other Programmes**

Most of the procurements depending on its type, value and emergent needs were done at international, national and local level. With the available details, the costs seem normal and the local purchases and international procurement costs were comparable. Since only about 10 percent of the items were procured by the UNICEF State offices and the rates are comparable. An analysis of the rates of items procured in Uttar Pradesh and Bihar indicates them to be fairly comparable.

The current study has a limitation on making a detailed cost comparison analysis of all the items of expenditure including logistics and NGO support. This analysis would require a study of procurement rates of various purchases, comparing these with prevailing rates in the market and more importantly a detailed break-up of the project expenditure including overheads under different activities. Also, the costs of services are likely to be different across different states. Such detailed break-up could not be accessed from the field offices, especially for the services and NGO support and overheads incurred.

#### **4.3.7 Contribution from Communities and Local Government**

Majority of the contribution from community groups came in way of volunteering to provide time and free labour in extending and managing the relief operations in the villages and relief camps. Most of these were individuals who came forward. The use of local resources, particularly the community/user groups, was minimal. In some cases, the communities had paid for transport of the materials provided to them. Much of the flood interventions were carried out through volunteers, NGO staffs and PRIs that were engaged informally by the NGO, line departments or the Block level Government officials. There has been mixed response from the local NGPs on their experience of working with PRIs. In general practice, the PRIs have been partnered by NGOs in all geographic areas which do not come under their normal operational area.

Volunteers were key resources that the NGOs used to extend their activities. Without local persons and volunteers, vulnerability assessment and selection of vulnerable households to distribute relief materials was nearly impossible. The volunteers in most cases worked overtime and provided support. A concern however remains in terms of lower payment against the services (and its duration) rendered by them. Some of the volunteers in three of the districts visited have shared this issue.

There are high diversity in interest, motivation and capacity of PRIs across the state. Some of the NGOs have history of association with PRIs and have been able to tap resourceful PRI members. In flood-prone areas of Bihar, many settlements come under a single Panchayat and often the Panchayat president shows interest only if his settlement is impacted. In general, it is the capacity and motivation of the key members of PRI that determines possibility of partnership without conflicts of interest. PRI members were helpful in greater outreach in activities like disinfecting of hand pumps, distribution of materials like halogen tablets, ORS sachets, bleaching powder, which are not perceived as valuable items by the community. Field observation suggests that PRIs have been the preferred partners in inaccessible and remote villages like Banjaria and Sugauli blocks in East Champaran or Hasanpur, Bithan and Kalyanpur in Samastipur.

In villages that came under operational areas of the nodal NGO partner, the PRIs were apparently not involved in equal measures. There were few instances like in Chorli Panchayat of Khagaria district where the Panchayat head had to be disengaged by the partner NGO due to alleged irregularities. These instances, however, are not unexpected in the current socio-political scenario.

#### **4.3.8 Suitability of Operational and Financial Management Procedures for Crisis Response**

UNICEF has significant experience in handling disasters, but it was first major challenge for the Bihar Field Office. In this context, the relief operations and management went rather smoothly, despite initial delays as mentioned earlier. The field observations indicate the initial delays to be more than made up by coordinating efficiently with the government and other agencies.

The Emergency Preparedness and Response Plan (EPRP) as a document recognises the risk posed by flood and indicates UNICEF's preparedness to respond to such eventuality. This, however, is currently not informed by the spatial diversity in frequency of floods across the state. Given the recurrent nature of flood, it is advisable that EPRP may be appropriately detailed out to work as a contingency plan. This besides recognizing the flood vulnerability of the region could also include the operational aspect of the intervention. This is one issue which requires further attention, especially for pre-positioning and managing operations during emergencies. Also the facts and figures need to be cross checked. For example, the EPRP of 2007 reports that 95 percent of Bihar's population has access to safe drinking water, which seems to be defying the reality and other available statistics.

From the format of the data made available to the evaluation team (Microsoft Excel Tables, without formal database structure), it is apparent that a preliminary stock and movement register system was developed locally. Across the districts visited, the partners need to be encouraged to maintain a standardized stock and movement documentation practice. The team has learnt that such practice was recommended by the UNICEF but was not found to be followed at ground. In none of the districts, the team could be informed of actual movement of materials to the end user. Similarly, the disease surveillance system which is based on Microsoft Excel data sheets could be upgraded with a proper database structure. Such practices would facilitate in producing analytical reports for informed decision making particularly at the district level.

The interviews with Account and Procurement section indicated that they had developed this system in a short time to meet the immediate needs. Implementation of a good database will greatly help in tracking the availability and status of various items at various locations at least up to the NGO offices and pre-positioning locations on the downstream end. This can greatly improve the information available during emergencies for managing supplies.

The field interactions indicate that UNICEF had made swift arrangements for stocking of the huge stocks of procured material in Patna. For this, the agency was also able to elicit credible coordination and support from state government including using their infrastructure.

## **4.4 Impact**

### **4.4.1 Sectoral Achievement and Geographic Spread of Responses**

UNICEF supplied the most urgently needed supplies to prevent outbreak of diseases and early restoration of essential services. This included bleaching powder for disinfecting drinking water sources, ORS packets, hygiene kits and installation of temporary toilets and bathing cubicles at relief camps. There have been 15 suspected outbreaks of disease in the flood affected areas which were contained by timely actions. Other than supplies, UNICEF has continuously worked with the State Government and NGO partners on advocacy efforts to ensure adequate support to the most vulnerable among the affected children and communities.

Resumption of drinking water sources has been done by UNICEF through its partners in all districts. Disinfecting of hand pumps by demonstration and distribution of bleaching powder helped in containing waterborne diseases. In several villages, the beneficiaries revealed that such a drive was done for the first time in their village and has resulted in reducing diarrhoeal diseases in the area. Similarly, the PHED staffs have widely acknowledged the support extended by UNICEF.

UNICEF developed an understanding with PHED to support on essential supplies for shelter (with PHED), water treatment and disinfection, repair and installation of hand pumps, hygiene promotion and ECOSAN toilet construction in 500 villages across 10 districts. This was done in partnership with District Water and Sanitation Committee and local NGO partners. Besides, UNICEF also provided hygiene kits to marooned areas that included articles like soaps, dettol, piece of cotton cloth, bucket etc. These interventions have benefited the vulnerable families most of whom were displaced on embankments and roads.

The Behaviour Change Communication Campaign has made major impact at the community level. It was carried out during the last phase of post flood response when the flood water started to recede by mid October 2007. In majority of the villages visited by the evaluation team and people interacted could vividly recall of the campaign and the demonstration of disinfection of drinking water sources. Most of these households reported that they had disinfected their hand pumps after the water level receded. Even prior to the campaign the volunteers are reported to have provided hygiene related information and materials like bleaching powder and halozone tablets to the community. This support has contributed to successful control of major outbreak of water borne disease and has been possible through large scale mobilization of human resources across levels.

The provision of toilets during flood period remains one of the major demands particularly in the villages severely affected by flood. UNICEF responded to the needs of the people by constructing 920 temporary toilets and 320 bathing cubicles. The provision of temporary toilets has been appreciated by the women. This sentiment is equally shared by males in the community as it has provided privacy to women in their families and also helped in reducing the likelihood of snakebite otherwise going in open.

In some cases, the local community were observed to be not fully satisfied with toilets set up. This was mainly on account of ever increasing inundation levels and space congestion at the toilet site. As in Fulhatta village in Samastipur, the temporary toilet got redundant due to

submergence of the unit a week after it was constructed. On the same issue, some government staff has expressed the need for more make shift bamboo toilets in relief camps and marooned villages. This according to them is useful but a proper site selection would be paramount to its usefulness. An alternative provided in terms of ECOSAN toilets too has not found much favour among the community and used sparingly. In some places they were apparently used and found soiled and abandoned. In all such places people informed that they intend to use them only during the floods. Further, none of the user appeared to be confident of the sustainability in the use pattern of these toilets. It is also not clear if the people will be ready to use the manure generated. The PHED engineers raised the need to address its design issues particularly the slope, usability by children and more effective design to segregate urine/water from entering the main chamber. Such concerns have been shared by the engineers, which are reportedly being addressed now.

Nutrition has been one of the regular flagship interventions of the UNICEF. The initiative to train the Anganwadi workers, ASHA and ANM workers on nutritional and health care of the children specifically during floods and sensitization of mothers was a sound initiative by UNICEF. The impact of training given to the Anganwadi workers, however, could not be traced much during the field visits by the evaluation team. In over 30 villages visited and interaction with eight Anganwadi workers and parents in general, none could recollect of any such training being given. A larger sample is required make an assessment of this intervention.

UNICEF addressed the issue of severe or acute malnutrition (SAM) by screening about 60,000 children from various relief camp sites within 2-3 weeks to identify SAM children. This was subsequently followed by nutrition support and rehabilitation of these through Nutritional Rehabilitation Centres (NRCs) and home based care activities. NRCs have found wide acceptance among the stakeholders including the targeted beneficiaries. The success of such interventions has led to emergent discussion on institutionalizing it with the regular health interventions by the government.

*A visit to the NRC in civil hospital campus in Motihari, the headquarters of East Champaran district, unfolds the silent success of this intervention. This centre was set up after preparatory assessment and training to the staff. The initial doubts on its acceptance by the rural parents have now been laid to rest. Sudha Rani one of the demonstrators at the centre interprets its success as the repayment to the dedication they have displayed so far. She also mentions the initial efforts of the UNICEF staff that put the system in place.*

*The centre which began on November 1 2008 has now rehabilitated more than 100 SAM children from its centre. The centre caters to the neighbouring six blocks in the district and has been running on full capacity since the start. At any point it can accommodate 12 children who normally are required to stay for two weeks course. The centre also provides for mothers stay, who in the process are also trained on child care. The mothers commented that this intervention is a life saver for their children. Manju, one of the mothers, narrated how she was encouraged by similar rehabilitation of another child in her village. She was able to get to this place through a local volunteer placed in the area. She never had any hesitation in coming to this place nor did his husband object to it.*

In nutrition, community kitchen has been a successfully managed intervention by the UNICEF with the management support of several local civil society bodies and responsible

citizens. This was widely appreciated by the community. UNICEF has supported more than 100 such community kitchens in the affected districts where children and mothers were the targeted beneficiaries.

In health, the coordination with the concerned line department was the highlight of the entire exercise. Mass Measles Vaccination campaign and regular surveillance system contributed to prevention of major disease outbreaks. The surveillance and the deployment of medical teams have found special mention by the Health Department officials in all the districts visited. The provisions of maternity huts were reported to be very helpful in conducting safe deliveries in relief camps. As per UNICEF daily surveillance data, the agency has facilitated in 191 safe deliveries till mid October 2007.

In Education, UNICEF has negotiated with the State to keep the schools open during floods. This was a significant deviation from the past. Surveys were conducted to assess the damage status of schools in the affected areas. UNICEF was also instrumental in running of alternate learning spaces (ALS) in the marooned areas. Out of 1000 ALS operational during the period, about 800 ALS were managed by government teachers. This has helped in reducing the number of non class days in the schools and reduced the dropout rate. In fact in some of the areas instances of drop outs joining these centres have been reported.

#### **4.4.2 Beneficiaries**

One of the positive aspects of the flood response has been the targeted nature of its beneficiary identification. The intervention had maximum impact in the poorest and the displaced sections of the flood affected population. By general understanding, most of those displaced are the ones who are socially and also financially disadvantaged. No instance of social exclusion reported. The dominant communities in some of the villages did have an issue with the targeting of the poor, but seemed to have taken in their stride, since most of the materials distributed were not considered valuable by them. Due to limited material available for distribution, there were certain groups within the vulnerable communities that were reportedly left out based on the judgment of the local volunteer or the partner NGO. In cases as also reported earlier, the local NGOs regular programme philosophy/ area too seem to have guided in selection of the communities and villages.

#### **4.5 Sustainability**

The flood response has had many positives for the NGOs that UNICEF associated with. However, most of these NGO partners function with a very limited financial resource base, and hence, a sustained low level engagement with the expanded community base or the volunteers can not be maintained under the regular programme of these partners. Also, there is a need to nurture a sound working relationship between the NGO partners and the various government line departments. This is one aspect that was conspicuous by its absence. UNICEF may play an important role in developing this relationship.

There is need to sensitize and train PRI members to enhance effectiveness of the intervention through CBDP exercises. The role of PRIs is becoming increasingly crucial for local development of the area. In such scenario, it becomes very relevant that they are better equipped and sensitized about their roles during such emergencies. In view of encouraging feedback on the role played by PRIs even though their engagement was limited, the scope for an enhanced role needs to be traced for quick outreach. Along with elected representatives,

the block level administration, and revenue officials are important links in government relief distribution system and have to be included in ensuring sustainability of interventions.

In order to lend sustainability to its interventions, UNICEF needs to further strengthen its existing programmes with State institutions. The lesson from 2007's intervention needs to be incorporated in to regular state interventions. UNICEF has made significant strides on this account. Some of these are:

- **Operationalisation of PHCs for delivery of newborn care services** – In the 2007 floods UNICEF had partnered with the Department of Health, GoB, for rehabilitation of the PHCs in the flood affected areas and 100 such PHCs were rehabilitated and quickly resume immunization services and cater to the increasing demand for delivery services for the Janani Suraksha Yojna (JSY) beneficiaries. This has been now mainstreamed into the GoB routine programme and is part of the National Rural Health Mission Project Implementation Plan (NRHM - PIP).
- **Supplementary Immunization with Measles and Vitamin A** – This was also incorporated in NRHM-PIP to provide supplementary immunization with Measles and Vitamin A in flood affected areas.
- **Mobilisation of Medical Teams for Health Relief** – Learning for the experience of 2007 floods, GoB placed a separate budget head with US\$ 250,000 in the NRHM – PIP for this.
- **Pre-positioning of essential supplies for floods** – UNICEF provided technical support in developing list of essential supplies to be pre-positioned by the Health department. This was also incorporated in NRHM-PIP.
- **Nutrition Rehabilitation Centre (NRC)** – The state NRHM programme now proposes to ensure that every district hospital has at least one NRC and plans to cover them in phased manner.
- **Community based care of SAM Children** – Community based care was initiated as a special intervention jointly by Integrated Child Development Services (ICDS) and health functionaries at the household level. In this regard in 2007 floods, ICDS Directorate (GoB) with the help of UNICEF took the lead to ensure co-ordination between the three key functionaries i.e. AWW, ASHA and ANM at the grass root level and gave training to community based care on SAM management. The ICDS-IV project has now included this effort in their PIP.
- **Setting up Alternate Learning System** - ALS being institutionalized by Government through an order to schools remains opens in all flood affected areas (wherever possible and not inundated) and school teachers to attend schools. Their non-adherence of running the ALS being marked as absence from service.

Similarly, UNICEF may negotiate with the State on the need for Teachers Training programme for incorporating emergency context in school management in Bihar.

With various sectoral representatives heading specific interventions, their moving out from the scene has resulted in knowledge vacuum at the district level. The issue of poor

institutional memory makes it very important to create a position or location at district level for documentation of its interventions. This is particularly important for knowledge sharing and reference purpose. Such positions can also be handed with the responsibility of inter sectoral and inter partner coordination of the activities. Very few of the current staff have idea of the cross- sectoral or partner NGO interventions during floods. As apparent from the discussions relief operations in 2007 have apparently been guided and documented sectorally at the state level. A single focal person (temporary though) for over all interventions at the district level could be one answer to this. The individual could not only ensure coordination among various partners in operation but would also ensure proper documentation of the field operations. Such an exercise would also be an asset for the local administration. UNICEF is learnt to have positioned a staff in that capacity during its response. Field interactions suggest of limited effectiveness in role discharge. The district level discussion provided little on the role played by the staff placed in this position. The sectoral representatives apparently had preponderance in terms of the role played. Further, the local NGO partners apparently had direct reporting to the state office rather than the UNICEF representative. This in fact forced a Samastipur based UNICEF staff to summon local partner to share their operation details with them on daily basis. For future UNICEF may like ensure a stronger role for the individual designated.

Actual interventions learning's of the 2007 flood response has been documented to some extent, but with many of the key persons transferred or going back to their states, some of the key documentation and building institutional memory still remains to be done. UNICEF may ensure the documentation of the work done at the district level; share it with the local partners and the district administration. And the same can be consolidated at the state level and shared with concerned state departments, BIPARD and the URS and URRCR partners. The experience gained from the 2007 floods gave significant confidence among UNICEF Patna in their capability to handle large disasters. Further, it has set a precedence of such a large scale collaborative operation involving both state and non state- partners that needs to be carried forward.

## **5.0 KEY FINDINGS FROM UTTAR PRADESH**

### **5.1 Relevance**

#### **5.1.1 Vulnerability Assessment**

The heavy rainfall was reported from the last week of July 2007 which worsened in during next week causing widespread flood as per the information from National Disaster Management Institute (NDMI), and by 30<sup>th</sup> July 2007 more than 26 deaths were reported from Uttar Pradesh. However, the UNICEF's 6<sup>th</sup> India Flood Briefing note dated 30<sup>th</sup> July 2007 does not report Uttar Pradesh floods. The UNICEF conducted Initial Rapid Assessment (IRA) on 2<sup>nd</sup> August 2007. By that time, the government had already deployed administrative machinery to service. Rescue, Food, medicine and purification of water at the camps etc., were initiated by then, as indicated in the Rapid Assessment Report.

The formal partnership agreements with NGOs were done after the IRA. This was the first flood disaster of this scale with which UNICEF was involved in Uttar Pradesh. Immediately after the IRA, UNICEF conducted a systematic health risk assessment in the camps. A fresh assessment of the marooned villages and the relief camps for determining water and sanitation and health priorities in the changing situations was conducted by UNICEF team on August 6<sup>th</sup> 2007. Identification of vulnerable pockets and communities were done by NGO partners in the period following the formal agreement and during the support activities.

#### **5.1.2 Appropriateness and Timeliness**

The initial response was delayed by at least a week after the floods. The Uttar Pradesh flood was short lived and by first week of August, the water had started receding from most places as reported in UNICEF's briefing notes of 6<sup>th</sup> August 2007. There was urgent need for temporary shelter and UNICEF started procurement process. By 14<sup>th</sup> August, procurement orders were given for 25,000 tarpaulin sheets and 12,500 were dispatched to the field. About 1.5 million halozone tablets were also dispatched. While there was delay in the immediate response, the UNICEF was able to quickly procure critical items like tarpaulin locally in the state. Partnership with NGOs was developed after first week of August and the identification of partnerships started evolving since second week of August.

Since UNICEF was handling such a response at large scale for the first time, it took about a week to a fortnight to initiate action on ground. Using different partners for different components resulted in timely delivery at the end points without putting much load on the partners. Once decision on flood intervention taken, the operation was swift, noting that it also involved identification of partners.

Movement of materials was efficient. The materials were directly transported to Stock Points at regional level which helped timely delivery of materials. In many cases the supply trucks were even offloaded at the block to reduce delays, as reported in Bahraich. This saved time and money. Better road conditions and limited constraints due to breaching, also helped in this. Unlike Bihar, there was virtually no fear of looting reported.

The Uttar Pradesh Government had good stock of bleaching powder, especially since the state has many piped water supply schemes and bleaching powder is one of the routine

purchases unlike in case of Bihar. UNICEF initially provided the bleaching powder to the Health Department, since the NGO partnerships were not in place. When the water started receding after the August first week in the districts such as Maharajganj and Bahraich, disinfection of hand pumps were started in peripheral areas. The requirement for items like halozone tablets was reduced significantly by mid August. Districts in the lower reaches, which had longer inundation, however, had halozone requirements due to second round of floods in mid August. The mobile medical teams were deployed by the August first week. This was one of the critical and useful interventions. This shift in focus in relief operation was appropriate to the changing situation.

Partnership with some of the local NGOs such as Sahara Welfare Foundation (SWF) and Art of Living were useful in operating mobile health clinics in the rural areas.

The BCC campaign on ground started towards end October and which could have begun earlier. The ALS interventions started by end of August, which was timely and was useful.

### **5.1.3 Coherence and Connectedness**

Since UNICEF was asked to take lead role in Inter Agency Cooperation (IAC) during the first meeting itself, the efforts were fairly well coordinated. However, since multiple agencies had started providing relief in a fairly small region and many items were already ordered, the issue of redundancy was felt in some cases. International NGOs such as Oxfam, CRS, Action Aid, SCF, and CARE have been active in this region since many years. By setting up Inter Agency Cooperation, the response was fairly well connected and coherent.

The geographic coherence was maintained, since most of the damage occurred in four districts along a narrow riparian patch along Ghaghara, Rapti and Rohini rivers. The geographic targeting was good due to focus on flooded areas along embankments. UNICEF could leverage the existing coordination with the district level administration particularly by deploying the Divisional Health and Nutrition Coordinators (DHNTC) to lead its district level health interventions. This enabled in setting up of the disease surveillance system, which was essential link in controlling diseases and management of medical support. Since the government had sufficient stock of medical supplies, UNICEF provided logistic support to the Health Department along with mobile medical teams. This ensured an integrated management of health interventions with active participation of government, UNICEF and NGOs.

By focusing on gaps in government interventions and complementing it with temporary shelters, drinking water safety, health and education, the connectedness and child focus were ensured. At least once in midway, changes were done to reflect changing priorities and needs by reducing the focus on bleaching powder and increasing the shelter focus.

## **5.2 Effectiveness**

### **5.2.1 Focus on CCC**

The UNICEF response was mostly in line with the CCC principles and addressed most of the needs of affected children with special focus on displaced. Since the State Government responded almost immediately, the profile of immediate needs had changed significantly. While there were few unmet needs beyond what Government had provided, UNICEF could still find the relevance in this critical support enunciated in CCC guidelines. More importantly, UNICEF complemented the Government efforts without duplication especially by providing temporary shelters (tarpaulins), safe drinking water through disinfecting hand pumps and distribution of halozone tablets and jerry cans to store water, distributing ORS sachets, providing logistical support for mobile medical teams, initiating ALS and BCC.

The rapid assessments were able to provide information on critical gaps and were able to focus on CCC principles after the initial delay. By leading the inter agency cooperation mechanism, UNICEF rapidly took the coordinating role in over all response, which ensured that the children's emergency needs were met. The surveillance system enabled the UNICEF and government medical teams to respond to possible disease outbreaks. The overall response matched the requirements of CCCs, albeit about a week to fortnight late in reaching the affected

### **5.2.2 Adequacy of Preparedness Measures**

It has to be noted that the flood risk is comparatively lower in this region and also the duration of flood is mostly for few days. The EPRP was prepared, but the details provided may be revisited based on geographic distribution of risk, frequency and vulnerability. The EPRP 2007 reckons the likelihood of flood in Uttar Pradesh to be fairly high. In this context, the immediate response could have been swifter.

NGO Partnerships were developed during and after the floods, though some of the partners already had considerable prior expertise in community based disaster management. Special mention can be made regarding Purvanchal Gramin Vikas Sansthan (PGVS), a member of National NGO task force on Disaster Management formed by National Disaster Management Authority (Government of India). PGVS's association with UNDP's CBDP efforts in Gorakhpur and other eastern districts of Uttar Pradesh was particularly useful. It had established grain banks, saving groups focused on flood risks and village level teams to take action in case for floods. Also other INGOs have been active in the area of disaster management in this region, whose expertise and reach can be used effectively.

The capacities of such organisations were sufficient to deal with the current risk in their own operational areas, while they supported the smaller NGOs effectively. UNICEF and other INGOs filled the gaps to some extent and the overall response was sufficient to deal with the crisis. Recurrence of floods and droughts in this region requires more attention on food security. The Gorakhpur Environmental Action Group, an NGO, has done significant work on food security and traditional technologies of flood preparedness, which may be quite useful.

CBDP interventions were done by other INGOs since last few years in this region. The NGOs

like Daud Memorial Trust and PGVS in Maharajganj and Gorakhpur have been associated with CASA on this. Community level vulnerability assessment, identification of the vulnerable pockets was done in Dhani block, Maharajganj. This has helped in rather swift delivery by the organisation when the UNICEF supply reached. UNICEF can learn from their experiences and strengthen the current CBDP processes being undertaken by these agencies or any other similar initiatives by state in future.

### **5.2.3 Alignment with Government Response**

The State Government was quick in taking up relief activities and also had mobilized about 600 doctors before UNICEF stepped in. UNICEF as the emergency response to flood affected areas attempted in complementing relief response and filling gaps to the unmet needs especially those related to children. While food and basic requirements were met by Government relief operations, there was shortage of tarpaulin and other materials such jerry cans to store safe drinking water which UNICEF tried to fill in. Also, though State Government had mobilised sufficient number of doctors, the logistic support to medical teams was insufficient. UNICEF's work on setting up surveillance system, providing logistics support to medical teams, setting up ALS and providing support through teaching and learning materials. There were well appreciated by all stakeholders. UNICEF's Flood response aligned with current State programmes aimed at improving various human development indicators on education, nutrition and health. Since UNICEF focused on complementing Government efforts, the responses yielded better results.

### **5.2.4 Inter Agency Cooperation**

Since many INGOs such as Oxfam, CRS, Action Aid, SCF, and CARE were already working in the region, a strong need for Inter Agency Cooperation (IAC) was felt during the first meeting in August 2007 and they requested UNICEF to lead this initiative. This helped in focusing on all affected regions and also minimized duplication of efforts. The field visits show that some of the NGOs used funds and materials from various agencies and efficiently managed to provide a fairly comprehensive relief to the communities. Also pre-existing coordination with various State line departments for running programmes provided a good base for working together with the government.

Inter Agency meetings of NGOs and INGOs were reported from both districts visited. It seems that the IAC effort seems to have tapered especially at later stages. Sharing of each other's intervention would be good exercise for future and in accordance with the URS objectives.

### **5.2.5 Internal and External Coordination**

By making the DHNTC the nodal person at district level, UNICEF was able to manage the smooth information flow from ground to the State office. Feedback mechanisms were effective and the materials and personnel could be deployed directly to the districts. This reduced the time in transit; however, transfer of these persons from one district to other during the flood period indicates an ad-hoc arrangement at times. This may not work on larger scale disasters. Regarding coordination between district and state level teams, one of the UNICEF staff informed that their district level documentation of emergency relief response when communicated was not effectively consolidated at the state level. In another instance, a UNICEF staff felt that the BCC work was handled by the State team directly with

very little role for the local teams.

The overall coordination of UNICEF was appreciated by the District Collector of Maharajganj, especially about the support through DHNTC. Similarly, cooperation with the Education Departments and Uttar Pradesh Jal Nigam were appreciated by district level officials. Information sharing with the Government has also been acknowledged by the district authorities. This also finds mention in district level reports by district authorities on relief support.

Separate NGO partners, some local and some from others areas were used for different response activities by UNICEF, which can potentially reduce the possibility of local absorption of the lessons and experience for future. If multiple NGOs are used in the same region, it is advisable that there is a fair amount of information sharing between them.

Given that the scale of flooding was not as high as in case of Bihar, UNICEF Lucknow staffs were able to manage the response activities fairly well without needing to request for human resource support from other UNICEF State offices. The coordination between UNICEF's Delhi and State office was efficient and smooth. The joint funding proposal was prepared in a short time and they were able to start response soon afterwards.

### **5.2.6 Response Time Issues: Shortage and Surplus**

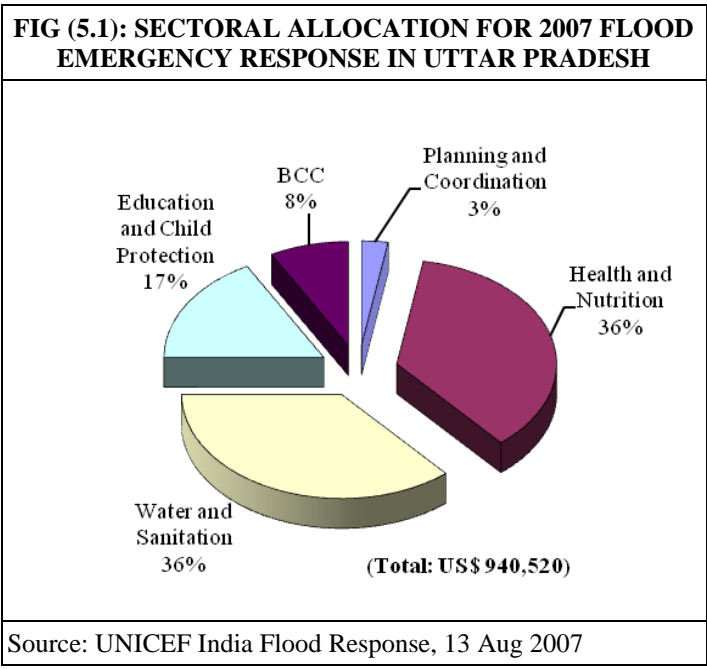
Initial delay is cited as major issues by both district UNICEF staff and the NGO partners. The State team too has reckoned this as one of the shortcomings. A summary taken out from various situation reports to show the progress of UNICEF interventions is presented in the Annex (F).

Delay in supply of bleaching powder and halozone probably resulted in surplus at the later stage. For example, as of 18<sup>th</sup> August only 100,000 ORS packets were distributed from the UNICEF while about 1.6 million were procured. Major supplies to the partners started only in the third week of August, by which time the water had receded in many of the districts and people had returned to their villages from the temporary relief camps. Supplies of Jerry cans and tarpaulin also show similar trends and probably not very useful due to delays. NGO partners had sufficient time to prepare themselves for response and almost all of them were already involved in some short with other donors. BCC activities on ground were also started in the month of October. As in Bihar, UNICEF may think about minimizing the lead time for the vendor to supply the order placed and possibly identify these vendors closer to these States.

## **5.3 Efficiency**

### **5.3.1 Allocation and Spending**

As per the initial proposal, about 0.94 million US\$ was allocated for Uttar Pradesh flood response. Out of this, major budget heads were for water and sanitation (36 percent) and health and nutrition (36 percent), followed by education and child protection (17 percent) and BCC (8 percent).



There was a midway correction in items procured, probably due to less demand for bleaching powder. The quantity of materials procured up to 14 October 2007 is presented in the Annex (G). With normative costs for each one of the items, about 36 percent was spent on tarpaulins.

### 5.3.2 Value Addition to Government's Efforts

The Government claims to have carried disinfection, but in all the villages visited by the evaluation team, nowhere people said to have received this service. UNICEF apparently was able to fill this gap significantly. UNICEF delivery in terms of halozone tablets seems to have reached after first round of floods but had reached about 2.5 million people by end August through NGOs. Similarly the BCC was a visible campaign as people could recall it.

Support in terms of field surveillance for disease outbreak, regular reporting, data maintenance and efficient field management has helped the health department. Timely monitoring of support to the health team and fund flow has been appreciated by the CMOs of the district visited.

*“During the flood of 2007, the entire district health team operated in full swing. This was crucial as we were already under staffed” recounts Dr. R C Parashar, CMO, Maharajganj. He further adds “The Civil hospital had sufficient stock of medicine supply. The PHCs too had its stocks replenished”. He, however, constantly needed support on operation and logistics management. In this context, he received critical support from the UNICEF. “It was more important for me to have someone by my side to assist in managing daily operations than to have reinforcement in the medicines stock by UNICEF” he explains further. The locally placed DHNTC, a UNICEF staff, played this much needed role to support him.*

The Government medical camps already started by 2<sup>nd</sup> August were responsive enough and UNICEF response has to be seen in that context. Without support from UNICEF, the

surveillance would not have been efficient enough in the context of past history of floods. A total of 11,816 cases of diarrhoea along with 92,522 ARI/ fever cases were treated by medical relief camps. The mobile medical clinics treated 2,406 diarrhoea cases and 34,113 ARI/ fever cases. No major outbreaks were reported despite nearly 40,000 people staying in camps for nearly two months.

### **5.3.3 CCC Framework and Spending**

With the focus on safe drinking water and control of water borne diseases, the children were the main focus of the interventions. Later, the support to education helped in early restarting of the affected schools helped in children being able to resume their studies. The spending on children as direct beneficiary is not perceived by most of the communities interacted with, as UNICEF might have liked to. Perhaps the intervention timing and the scale of disaster could be some of the reasons.

Of the total fund (US\$ 5 million) raised by UNICEF for emergency flood response in India in 2007, around 19 percent was allocated and spent on emergency response in Uttar Pradesh. The overall spending of the flood emergency response in Uttar Pradesh suggest adherence to CCC with two third of the total amount being spent on provision of safe drinking water and sanitation and health and nutrition with special focus on children.

### **5.3.4 Cost Effectiveness**

UNICEF was able to get the services of NGOs, which greatly reduced the cost of delivery. Also by providing support to Government the cost of delivery was minimized. By using the local procurement of tarpaulins and Jerry cans, UNICEF could save money and time compared to central procurement. Since UNICEF already had a good working relationship with the Government, the delivery could be done through the Government in a cost effective manner.

Movement of materials was efficient. The materials were directly transported to Stock Points at regional level which helped timely delivery of materials. In many cases the supply trucks would be offloaded at the block level even, as reported in Bahraich. This saved time and money. Better road conditions and limited constraints due to breaching, also helped in this. Unlike Bihar, there was virtually no fear of looting reported.

The imported impregnated bed nets could have been purchased locally and treatment could be done by local service providers/ NGOs (from non-flood districts), if the chemical could have been made available thus saving lot of money and transport. Also, the effectiveness of the chemical is about 6 months and the people are likely to continue to use it without being able to treat the net again.

### **5.3.5 Cost Comparison with Other Programmes**

The costs of purchases are comparable with similar items purchased from Bihar. It seems that the price of locally purchased Jerry cans were about 30 percent cheaper. Since most of the items were purchased at central level, the price variation was not an issue.

Some of the materials supplied and assets created were suboptimal. For example, only about 10,000 bed nets were provided. Compared to Bihar, the Uttar Pradesh market has better

capacity and Jerry cans and tarpaulin was mostly locally purchased. Unlike in Bihar, Health Department was reimbursed the transport and other logistic support expenses, which gave them freedom to operate medical camps more efficiently.

It is suggested that UNICEF limits its activity to real needs, complimenting the Government efforts. For example, The Uttar Pradesh Jal Nigam is reported to have funds to install about 1,17,000 hand pumps across the state and advocacy could have been more effective than financing Mark II hand pumps, unless any new technology or methods were to be demonstrated.

*Tikuri was one of the flood affected villages in Mahesi block of Bahraich district. The village remained inundated for about 10 days with a peak period of 3 days. Several of the hand pumps got submerged in flood waters.*



*Post flood, Jal Nigam, started installation of hand pumps in villages to ensure safe drinking water to people. UNICEF had supported Jal Nigam by funding for these hand pumps. The objective however does not seem to have been fulfilled as none of the new installations in this district seem to have been done on a raised ground where people often take refuge. In one case, hand pump with raised platform (constructed by another agency) was observed. The community considers this as a good intervention.*

### **5.3.6 Involvement of Local Groups and PRIs**

The local NGO partners have had long associations with INGOs, and have built capacities and developed relationships with local communities over time. As reported earlier, some of the partners have been leading the CBDP activities in their area of operation. Since it is an emergency response, not much work on training/ capacity building seems to have been done with the NGOs on their preparedness. The NGOs that worked on BCC did receive training and their volunteers were trained on this aspect. PRIs and local bodies were partnered by the NGO partners in extending their activities to the village level.

### **5.3.7 Suitability of Operational and Financial Management Procedures for Crisis Response**

UNICEF Field office was able to manage the whole activity without taking support of other UNICEF state offices, largely because the scale of intervention was much smaller than that in Bihar. Also, the support for the Government for medical camps was given through direct payments for transport and other expenses, which reduced need for micro-management.

There is scope for improvement in managing surveillance data, as it was found that the current system is rather rudimentary. Similar issues are also found in case of stock and

material management, which can be improved significantly.

The EPRP process is broad to provide sufficient information and requires to be improved significantly. The EPRP and the response can be greatly improved through historical and real time data, especially on rainfall and river gauges spread across the state. The State Irrigation Department has considerable amount of historical data on river flows and floods and this will be useful in understanding the flood risk over the region as well as identifying key points for pre-positioning. Association with State Irrigation and Agricultural Department and partnering with disaster management experts can provide near real-time information and generalised forecasting tools to anticipate progress of floods at least one or two days in advance. Along with this, information gleaned from CBDPs can greatly help in assessing risk across the region, prioritization of responses and pre-positioning for preparing an effective EPRP.

## **5.4 Impact**

### **5.4.1 Sectoral Achievement and Geographic Spread of Responses**

The UNICEF response was mainly aimed at providing temporary shelter, clean drinking water, prevention of disease outbreaks flowed by BCC and support to education. ORS was distributed in sixteen districts whereas tarpaulin and halozone tablets in nine districts. The details are presented in the Annex (H).

As a result of active disease surveillance system established with the help of health authorities in the affected areas, no disease outbreak or diarrhoea related death occurred during the flood period. No epidemics were reported among the targeted population. About 28,000 children benefited by the way of rehabilitation material and 3,000 children benefited from alternate learning spaces (ALS). Message for improved behaviour through BCC reached to more than 178,000 families through brochure and interpersonal communication.

The geographic spread indicates that the most affected districts got the priority and the immaterial support was focused on complementing the Government efforts. While the material support was suboptimal given the scale of Government support, it helped in reaching the most vulnerable in the communities.

### **5.4.2 Beneficiaries**

The main beneficiaries of UNICEF response were the persons who had to stay for more than two weeks in the camps. These communities included those whose houses were destroyed and also included whole settlements washed away by the river. Some of the communities who had lost the whole settlements continued to live in these temporary camps for more than three months. The medical camps benefited the most of the affected communities, who could not afford to spend money on medicines

While the materials like hygiene kits and tarpaulins were limited in number, they helped the most- needy in the affected communities. The targeting was well planned by the partners and only people who were most vulnerable were provided these support.

Solid wastes were cleaned in 150 settlements, which were done by Village Health Society funds under NRHM. This was facilitated by UNICEF's suggestion to the Health Department.

UNICEF also set up 53 Alternate Learning Spaces (ALS) which helped about 3,076 children. A total of 1,167 primary schools and about 280 schools were identified and support was provided. At Maharajganj, the Education Officer informed that they had received the materials.

### **5.4.3 Local Support in Response Activities**

The local support came through the volunteers, some of whom were already trained in CBDP exercises. The beneficiary identification was done by partner NGOs with active participation of the local communities. The communities also provided continuous information on the status and helped in establishing informal channels with NGOs.

### **5.4.4 Issues of Social Exclusion**

No incidence of social exclusion was reported. This was largely due to nature of interventions and the NGO partners' experience in handling difficult situations of distribution of items perceived as valuable by the communities. Most of such materials were distributed through coupon system, and distribution done at their local offices instead of at the village. Some of the beneficiaries were rather upset for having to travel many kilometres to local NGO office and getting only a Jerry Can.

### **5.4.5 Influence on Existing Inequities**

The UNICEF and the partners were quite conscious of the existing inequities and were careful in choosing the beneficiaries. Their familiarity of the region and the issues helped to focus on most vulnerable in the communities.

### **5.4.6 Adherence to International Standards and Code of Conduct**

The UNICEF response was undertaken with the spirit of adherence to quality. The staffs are well versed with the international standards and tried their best to adhere to those principles. The visits made by evaluation team did not reveal any deviation from the code of conduct. While the delay was there, it was largely due to the scale of the disaster, and lack of preparedness to face such a disaster.

## **5.5 Sustainability**

### **5.5.1 Strengthening of Local Capacities**

Most of the local partners had past experience in community development and some of them are actively involved in CBDP efforts promoted by UNDP and CASA. However, some of them, especially the smaller NGOs had limited capacities to handle disaster responses. Though some of the larger NGOs are providing support to smaller NGOs in building their capacities, it requires to be strengthened through small but steady support in training and capacity development.

One of the key requirements in preparedness is near real-time information on floods. UNICEF is well placed to provide such support through informal and formal channels. This would also help in honing the EPRP as well as help in improving the preparedness at community levels. The efforts of CBDP need to be continued and strengthened and spread

geographically along the flood prone sections of the Ghaghara, Rapti and Rohini rivers. In this context UNICEF can partner with other International NGOs in formation of such platforms across the flood prone regions of Uttar Pradesh.

The Behaviour Change Communication is a key item which could get attention only towards the end. If the health responses have to yield results, more focus has to be laid in BCC activities right from the beginning, especially when the communities are living in camps which are often crowded and sanitation is an issue. Even though late, the BCC interventions were more visible and understood by the communities. Regular reinforcement will be required for its sustenance.

Documentation of the experiences and building institutional memory at the local stakeholder level is an important aspect which requires strengthening. With frequent transfer of officials at district level, continuation of preparedness activities is essential along with documentation of the processes, adopted and lessons learnt.

The ad-hoc system of placing DHNTC as the focal person for UNICEF intervention has apparently worked well particularly since the scale of operations was limited. While DHNTC was able to coordinate well with the Health Department, more support for ground level coordination with NGOs and other Government agencies is necessary, especially if the scale of disaster becomes large.

### **5.5.2 Systems in Monitoring and Learning**

The current system of disease surveillance and management in disasters has shown that considerable improvement is possible in monitoring systems to deal with floods and other natural disasters. With more focus necessary on communication with anticipatory action and feedback, district level coordination becomes an important issue.

Some of the partner NGOs informed that they were not given format for vulnerability assessment and had to resort to ad-hoc formats. Standardisation of reporting formats, usable by less skilled people will be helpful. Also the protocols for communication can greatly improve the quality of data inputs from field and can reduce communication cost.

A well designed database supported by daily/ hourly update using mobile communications systems can greatly improve the data gathering and decision making on near real-time scale. More informed decision making is possible, if the Government and NGO resources are tapped more effectively at district levels and an effective communication system is set up starting from the village level. This will improve the reporting of food, health and water situation in camps on and reduce the time for adapting to the needs rapidly.

## **6.0 CONCLUSIONS AND RECOMMENDATIONS**

### **6.1 Conclusions**

The flood response in Bihar and Uttar Pradesh was the first time intervention at this scale for both the UNICEF State teams. The Government response in both states was reported to be significantly better than in the past and particularly so in the context of Bihar. Several UN agencies and NGOs also responded to the needs of the affected population.

In adherence to CCC, both the UNICEF State teams largely targeted its interventions to children through sectoral interventions in the area of water and sanitation, health, nutrition, education and child protection. Despite large-scale flood devastation and high risk, the objectives had been achieved. No major outbreak of diseases was reported in either Bihar or Uttar Pradesh.

The overall response in Bihar and Uttar Pradesh can largely be categorised in two phases i.e. the initial response phase which started with pre-positioned materials and lasted for maximum of two weeks and which was followed by intensive response phase which lasted for almost four months in case of Bihar and a little less in case of Uttar Pradesh. The following section details out the conclusions for each of the states separately and also draws out the recommendations for future emergency response for UNICEF.

#### **The UNICEF's Flood Emergency Response in Bihar**

In Bihar, UNICEF flood emergency response literally began within 48 hours of the first incidence using through distribution of pre-positioned materials which included 865 tarpaulin sheets to provide temporary shelters, 130,000 oral re-hydration solution (ORS) sachets, halozone tablets for purifying water, temporary toilet sets, family hygiene kits, bleaching powder, disposable delivery kits and other relief items. The distribution was arranged through UNICEF's partners NGOs working with over 40,000 families in approximately 1,000 selected villages in seven worst affected districts.

UNICEF was among the first international organisations to respond to the crisis. UNICEF in its initial response focused only on the selected most affected/vulnerable districts. However, in the intensive response phase, the UNICEF's flood emergency response activities were expanded to 12 severely affected districts namely Muzaffarpur, Sitamarhi, East Champaran, Madhubani, Darbhanga, Samastipur, Sheohar, Begusarai, Saharsa, Supaul, West Champaran and Khagaria. After the initial response, rapid assessment was undertaken to assess the situation and fine tuning of strategy through sectoral assessments, the intensive response phase started in the area of water and sanitation, nutrition, health, education and child protection.

Most of the flood emergency response in Bihar was found to be relevant, appropriate and timely, well coordinated and in accordance with CCC guidelines. UNICEF's interventions were targeted on most vulnerable population. In general, interventions targeted children and mothers as the sectoral focus groups, which is in line with the existing sectoral commitments of UNICEF. Some delays on account of local transportation constraints in accessing worst-affected pockets were observed and remained a major challenge.

The interventions were built on the existing programmes and with existing partners. Most of the above interventions were made in coordination and collaboration with UNICEF's counterpart i.e. the government line departments and local NGOs. The institutional partnership with local NGOs in selected vulnerable districts was in place long before the floods, however, further ground level partnerships, e.g. district-level NGOs with other NGOs and Panchayat Raj Institutions (PRI) for extension of relief support, were developed in the course of intervention. Partnership with local organisations has helped in effective extension of support to the affected population and particularly in terms of its targeting the beneficiaries.

Some of the interventions made by UNICEF were quite unique and innovative and sets standards for any future relief operations. Among those were the UNICEF's interventions towards Behaviour Change Communication (BCC) which was able to cover a much larger segment and that too on a very crucial, yet ignored, component of relief measures. Similarly rebuilding measures like assessment and restoration of Anganwadi Centres (AWCs), assessment of SAM children and setting up NRCs, setting up maternity huts and operationalisation of PHCs through lobbying and setting up ALSs were some of the innovative relief measures tried out which were sectorally quite appropriate and was the need of the hour.

While the magnitude of UNICEF's relief support was less than 5 percent of the State Government's relief, it set an example for supply of critical items and also setting the standards for government on the aspects of effectiveness, priority setting, relative timeliness and overall responsiveness. UNICEF's support to setting up weekly coordination meetings conducted with NGOs and Government counterparts through Unified Response Control Room (URCR) in the Centre for Disaster Management guided the overall relief operation by all agencies including the State government.

UNICEF took lead in streamlining and coordinating its efforts with government, International NGOs (INGOs) and other donor agencies through Inter Agency Cooperation (IAC) meetings, which was very well appreciated by all stakeholders. This helped in reducing the incidences of duplication of efforts by various agencies, and attracted support from many new donor agencies who had never even visited Bihar earlier. This included agencies such as OXFAM, ACTED, Action Aid, CRS, MSF, Save the Children, CASA and many others and resulted in about 25 INGOs to work together. UNICEF played a key role in coordination through joint meetings at the state level and developed process of joint mapping exercise. This created a platform for sharing of information and spreading the relief across the region.

No instance of social exclusion in terms of dominance of socially powerful castes/class in distribution of relief support was reported in any of the villages visited. In fact, the need for targeting vulnerable communities has found fair acceptance among dominant groups in some of the villages visited. Association with NGO partners has particularly been helpful in achieving this objective.

The sustainability of the interventions made by UNICEF gets strengthened by the fact that many of its interventions were incorporated and institutionalised by the State Government in their regular programmes. This includes:

- Restoration of Anganwadi during the flood event has also been institutionalised by incorporating this into Programme Implementation Plan (PIP) for Integrated Child Development Services (ICDS) - IV of World Bank programme for Bihar.

- ALS being institutionalized by the Government order to the schools to remain open in all flood affected areas (wherever possible and not inundated) and school teachers to attend schools. Their non adherence of running the ALS being marked as absence from service.
- NRC being institutionalised by incorporating this into 2008-09 PIP of National Rural Health Mission (NRHM) programme of the State Government
- Operationalisation of Primary Health Centres as part of the disaster mitigation plan incorporated in NRHM PIP
- In water and sanitation sector, the Government provided for the hand pump in shelter area and raising of hand pumps in village area. The Government has made allocation for raising of hand pumps from its plan funds.

The impact of CBDP exercise piloted on a small scale post 2004 floods was not very visible. There is a need for sustained efforts on internalizing its values by the community. The State Government is learnt to have undertaken this exercise in partnership with UNDP in this regard. UNICEF may share its learning with the Government so as to strengthen this effort.

### **The UNICEF's Flood Emergency Response in Uttar Pradesh**

Interventions started with an Initial Rapid Assessment conducted within a week of crisis (first week of August). The State Government was prompt in deploying its resources and personnel in affected areas as the floods started. EPRP for 2007 was updated by the UNICEF Uttar Pradesh State team in July 2007 which also indicated preparedness in terms of basic relief materials. The partnership with local NGOs was developed during the initial fortnight of intervention. Identification of target beneficiary in vulnerable pockets was done in the third week of August 2007 by partners based on their local knowledge.

Maximum interventions were focused in the villages along the banks of Ghaghara and Rapti rivers and its tributaries. This largely falls in Bahraich, Maharajganj, Gorakhpur and Barabanki districts.

The UNICEF relief support was provided through the State Government (i.e. through District Administration) and local NGO partners identified in early August 2007. This relief support was made in adherence to CCC and in the area of water and sanitation, health, nutrition, education and child protection.

The Uttar Pradesh Government was prompt to respond to the relief requirements, hence UNICEF intervened on remaining need gaps given initial delays in responses. The supply of essential support materials reached late (a fortnight later). Though it focused on essential items and benefited the community, by reaching a bit late and after the Government relief, it reported to be redundant in some cases. However, UNICEF's main contribution has been in supporting operational management of health interventions during this period. The surveillance system has reported to have helped in preventing disease outbreaks. In addition, the trust building and the environment of cooperation developed has been the major impact of the interventions made by UNICEF.

The operational cost has been minimal, as it required low deployment of staff. Transportation overheads and delay was minimized by having regional stock points and direct transport to most of the relief locations.

UNICEF also led the initiative for Inter Agency Cooperation in Uttar Pradesh for information sharing and reducing duplication of efforts. This, however, seemed to have tapered off in the later stages of relief operation. Though the BCC was delayed and started only in October, after flood water had receded, the impact of BCC and health interventions was visible and recounted by different stakeholders.

Most of the local partners had past experience in community development and some of them are actively involved in CDBP efforts promoted by UNDP and other INGOs. Strengthening of local capacities and building upon the existing capacities of some of the current partners may be a key intervention in future.

## **6.2 Key Recommendations**

The key recommendations of the evaluation exercise are as follows:

- The Emergency Preparedness and Response Plan (EPRP) as a document recognises the risk posed by flood and indicate UNICEF's preparedness to respond to such eventuality. This, however, is currently not informed by the spatial diversity in frequency of floods across the state. Given the recurrent nature of flood, it is advisable that UNICEF details out the EPRP in such a manner that it can also be used as a contingency plan. The plan, besides recognizing the flood vulnerability of the region, can include the operational aspect of the intervention. This is one issue which requires further attention, especially for pre-positioning and managing operations during emergencies.
- UNICEF needs to further develop and strengthen its partnership with local NGOs. This is essential in view of high recurrence of floods in both states. Similarly, the nodal NGOs have to be provided with sufficient time to develop partnerships with other local NGOs, Panchayati Raj Institutions (PRIs) and communities for an efficient relief operation. Timely sharing of its commitments on flood response with local partners including local NGOs would be very helpful in micro level planning of interventions.
- In view of the delay reported during the initial emergency supplies (though orders were placed timely with the vendors), UNICEF may think of providing some flexibility by allowing state level procurement in times of emergency, identifying vendors nearer to high risk states and finding ways to minimize lead time between supply order and the actual supply at the destination. Such changes will of course have to be within the quality control and other procurement norms of UNICEF with flexibility granted where ever feasible.
- The role of district based coordinators for cross sectoral liaison and logistic coordination with the Government departments and civil society organizations at the time of emergency requires further strengthening. This is applicable particularly in the case of Bihar. Deputing a nodal person at the district level to coordinate all relief efforts including being made by various sectors may help strengthen this aspect.
- Data management on stocks and movement during emergencies by both UNICEF and its partners provides for space for further improvement. Another critical gap is on account of lack of district level consolidated documentation of UNICEF emergency support intervention that may be useful for future reference.

- A suitable data base structure may need to be developed for efficient monitoring of relief operations. This can be made applicable for recording local requirements as well as stock and movement of relief materials and efforts. Similarly a proper database structure may also be developed for disease surveillance. Sharing the same with district teams may facilitate in producing analytical reports for informed decision making and better coordination of relief operation.
- Certain operational guidelines on approaches and practices for engagement of local partners with other NGOS and volunteers are necessary so that the NGOs do not short-change the inputs of volunteers especially in times of stress. To build continued support at local level, it may be essential to implement clear guidelines of engagement, code of conduct and basic support like safety gear, group insurance for the period of their engagement. This may increase interest and motivation among local partners.
- Government being the major role player during the emergencies, UNICEF should continue to share its learning and advocate for necessary modification in intervention policies and norms. Some positive outcomes have already been achieved in Bihar and the constructive pressure needs to be sustained.

# **ANNEXES**

<b>ANNEX (A) : IMPACT OF BIHAR FLOODS AND STATE RESPONSE</b>						
<b>No.</b>	<b>Districts</b>	<b>Blocks Affected</b>	<b>Lives lost</b>	<b>Boats deployed</b>	<b>Relief Camps</b>	<b>Medical Camps</b>
1	Muzaffarpur	15	98	1,098	400	50
2	Sitamarhi	17	33	441	9	67
3	Saharsa	6	25	610	16	13
4	E.Champ.	27	96	527	59	64
5	Supaul	6	1	172	22	17
6	Darbhanga	18	136	937	247	22
7	Patna	18	2	49		
8	Bhagalpur	13	38	200	21	21
9	W.Champ	16	20	255	47	40
10	Katihar	16	36	310	8	9
11	Madhubani	20	63	121	331	126
12	Samastipur	19	175	754	276	51
13	Sheohar	5	4	88	30	5
14	Nalanda	18	17	69	5	4
15	Khagaria	7	113	774	95	59
16	Gopalganj	8	10	90	17	27
17	Madhepura	3	19	135	2	4
18	Araria	1		20		
19	Begusarai	10	49	360	47	22
20	Vaishali	15	32	362	48	18
21	Siwan	1				
22	Purnea	4		87	8	
<b>Total</b>		<b>263</b>	<b>967</b>	<b>7,459</b>	<b>1,688</b>	<b>619</b>

*Source: Daily Report on Rainfall and Flood (15 Oct 07) Deptt. of Disaster management, GoB*

<b>ANNEX (B) : RELIEF DISTRIBUTED BY GOVERNMENT OF BIHAR</b>				
<b>Relief material</b>	<b>Amount</b>	<b>Units</b>	<b>Relief Per Capita*</b>	<b>Units</b>
Wheat	1,561,506	Qtls	6	Kg
Rice	1,574,446	Qtls	6	Kg
Chura (Beaten rice)	9,650	Qtls	0.039	Kg
Gur (Jaggery)	1,427	Qtls	0.006	Kg
Sattu (Gram flour)	47	Qtls	0.000	Kg
Salt	310	Qtls	0.001	Kg
Candles	235,251	No.s		
Match Box	182,369	No.s		
Polythene Sheets	363,618	No.s		
Cash	18.5	US\$ million	0.75	US\$

*Source: Daily Report on Rainfall & Flood(15Oct07) Deptt of Disaster Management, GoB*  
*Note: Per capita relief was calculated based on 245.58 lakh affected population.*

<b>ANNEX (C) : LIST OF PRE-POSITIONED ITEMS IN BIHAR IN 2007</b>									
<b>Sl. No</b>	<b>Items</b>	<b>State level</b>	<b>District Level</b>						<b>Total</b>
		<b>At Patna</b>	<b>Madhubani/ Darbhanga</b>	<b>Muzaffar pur</b>	<b>Samastipur</b>	<b>East Champaran</b>	<b>Khagaria</b>	<b>Sitamarhi</b>	
1	Family Hygiene Kits	203	150	100	100	150		47	750
2	ORS	50,000	10,000	10,000	10,000	10,000	30,000	10,000	130,000
3	Bleaching powder (Bags)		100	100	100	150	30	50	530
4	Tarpaulin sheets	100	20	300	20	400		25	865
5	Sintex tank for Water Storage	136	16	16	16	16	4		204
6	Disposal Delivery Kits	1,600	600	600	600	600			4,000
7	IFA Tablets	100,000	100,000	100,000	100,000	100,000			500,000
8	Jerry cans (Bags)	24	2	2	2	2		2	34
9	Torch Light	50	10	10	10	10	10	10	110
10	Halozone Tablets	1,500	100	100	100	100		100	2,000
11	Weighing Scale	50	10	10	10	10		10	100
12	Note Book	10,000	2,000	2,000	2,000	2,000		2,000	20,000
13	Pencil/Eraser	10,000	2,000	2,000	2,000	2,000		2,000	20,000
14	Vitamin-A Solution	5,000	1,000	1,000	1,000	1,000		1,000	10,000
15	Rain coat	50	10	10	10	10		10	100

*Source: Initial Assessment Report of the Flood Situation in Bihar, 1<sup>st</sup> August, 2007. UNICEF Bihar*

<b>ANNEX (D) : PREPAREDNESS INFORMATION FROM FIELD VISITS, BIHAR</b>			
<b>Districts</b>	<b>Villages Visited</b>	<b>Evidence of Preparedness seen in No. of Villages</b>	
		<b>CBDP Training / Propositioning</b>	<b>Grain Bank</b>
Muzaffarpur	8	2	2
East Champaran	7	3	None
Khagaria	8	None	None
Samastipur	7	1	2
<b>Total</b>	<b>30</b>	<b>6</b>	<b>4</b>

*Source: TARU Field Assessment*

<b>ANNEX (E) : DISTRIBUTION THROUGH VARIOUS AGENCIES/PARTNERS, BIHAR</b>				
<b>Material distributed</b>	<b>Government.</b>	<b>NGO</b>	<b>UNICEF</b>	<b>Other</b>
ORS	28%	64%	8%	0%
Bleaching Powder	20%	77%	3%	0%
Tarpaulin Sheets	16%	79%	4%	1%
Halozone Tablets	10%	87%	4%	0%
Handbills on Halozone use	0%	78%	1%	21%
Hygiene Kits		100%		
IFA Tablets	46%	16%	38%	1%
Cholera Kits	100%			
Jerry Cans	16%	81%		2%
PUR	5%	26%	69%	
Life Jacket	35%	60%	5%	
Plastic Bucket		100%		
Bed Net	22%	78%		

*Source: UNICEF Bihar ( up to 13 December 2007)*

**ANNEX (F) : SUPPLY OF MATERIALS ACROSS MONTHS**

Item	Month of Supply to partner agencies/government					Total
	August	September	October	November	December	
ORS (in sachets)	26%	34%	21%	16%	3%	2,526,300
Bleaching Powder (bags)	12%	59%	24%	5%	0%	26,461
Tarpaulin Sheets (in units)	54%	31%	4%	8%	3%	50,395
Halozone Tablets (in pieces)	24%	73%	3%	0%	0%	7,955.500
Handbills Halozone	21%	17%	61%	0%	0%	422,000
Hygiene Kits (in units)	0%	39%	57%	3%	0%	23,326
IFA Tablets (in pieces)	62%	2%	1%	0%	35%	4,779,000
Cholera Kits (in units)	0%	0%	100%	0%	0%	497
Jerry Cans	89%	11%	0%	0%	0%	3,466
PUR (in sachets)	32%	0%	0%	0%	68%	199,060
Life Jacket (in units)	0%	60%	0%	35%	5%	200
Plastic Bucket (in units)	0%	0%	50%	50%	0%	10,000
Bed net (in units)	0%	0%	0%	17%	83%	11,510

*Source: UNICEF Bihar ( Data up to 13 Dec 2007) The database did not have dates for some supplies distributed directly by UNICEF staff*

**ANNEX (G) : DISTRIBUTION OF RELIEF MATERIALS ACROSS DISTRICTS, BIHAR**

Item \ District	ORS	PUR Water cleaner	Bleaching Powder	Halozone Tablets	Handbills Halozone Use	IFA Tablets	Hygiene Kits	Plastic Bucket	Bed net	Jerry Cans	Tarpaulin Sheets
Begusarai	10%		19%	11%	23%	1%	33%	60%	56%		9%
Bhagalpur	0%	1%	0%	0%						6%	2%
Darbhanga	3%	2%	2%	1%		19%				6%	2%
E.Champaran	11%	7%	25%	31%	5%	3%	10%			15%	14%
Gopalganj			0%								
Katihar			0%								
Khagaria	13%	6%	15%	12%	3%	1%	24%	28%	39%	18%	13%
Lakhisarai											
Madhepura	0%		0%	0%		0%				2%	
Madhubani	8%	3%	6%	8%	20%	13%	6%			7%	9%
Muzaffarpur	11%	3%	6%	5%	1%	3%	2%			8%	6%
Patna	1%	0%	1%	1%	21%	38%					4%
Saharsa	6%	1%	5%	3%	20%	1%	13%			7%	5%
Samastipur	9%	1%	8%	16%	5%	8%	6%	10%		13%	7%
Sheohar	2%	1%	0%	1%		1%				10%	2%
Sitamarhi	7%	3%	7%	7%	2%	3%	6%	3%		3%	17%
Supaul	0%	0%	0%	1%		1%				3%	2%
Vaishali	14%		3%	1%	0%	1%					0%
W.Champaran	3%	1%	1%	1%		4%				1%	6%
UNICEF Direct	2%	69%	0%	1%	0%	2%	0%		4%	3%	2%

Source: UNICEF, Bihar ( up to 13<sup>th</sup> December 2007)

Notes: Some of the IFA tablets were collected by CD&N State coordinator at Patna and distributed

<b>ANNEX (H) : PROGRESS OF VARIOUS RESPONSES, UTTAR PRADESH</b>				
<b>Activity</b>	<b>2-Aug-07</b>	<b>13-Aug-07</b>	<b>30-Aug-07</b>	<b>13-Sep-07</b>
ECOSAN Toilets				15
Halozone (in Millions)		1.5	1	
Bleaching powder (bags)		11,000*		
Disinfecting Water Sources (Villages)				1,000
Patients treated (camps)				319,665
Mobile clinics			97	
Patients treated		2500	64,085	128,983
Measles Vaccine /Vitamin A Supplement			3,009	18,808
ORS (million)		1.5**		
Bed Nets				10,000
IEC on Diarrhoea			20,000	
Education			1,100 schools identified for support	
BCC(Volunteers trained)				200

*Source: UNICEF Uttar Pradesh(SITREPS)*

*Notes:*

\* Initially supplied to Health Department

\*\* Requisitioned by State UNICEF office

<b>ANNEX (I) : QUANTITY OF ITEMS PROCURED, UTTAR PRADESH</b>		
<b>Item</b>	<b>Order placed (August 8, 2007)</b>	<b>Status October 14</b>
Bed nets	10,000	10,000
Bleaching powder	25,000	11,250
ECOSAN Toilets	150	80
Halozone	1,550,000	2,000,000
Hygiene kits	900	900
IM-II Hand pumps	156	83
Jerry cans	27,000	27,000
ORS	1,600,000	1,000,000
Tarpaulin	25,000	25,000

*Source: UNICEF, UP*

<b>ANNEX (J) : MATERIAL DISTRIBUTION ACROSS DISTRICTS</b>									
<b>Districts</b>	<b>Bed nets</b>	<b>Bleaching powder</b>	<b>Ecosan Toilets</b>	<b>Halozone ('000)</b>	<b>Hygiene kits</b>	<b>IM-II Hand Pumps</b>	<b>Jerry cans</b>	<b>ORS ('000)</b>	<b>Tarpaulin</b>
Azamgarh	600	700		140			1,500	50	1,500
Bahraich	1,000	5,500	15	260	200	15	9,740	30	5,000
Ballia								10	
Balrampur	1,000		10	200	150	5	-	195	1,500
Barabanki	1,000	2,050	10	260	200	10	6,200	51	5,000
Basti	650	700		100		10	1,500	50	1,500
Deoria								-	
Faizabad	150					5		30	
Gonda	400			140		10	-	70	2,000
Gorakhpur	1,500	2,300	15	140		10	7,500	196	3,000
GTHM							560		-
Kushinagar	250		5					40	
Lakhimpur	200			140				70	
Maharajganj	800		15	320	200	10		70	4,000
Mau									
Philibit								20	
SantKabirNagar	150			100				20	
Shravasti	800		10	200	150	8	-	40	1,500
SiddarthNagar	1,500							60	
StockinLuck									
<b>Grand Total</b>	<b>10,000</b>	<b>11,250</b>	<b>80</b>	<b>200</b>	<b>900</b>	<b>83</b>	<b>27,000</b>	<b>1,000</b>	<b>25,000</b>

## ANNEX (K) : LIST OF PERSONS MET

### BIHAR

Mr. Bijaya Raj Bhandari	UNICEF, Patna
Mr S N Singh	UNICEF, Patna
Dr Shireen Varkey	UNICEF, Patna
Mr Manish Wasuja	UNICEF, Patna
Dr Anees Siddiqi	UNICEF, Patna
Mr Farhat Zakia	UNICEF, Patna
Mr Kaushik	UNICEF, Patna
Mr Raghu Menon	UNICEF, Patna,
Mr. Madan Kumar	Engineer in Chief, PHED, Government of Bihar, Patna
Mr. Vijay Prakash	Secretary, WCD, Government of Bihar, Patna
Mr. G S Dutt	Director General, BIPARD, Government of Bihar, Patna
Mr. Sanjay Pandey	BIPARD, Patna
Dr. D K Raman	Additional Director, Health and Family Welfare, Government of Bihar, Patna
Mr. Bipin Kumar	District Magistrate, Muzaffarpur
Mr. Prahlad Thakore	ADM,, Muzaffarpur
Mr G S Yadav	Executive Engineer, PHED, Muzaffarpur & E Champaran (in charge)
Dr. D. D. Singh	Civil Surgeon, Muzaffarpur
Mr. H K Srivastava	District Welfare Officer, Muzaffarpur
Mr. Radhkrishnasingh Yadav	District Education Officer, Muzaffarpur
Mr. Rohit Kumar	TSC coordinator, Muzaffarpur
Mr. Ramesh Pankaj	Secretary, Muzaffarpur Development Agency, Muzaffarpur
Mr. Ram Pravesh Kumar	Hanuman Prasad Gram Vikas Seva Samiti, Muzaffarpur
Mr. Ijlas Naramdeshvar Lal	District Magistrate, East Champaran
Mr. Raghvendra Jha	A.D.M, East Champaran
Dr. Baidyanath Singh	Civil Surgeon, East Champaran
Mr. Vidhyanand Singh	BDO, Motihari, East Champaran
Mr. Jairam Pathak	State Coordinator- NRC, UNICEF
Mr. Ajit Shrivastava	District Coordinator- Duhlar Se Muskan, UNICEF, East Champaran
Mr. Sanjay Pandey	Micro Nutrient Programme, UNICEF, East Champaran
Mr. Amarji	Samajik Sodh Evam Vikas Kendra, East Champaran
Mr. Anwar Hussain	Sarpanch, Sundarpur, East Champaran
Mr. Jokhan Shah	Mukhiya, Gulariya, East Champaran
Mr. Udaynarayan Thakur	District Magistrate, Khagaria
Mr. Upendra Narayan Singh	ADM, Khagaria
Mr. Nageshwar Shrama	Executive Engineer, PHED Begusarai and Khagaria (in charge)
Dr. U. C. Mishra	Civil Surgeon, Khagaria
Mr. Gyanendra Shekhar	District Programme Manager-District Health Society,

	Khagaria
Mr. Vinod Kumar	State Coordinator, Micro Nutrients Programme, UNICEF
Mr. Kaushalendra	Secretary, SKGSK, Khagaria
Mr. Dinesh Sada	Mukhiya, Pirnagra, Khagaria
Mr. Umakant Singh	Mukhiya, Satishnagar, Khagaria
Mr. Prabhakar Pd Singh	Block Panchayat President, Choutham, Khagaria
Mr. Hemchandra Prasad	ADM, Samastipur
Mr. Parvesh Kumar	Head clerk, PHED, Samastipur
Dr. Bhairav Prasad	Civil Surgeon, Samastipur
Mr. Manish Kumar	District Programme Manager, District Health Society, Samastipur
Mr. Ramchandra Prasad	District Welfare Officer, Samastipur
Mr. Akhilesh Kumar Bharti	MOIC, PHC Patori, Samastipur
Mr. Sanjay Sharma	Block Development Officer, Patori, Samastipur
Mr. Shivshekar Anand	District Field Monitor, UNICEF, Samastipur
Mr. Parasnath Singh	Founder, CARD, Samastipur
Mr. Surendra Kumar	Secretary, Nutan Garmoday Samaj Seva Sansthan, Samastipur
Mr. Akhilesh Kaushik	Secretary, Kasturba Gandhi Mahila Vikas Samati, Samastipur

## UTTAR PRADESH

Mr. Amit Malhotra	UNICEF, Lucknow
Mr. Vinoba Gautam	UNICEF, Lucknow
Mr Chanrav Burenbayar	UNICEF, Lucknow
Mrs. Ellison	UNICEF, Lucknow
Mr. Sanjay Bhardwaj	UNICEF, Lucknow
Mr. Umesh Sinha	Relief Commissioner, Government of Uttar Pradesh, Lucknow
Mr. A C Mishra	Jal Nigam, Government of Uttar Pradesh, Lucknow
Mr. Anil Srivastava	Sahara Foundation, Lucknow
Mr. H C Joshi	State coordinator, Nehru Yuva Kendra, Lucknow
Mr. Shayam Prakash Dixit	District Magistrate, Maharajganj
Dr. R.H Prasad	Basic Education Officer, Maharajganj
Mr. Prabhakar	Additional District Panchayati Raj Officer, Maharajganj
Mr. Ashutosh Singh Baghel	Engineer, Jal Nigam, Maharajganj
Dr. R.C. Parasar	C.M.O, Maharajganj
Dr. Dinesh Singh	DHNTC, UNICEF, Gorakhpur
Mr. Vimal Pandey	Secretary, SBGSS, Maharajganj
Fr. G B Jose	PGSS, Gorakhpur
Mr. Jamal Ahemad	Pradhan, Matihanpurva, Maharajganj
Mrs Anarkali Devi	Pradhan, Harakpura, Maharajganj
Dr M P Gupta	CMO, Bahraich
Dr. Ajay Verma	PHC- Kaisarganj, Bahraich
Mr. Sarju Prasad Shukla	Tehshildar, Kaisarganj, Bahraich

Dr. Ram Narayan Verma	PHC- Mihipurva, Bahraich
Dr Sameer	DHNTC, Gonda, UNICEF
Mr Subhash Singh	Bahraich, UNICEF
Mr. S Vajpayee	Secretary, ABKGSS, Bahraich
Mr. M A Khan	Secretary, KGVS, Allahabad
Mr. Ram Sagar Singh	Pradhan, Gorhiya I, Bahraich
Mr. Mansa Ram Yadav	Pradhan, Gorhiya III, Bahraich

**ANNEX (L) : LIST OF VILLAGES VISITED, BIHAR**

<b>Sl. No.</b>	<b>District</b>	<b>Blok</b>	<b>Panchayat</b>	<b>Village/Hamlets</b>
1	Muzaffapur	Katra	Dargah	Baradih
2	Muzaffapur	Katra	Sonpur	Dewgan
3	Muzaffapur	Katra	Sonpur	Nagware
4	Muzaffapur	Katra	Sonpur	Siswara
5	Muzaffapur	Kudhani	Chandrahatti	Chandrahatti
6	Muzaffapur	Kudhani	Chhagan Harishankar	Chhagan Darghah
7	Muzaffapur	Kudhani	Chhagan Purvi	Darda
8	Muzaffapur	Kudhani	Sakari Sariya	Lukhi Nandlalpur
9	Motihari	Chakiya	Baisaha	Bada Baisaha
10	Motihari	Banjariya	Panchrukhiya - West	Mokhlishpur
11	Motihari	Banjariya	Panchrukhiya - East	Sundarpur
12	Motihari	Banjariya	Simra	Simrahat
13	Motihari	Motihari	Bardaha	Khap Sariya
14	Motihari	Motihari	Kataha Loknathpur	Gulariya
15	Motihari	Motihari	Madhubanigat	Madhubanigat
16	Khagariya	Beldur	Baletha	Pachat
17	Khagariya	Beldur	Chorli	Chorli
18	Khagariya	Beldur	Deghaun	Deghaun
19	Khagariya	Khagariya	Jahangira	Jahangira
20	Khagariya	Khagariya	Bachota	Bachota
21	Khagariya	Khagariya	Kathora	Peernagra
22	Khagariya	Parvatta	Satishnagar	Satishnagar
23	Khagariya	Khagariya	Mathura Pur	Kamalpur
24	Samastipur	Kalyanpur	Haajpurva	Mdanpurtop
25	Samastipur	Kalyanpur	Barhetta	Kamargama
26	Samastipur	Kalyanpur	Kanojar	Fullhatta
27	Samastipur	Kalyanpur	Sormar	Sormar
28	Samastipur	Patori	Chaksalem	Chaksalem
29	Samastipur	Patori	Darba	Darba
30	Samastipur	Patori	Siura	Siura

**ANNEX (M) : LIST OF VILLAGES VISITED, UP**

<b>Sl. No.</b>	<b>District</b>	<b>Blok</b>	<b>Panchayat</b>	<b>Village/Hamlets</b>
1	Maharajganj	Brijmanganj	Matihapurva	Puraina
2	Maharajganj	Brijmanganj	Sauraha	Sauraha
3	Maharajganj	Brijmanganj	Sauraha	Dolatpur
4	Maharajganj	Dhani	Belsar	Belsar
5	Maharajganj	Dhani	Mahedava	Chowka
6	Maharajganj	Paniyara	Domra	Domrakhas
7	Maharajganj	Paniyara	Harakhpura	Harakhpura
8	Maharajganj	Lakshmipur	Khaligadh	Sonaradi
9	Maharajganj	Dhani	Ghivpur	Ghivpur
10	Maharajganj	Dhani	Kanapar	Gulhariya
11	Bahraich	Kaisarganj	Ghoriya 1	Ghoriya 1
12	Bahraich	Kaisarganj	Ghoriya 1	Bahatapurva
13	Bahraich	Kaisarganj	Ghoriya 3	Malhanpurva
14	Bahraich	Kaisarganj	Ghoriya 3	Nai Abadi
15	Bahraich	Phakarpur	Todar Garera Nakdelpur	Garera Nakdelpur
16	Bahraich	Phakarpur	Todar Garera Nakdelpur	Diha
17	Bahraich	Phakarpur	Bondi	Silota/Atodar (displaced settlements)
18	Bahraich	Mahesi	Panditpurva	Pasipurva
19	Bahraich	Mihi Purva	Girgitiya	Matiha Purva
20	Bahraich	Mihi Purva	Samay Gorhi	Godiyan Purva

## **ANNEX (N) : TERMS OF REFERENCE**

### **1. Background & Purpose**

India is one of world's most disaster-prone countries, exceptionally prone to natural disasters. Floods, cyclones, droughts, earthquakes and landslides have all been recurrent phenomena in the country. Many regions in India experience natural disasters perennially, while others face such calamities irregularly. In recent years, due to global climatic trends, environmental degradation and population growth, the large-scale flooding had been occurring also at odd times of the year and in places that are normally not prone to floods. The intensity and frequency of such calamities appear to be increasing, incrementally adversely impacting socio-economic life of substantial segments of the population, loss of lives and property, as well as causing extensive damage to livelihoods and infrastructure.

The heavy monsoons in India in 2007 started in June. The successive rainfall since then caused significant flooding in the states of Kerala, Andhra Pradesh, Karnataka, West Bengal, Assam, Maharashtra, Orissa and Gujarat. By early August, However, the worst flooding took place in the northern states of Bihar and Uttar Pradesh. Despite widespread flooding, the national, state and district authorities have, in general, been able to provide essential life-saving support to the affected population during early stages of disaster. However, as the flooding situation aggravated, the state and district authorities began to seek for external support. Since late June, UNICEF started receiving requests for assistance for specific and limited assistance by the several state authorities. As of August, UNICEF focused on interventions in the two states considered to be most severely affected, i.e. Bihar and Uttar Pradesh.

The impact of floods in 2007, among the worst in the country in decades, has been felt by dozens of millions of people across India. According to government estimates, as of 10th October, the cumulative number of human casualties to 2007 floods in India stood at over 3,300, with almost 60 million people affected. Flooding has also created havoc in transport, communication and services. As usual, floods have disproportionately hit the poorest and weakest, and vulnerable children among them.

UNICEF has quickly mobilised funds and used some US\$ 4 million for flood response interventions in Bihar and Uttar Pradesh, in addition to small-scale investments in preparedness measures. There is a need to look at UNICEF's state offices, New Delhi Country Office and Regional Office/Headquarters relief activities in the two states. This will contribute to UNICEF's overall commitment to accountability and improved performance. The evaluation will document lessons learned and provide recommendations for the country programme and for UNICEF emergency response and recovery programme in general.

UNICEF's core commitments for children in emergencies are as follows:

- a) Overall humanitarian response, including operational approach, rapid assessment and coordination
- b) Programme commitments in health and nutrition, water, sanitation and hygiene, child protection and education, and HIV and AIDS
- c) Operational commitments, including security, planning, monitoring, fundraising, communications, human resources, information technology, supply and logistics, finance and

- d) Administration organizational preparedness and support, at all levels including regional, country-office and headquarters.

## **2. Major users of the research activity and plans for disseminating it:**

- UNICEF ICO, UNICEF Regional Office Kathmandu, HQ Geneva and New York (EMOPS), Copenhagen and Brussels.
- UNDP and other UN agencies in India
- NGO community through Sphere India Group.
- National Disaster Management Authority, States Disaster Management Authorities of Bihar and UP.

## **3. Objectives of the exercise:**

The objective of the study is to develop a comprehensive understanding of the following:

### **3.1 Objective: Relevance**

#### **Sub Objective:**

1. Had a vulnerability assessment been conducted as part of preparedness efforts?
2. Did the initial response phase include an assessment of the needs of the affected population?
3. Was UNICEF's overall response appropriate and timely?
4. Was UNICEF response action coherent and connected? (i.e. appropriate co-ordination, functional/geographic coherence, long-term and policy/practice issues addressed, etc.)?

### **Objective 3.2: Effectiveness**

#### **Sub-objective:**

1. To what extent did UNICEF's immediate and short-term response meet the CCCs?
2. Were preparedness measures (e.g. pre-positioning, EPRP, partnerships, skills, etc.) adequate to cope with the emergency?
3. Did the earlier small-scale CBDP interventions contribute to the overall success, of response?
4. To what extent did UNICEF work with national and state governments and align itself with government commitments and responses to the emergency?
5. To what extent and with what result did UNICEF India promote and engage in inter-agency cooperation among government, NGO and international agencies?
6. To what extent were internal co-ordination mechanisms present (at the state office, national and regional levels), and how effective were they?

### **Objective 3.3: Efficiency**

#### **Sub-objective:**

1. How much money did UNICEF allocate, and spend, where, on what?
2. While complementing government's efforts, did UNICEF add value to the overall response?
3. Was the allocation of funds/spending in line with the needs of those affected as per our Core Commitments to Children in emergencies?

4. Were UNICEF's interventions cost-effective?
5. Has UNICEF's response, particularly in the provision of supplies, been timely given the logistic and security constraints?
6. Were goods procured and assets created during the post-crisis phase at costs comparable to other parts of the country program?
7. To what extent have the community / user groups, and local government contributed to the post-crisis transitional response?
8. How suitable from the programme perspective were UNICEF's operational and financial management procedures (including the Emergency Preparedness and Response Plan) in responding to the crisis and to what extent did they help or hinder efficiency and the achievement of results?

### **Objective 3.4: Impact**

#### **Sub-objective:**

1. What has been achieved by UNICEF? in what sectors? where? (impact, coverage)
2. Who benefited and how (including from the viewpoint of intended beneficiaries)?
3. Were local people involved in the response? What was their perception of UNICEF's response and its impact?
4. Was there any instance of social exclusion<sup>3</sup> and/or elite capture of assistance<sup>4</sup> ?
5. Did UNICEF's assistance in any way influence the existing inequities in the local society?
6. Did UNICEF's performance meet international principles and standards? (Code of Conduct, Sphere, IASC)

### **Objective 3.5: Sustainability**

#### **Sub-objective:**

1. Were local capacities and disaster preparedness capacities strengthened?
2. Is there evidence that UNICEF has learned from the response, and shared lessons from this and previous disasters?
3. Have UNICEF got effective systems in place to monitor, evaluate, learn and adapt from their ongoing work?

## **4. Methodology**

### **Scope:**

1. A *desk review* of existing documents and materials including strategy documents, plans, proposals, monitoring data, mission reports, and previous UNICEF evaluations that focus on emergency response. These documents will be provided by the UNICEF offices in the two states and by the various agencies/NGOs who partnered with the UNICEF during the emergency. The desk review will address several evaluations questions related to Relevance, Effectiveness and Efficiency. It is expected that the evaluation will be evidence based and not based on perceptions and therefore, these documents and materials will be invaluable inputs for the evaluation.

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<sup>3</sup> Whether by caste, religion or gender

<sup>4</sup> Meaning that were assistance and benefits disproportionately captured by the relatively powerful and better off people, leaving the genuinely needy and poor with unfulfilled needs

2. **Field visits** to the two states, i.e. Bihar and Uttar Pradesh, as well as to the Country Office in New Delhi. Field visits will include:

- a. An *initial introduction* one day meeting with the UNICEF management and staff.
- b. *Key Informant Interviews* should be conducted with key stakeholders in Uttar Pradesh and Bihar to understand partners' involvement in and perception of UNICEF's contributions.

These will include the following

- a) *Collector or any officer in his/her office coordinating emergency work*
  - b) *BDOs of the affected block (2 in each district)*
  - c) *Panchayat Pradhan (in the areas where field visit is undertaken)*
  - d) *All NGO partners (at least one NGO personnel at the field level)*
- c. *Focus Group discussions* should be in the affected areas covered by UNICEF interventions in Bihar and Uttar Pradesh states, the purpose being to elicit feedback from local people about UNICEF's performance in the disaster response. In each districts 2 most affected blocks should be selected and within each block at least 3 villages should be selected. There should be good mix of villages that are selected, in terms of their size, distance from the headquarters, villages with high percentage of SC or ST etc. Therefore, the 6 FGDs are to be done in one district.
- d. An 'end of visit' debriefing to share broad findings with senior UNICEF staff, and not their comments.
3. Submission of & **first draft evaluation report** to UNICEF for distribution to a select number of stakeholders for factual corrections and other feedback.
  4. A *review workshop* will be held in New Delhi (tentative), led by the evaluators, to discuss substantive issues emerging from the first draft.
  5. Incorporation of comments and production of *second draft*.
  6. *Sign off and submission* to UNICEF New Delhi.

## 5. Schedule of Tasks & Timeline:

### Week 1-3

- Team arrive in UNICEF ICO New Delhi for briefing
- Desk Review (Consultants / team members)
- Final evaluation and tool design for stakeholder approval

### Week 4

- Team arrive in Lucknow/Uttar Pradesh for briefing
- Field Visits and data collection in Uttar Pradesh ( 2 districts)
- Interviews with official service providers and representatives of partner agencies
- Interview with beneficiaries in affected areas
- Team debriefings

#### Week 5-7

- Team arrive in Lucknow/Uttar Pradesh for briefing
- Field Visits and data collection in Bihar (4 districts)
- Interviews with official service providers and representatives of partner agencies
- Interview with beneficiaries in affected areas
- Team debriefings

#### Week 8-9

- Preparation of first draft report
- Debriefing in New Delhi
- Circulation of draft report for comments

#### Week 10 (1 week after the circulation of draft report for comments)

- Preparation and submission of second and final evaluation report.
- Conduct desk review of NGP implementation status and evaluation studies conducted by different states/ agencies so far
- Finalise purpose, methodology (sampling techniques), instruments and expected outcomes of study based on a meeting with PO WES Delhi, WSP and RGNDWM officials. Determine number of PRIs, households, Schools and Anganwadis to be surveyed to ensure that the results of the survey are statistically significant and representative. Finalise list of GPs/ Blocks in which impact study will be conducted.
- Finalise list of Government Officials, UNICEF, WSP officials, NGO representatives, PRI representatives etc with whom discussions will be held and develop structured discussion guidelines
- Identify and brief teams of investigators and supervisors Prepare chapter and tabulation plan
- Conduct field survey in first 30 GPs and submit a brief report. Review of methodology and outcome of first phase
- Conduct field survey in remaining GPs and prepare draft report with tables; the study will be conducted on the basis of a mutually agreed sampling methodology. Presentation of draft reports to Government of India, UNICEF. Collect feedback and incorporate to produce final report. UNICEF/ WSP will organise dissemination workshop

## 6. Timeline and Deliverables

The outputs of the evaluation will include one report, which should comply with UNICEF quality standard for evaluation reports (guidelines to be provided). The final report will include a 4-page summary.

### a) Summary Synthesis Report

This summary should be addressed primarily to the senior executive management of UNICEF. It should be a maximum of 4 pages. It should be concise and based on the evidence of the full report and case studies, focusing on UNICEF's response as a whole on the 'core public accountability' questions:

- How much was allocated and spent by UNICEF
- Whether UNICEF achieved what it initially set out to do

- Whether UNICEF's response was appropriate to the need
- Whether UNICEF's performance was in line with international standards
- Major strengths of UNICEF's response to-date
- Recommendations on how performance can be improved and risks mitigated

b) Full Synthesis Report

This should not exceed 25 pages, with additional annexes permissible. This should include key findings from Case Studies:

Overview of UNICEF programmes and expenditures, geographically and thematically

- Analysis addressing the questions raised in this TOR (see above)
- Conclusions and recommendations, with a section dedicated to drawing out specific lessons, with suggestions for taking forward lessons learned
- Feedback from beneficiaries

Appendices, to include the final evaluation terms of reference, maps, list of interviewees, and bibliography of documents consulted.

The consultants will be bound by normal UNICEF rules of confidentiality and will be briefed on media sensitivities.

All material collected in the undertaking of the evaluation process must be handed over to the India Country Office prior to termination of the contract. The report and all background documentation will be the property of UNICEF and will be divulged as appropriate by UNICEF.

**7. Official travel involved:**

Travel will be in Delhi, Uttar Pradesh, and Bihar.