Acknowledgment

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Acronyms

BCC Banjul City Council
CRR Central River Region
EmOC Emergency Obstetric Care
FAO Food and Agriculture Organisation
GBOS Gambia Bureau of Statistics
IDP Internally Displaced Person
KMC Kanifing Municipal Council
LRR Lower River Region
NBR North Bank Region
NDMA National Disaster Management Agency
NERICA New Rice for Africa
NFI Non-Food Item
NGO Non-Governmental Organisation
ORS Oral Rehydration Solution
PHC Primary Health Centre
RH Reproductive Health
RJA Rapid Joint Assessment
RDMC Regional Disaster Management Committee
STI Sexually Transmitted Infection
UNCT United Nations Country Team
UNDP United Nations Development Programme
UNFPA United Nations Population Fund
UNHCR United Nations High Commissioner for Refugees
UNICEF United Nations Children’s Fund
URR Upper River Region
VDC Village Development Committee
WFP World Food Programme
WHO World Health Organisation
WR Western Region

Cover photography: Flooded city centre of Basse (URR)
Table of Contents

1. Executive Summary .................................................................................................................. 4
2. Background .............................................................................................................................. 5
3. Methodology ............................................................................................................................ 5
4. Main findings and recommendations ...................................................................................... 7
   4.1. Shelter, infrastructure and environment ....................................................................... 7
       4.1.1. Main findings shelter ......................................................................................... 7
       4.1.2. Main findings infrastructure .............................................................................. 7
       4.1.3. Main findings environment ................................................................................. 8
       4.1.4. Short-term recommendations ............................................................................. 9
       4.1.5 Mid- and long-term recommendations ................................................................ 9
   4.2 Food and agriculture (crop and livestock) .................................................................... 9
       4.2.1 Main findings household food security ................................................................. 9
       4.2.2 Main findings agriculture (crop and livestock) ...................................................... 11
       4.2.3 Short-term recommendations ............................................................................. 14
       4.2.4 Mid- and long-term recommendations ................................................................ 15
   4.3 Health, water and sanitation, education and protection ................................................. 15
       4.3.1 Main findings health ............................................................................................. 15
       4.3.2 Main findings water and sanitation ..................................................................... 15
       4.3.3 Main findings education and protection ................................................................. 16
       4.3.4 Short-term recommendations ............................................................................. 16
       4.3.5 Mid- and long-term recommendations ................................................................ 17
5. Conclusion ............................................................................................................................... 17
6. Annexes .................................................................................................................................. 19
   6.1. Terms of Reference ........................................................................................................ 19
   6.2. Pledges, donations and response as of October 21, 2010 ............................................ 21
   6.3. State of preparedness and available resources for emergency relief in 2010 of the UN agencies, as of August 2010 ............................................................ 29
   6.4. Questionnaires .............................................................................................................. 32
   6.5. Pictorial ......................................................................................................................... 37
1. Executive Summary

With the aim to obtain an updated, objective and comprehensive overview on the magnitude of the impact of the heavy rains and floods that hit The Gambia during the last three months (July – September), the UN Country Team (UNCT), together with Government and NGO partners, and in close collaboration with the Regional Disaster Management Committees (RDMC) on the ground, embarked on a countrywide Rapid Joint Assessment (RJA) in September 2010.

The multi-sectoral assessment covered several dimensions that could potentially be affected by the heavy rains and floods. These dimensions were categorised into three groups, each led by UN agencies with the relevant mandate and technical expertise. The first dimension addresses aspects of shelter, infrastructure and environment and is reported by UNHCR and UNDP. However, additional investigation is necessary in this area as UNHCR was not in a position to submit a completed analysis on emergency shelter needs at the time of report writing and infrastructure does not fall within the mandate of the UN system (further work is ongoing and UNHCR Regional Bureau and other relevant agencies will be consulted for technical inputs). The second dimension, focusing on food and agriculture, is reported by WFP and FAO, who was responsible for assessing the impact on crops and livestock in particular and to that end led a separate assessment mission together with the Ministry of Agriculture. Finally, the third dimension addresses the aspects of health, water and sanitation, education and protection and is reported by UNFPA, UNICEF and WHO.

In general, the RJA team observed that the most affected regions were concentrated in the western part of the country. A number of houses were damaged or collapsed completely, and several roads and bridges cannot be used for transport anymore or cannot sustain the current transport flow. From a food and agriculture perspective, food stocks have been damaged, livestock lost and harvest crops destroyed, often hitting the subsistence farmers who fully rely on those means as source of food and income. Nevertheless, most households are coping with the situation to some extent, and livelihoods are likely to be restored in due course provided the overall prospects for the next harvest do not further deteriorate. Concerning water and sanitation, it was noted that many water sources have been flooded and potentially contaminated by flood water. Also, a rise in diarrhoeal diseases, malaria, skin, eye and acute respiratory infections has been recorded whereby some health facilities were found to be short on supplies, reducing their response capacity in case of a disease outbreak. Furthermore, the quality and access to education has been threatened in some cases by occupation of the facilities by displaced persons.

Based on these findings, the RJA team proposes the following short term recommendations amongst others:

- Cleaning of drainage systems to ease flow of excess water.
- Provision of building materials in order to assist a rapid relocation of the displaced persons.
- Food assistance to the most vulnerable households until the start of the harvest.
• Rehabilitation of access roads to rice fields.
• Rehabilitation of damaged water sources and treatment of water sources.
• Conduct in-depth health assessment (including contamination of drinking water resources).
• Provision of pit latrines to all households whose latrines collapsed.
• Provision of essential medicines (antibiotics, Injection materials, ORS) and other supplies such as detergents and laboratory reagents and equipment.
• Community sensitisation and/or training on waste management, geographic planning, house building and hygiene and sanitation.

2. Background
Heavy rainfalls since mid July have resulted in flooding, with damages to infrastructure and livelihoods in The Gambia. Most heavily hit areas include Western Region, Kanifing Municipal Council and the Greater Banjul areas. Loss of lives and livelihoods has also been reported elsewhere up-country.

With the support and overall coordination by the National Disaster Management Agency (NDMA), local authorities were able to quickly assess the situation on the ground and initiated immediate response, distributing food and non food items in selective districts/wards. Meanwhile, the Government declared a state of National Emergency in the country on September 7th and has launched an appeal both in country and abroad for additional relief and rehabilitation efforts on the basis of NDMA’s estimate of population affected.

The latest NDMA reports as at September 22, 2010 indicated that at least 26,000 people were affected with over 7,000 displaced – living in neighbouring houses and schools. Significant loss of livelihoods has been reported, particularly for small traders and farmers whose goods have been destroyed and whose livestock were lost. There are also reports indicating that rice fields were submerged.

With the objective to determine whether there is a gap in meeting the immediate and longer term livelihood needs of affected people, a multi-sectoral taskforce involving the Government, UNCT and NGO partners was set up to undertake a Rapid Joint Assessment mission to visit the worst affected areas. The assessment was purported to provide an update on the evolving situation and complement the information already provided by NDMA through their regional channels.

3. Methodology
The RJA was conducted on the basis of a review of initial damage assessment reports by NDMA, key informant interviews at the regional level involving the Governor’s/Mayor’s Office and the Regional Disaster Management Committees (RDMC) and primary data collection in selective areas.
Data collection in the field was carried out via i) focus group discussion with alkalis and other members of the village/community and ii) random household interviews. Structured questionnaires addressing multi-sectoral issues were used in both instances whereby selection of villages/communities to be visited was purpose driven guided by NDMA and the RDMCs identifying the worst affected districts in the different regions.

In total, some 24 focus group discussions and 81 household interviews were conducted in 28 villages/communities in 13 districts/wards (check for Banjul, KMC) across all six regions.

<table>
<thead>
<tr>
<th>Region</th>
<th>District/Ward</th>
<th>Village/Community</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banjul/Kanifing Municipality</td>
<td>Greater Banjul Area, Kanifing</td>
<td>Bakau, Banjul South, Bundung, Nema Wasulung, Old and New Jeshwang, Tallinding, Tobacco Road, Lancaster Street (9)</td>
</tr>
<tr>
<td>KMC</td>
<td>(2)</td>
<td></td>
</tr>
<tr>
<td>Western Region (WR)</td>
<td>Kombo (1)</td>
<td>Brikama Jamburr, Farato (2)</td>
</tr>
<tr>
<td>North Bank Region (NBR)</td>
<td>Lower Niumi, Upper Baddibu (2)</td>
<td>Barra, Essau, Kerr Sulay, Saba (4)</td>
</tr>
<tr>
<td>Lower River Region (LRR)</td>
<td>Jarra West, Jarra East, Kiang</td>
<td>Toniataba, Dingirai, Kwinella (3)</td>
</tr>
<tr>
<td></td>
<td>West (3)</td>
<td></td>
</tr>
<tr>
<td>Central River Region (CRR)</td>
<td>Fulladu West, Niani (2)</td>
<td>Palang Mandinka, Wassu, Bansang (3)</td>
</tr>
<tr>
<td>URR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper River Region (URR)</td>
<td>Fulladu East, Wuli East, Wuli</td>
<td>Badari, Foday Kunda, Ceesay Kunda, Taibatu, Medina Village, Brifu, Barif (7)</td>
</tr>
<tr>
<td></td>
<td>West (3)</td>
<td></td>
</tr>
</tbody>
</table>

In addition to the multi-sectoral assessment, a separate team led by the Ministry of Agriculture and FAO assessed the impact on crops and livestock specifically. This team visited three to four villages per region in six days. In NBR: Sitanunku, Ndungu Kebbeh and Illiassa; in CRR North: Balaghar Bententi, Kuntaur Fulla Kunda and Nema; in CRR South: Jahally, Pacharr and Tabanani; in URR: Fatoto, Bassending, Dampha Kunda and Sare Alpha; in LRR: Bureng, Soma, Kunnong; in Western Region: Yundum, Sifo and Bontong.

It should be noted that the results from the analysis of field data cannot be extrapolated to the entire population in the absence of a representative sample. Nonetheless, the findings were conclusive enough to suggest an overall trend, which was supported by triangulation with other data sources.
4. Main findings and recommendations

4.1. Shelter, infrastructure and environment

4.1.1. Main findings shelter

According to NDMA records as at September 22, 2010, a total of 2,090 houses were partially damaged, and 561 houses were fully destroyed nationwide. The regions with the highest number of houses completely destroyed are LRR (183), KMC (108) and WR (99). Similarly, most houses that are partially damaged can be found in LRR (1,100), KMC (389), CRR (272) and WR (222). However, the number of persons displaced is arguably a more meaningful indicator for the number of people directly affected by severe shelter damage and in need for support in shelter reconstruction. The NDMA figures demonstrate that the highest number of displaced persons is found in KMC (1,413), WR (1,134), CRR (1,079) and LRR (1,035). Nevertheless, NBR (630) and URR (607) are also seriously affected, leaving only BCC (24) with a low number of displaced persons. Overall, this leads to a total of 7,640 displaced persons.

The RJA team noted that throughout the country, houses were found damaged to such extent that continued living is either impossible or would impose a serious threat to the inhabitants. The threat is not only caused by the danger of collapse, but also standing water (often contaminated by flooded latrines) that can serve as a breeding ground for bacteria causing infections and diseases. Unsurprisingly, it became apparent that the collapsed houses shared similar characteristics. Most of them used mud as primary building material and did not rely on strong foundations, and many of the collapsed houses were located on natural water drainage routes.

At the same time, there were regional disparities in terms of coping strategies and the accessibility to alternative shelter. In most rural communities, solidarity enabled rapid availability of alternative shelter at unaffected neighbouring compounds or school building whereas affected persons in the urban areas frequently also relied on temporary rental. In Greater Banjul Area, individual cases were reported where people, despite the risk of staying in their flooded houses, refused to leave out of fear for robbery of household goods.

4.1.2. Main findings infrastructure

Driven by the concerns over the findings on infrastructure damage as provided by the report of the Infrastructure Sub-Committee (dated September 9, 2010), infrastructure damage was also included in this multi-sectoral RJA. In this context, infrastructure does not only refer to the road network, bridges and ferry crossings, but also electricity poles, water facilities (pipes, boreholes, open wells), health facilities, schools and administrative facilities. As such, the infrastructure dimension is strongly intertwined with water and sanitation (damaged water sources), health (damaged health facilities and

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1 At the time of report writing, UNHCR was not in a position to submit a full report on emergency shelter needs. Further work is ongoing and UNHCR Regional Bureau and other relevant agencies will be consulted for the necessary technical inputs.
longer trip duration to reach health centres), education (damaged schools) as well as food security
(more difficult access to markets, as well as to fields).

Concerning roads, bridges and ferry infrastructure, the report by the Infrastructure Sub-Committee
found that damage was found especially in the Kanifing Municipality and Brikama area of the Western
Region. However, much of the most severe damages were found to be temporal, caused by blocked
bridges. Furthermore, in conjunction with the findings of the RJA mission, it was reported that several
road surfaces (both of asphalted, laterite roads, as well as sand and dirt roads) have been severely
eroded by run-off water. Nevertheless, most of these problems result from poor maintenance over the
years and, even though they sometimes severely curb transportation capacity, no roads in the Western
part of the country have been found to be completely blocked.

Meanwhile, in the Eastern part of the country, more impediments on road infrastructure have been
observed. Especially in URR, the RJA team reported that large parts of Basse are completely submerged,
making them inaccessible to vehicles and poorly accessible on foot. The discussion with the RDMC of
URR revealed that the main cause of flooding in large parts of Basse (including the North Bank river
crossing) is the blockage of the drainage system, mainly due to illegal waste dumping. Similar issues
were also encountered in Bansang. In addition, in CRR, the inter-village access road that stretches for
over 5km, all the way to the Senegalese border, is totally damaged, cutting off access to neighbouring
schools and 26 hectares of rice fields.

4.1.3. Main findings environment
Drainage and waste management has been reported as a major problem in centres like KMC, Brikama,
and Basse etc. This is due to poor planning of settlements/residential houses (along water ways),
disposal of waste into drainage systems and inadequate (or lack of) designated waste disposal sites. This
results in the blockage of drainage system, over flow of excess water and consequential damage in
nearby structures. Leaked toxic materials/chemicals might have been washed away by the floods to
pollute natural drinking/watering points for animals in the wild. No damages to the natural
environment/ecosystem have been reported during the assessment. Notwithstanding, there is a need
for a rapid environmental assessment to determine the extent of damage (if any) to the natural
vegetation, rangelands etc, and how this impacts on livestock and wildlife.

From the perspective of the natural environment, not much has been reported during this RJA. A few
places reported having seen snakes (reptiles) wandering about to seek refuge in human settlements due
to the fact that their habitat has been flooded. There was an incidence of one crocodile loitering near
the flooded Katchically Sacred Crocodile Pond, and it was confirmed that a girl child was bitten to death
by a crocodile.

However, the fact that few cases of wildlife displacement have been reported is not an indication that
wild animals have not been affected by the floods. Wild animals are secretive and some are nocturnal,

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2 Other types of infrastructure damage (e.g. water sources, schools, etc.) will be discussed in the relevant sections of the report.
and it is therefore possible that a good number of them might have moved during the night or at other odd times and have sought refuge in people’s stores, nearby bushes and other rarely accessible places in residential quarters to avoid disturbance. Once the situation normalises, the animals will start to come out of hiding and the unpleasant encounter with humans will likely increase. Some animals like the snake and crocodile on the contrary can decide to use the new premise as a permanent habitat.

4.1.4. Short-term recommendations
1. Clean drainage systems to ease flow of excess water.
2. Provide support to identify and construct appropriate waste disposal sites in the affected communities.
3. Wherever possible, people should build their own housing with support in the provision of suitable local materials so that it could be culturally and socially appropriate for them.
4. The site and the type of shelter must be suitable for the two seasons (wet and dry) experienced in the country.
5. Considering the loss of family belongings in the floods, beds, mattresses, blankets, mosquito nets and clothing should be provided, if necessary.
6. Provide training on waste management, both at individual as well as community level.
7. Concerning crocodiles (Katchically Sacred Crocodile Pond): Provide adequate habitat for resident animals, if possible provide a reptile proof fence to avoid escape. Consider translocation of wandering crocodiles back to the pond.
8. Provide support to the translocation of snakes and other animals found in houses, stores etc, to an appropriate environment/habitat.
10. Support the provision of appropriate equipment for catching/trapping reptiles/animals for translocation.
11. Provide support to conduct rapid environmental assessment to determine the impact (if any) of the floods on the ecosystem and the need for re-vegetation/reforestation/tree planting etc.

4.1.5 Mid- and long-term recommendations
1. Proper planning and reconstruction of drainage systems.
2. Provide training on house building, geographical planning and water drainage management.

4.2 Food and agriculture (crop and livestock)

4.2.1 Main findings household food security
Who are the food insecure:
The main livelihoods of the affected population in the rural communities include subsistence farming (coos, rice, maize), cash cropping (groundnuts), horticultural production (for both cash and subsistence), livestock rearing (mostly small ruminants), and petty trading (especially fish mongering). In the urban communities, the livelihoods range from farming to salaried work (civil service), self employed business, petty trading in major markets such as in Banjul and Brikama, and skilled and unskilled labour. Women farmers, most of whom are engaged in upland NERICA, swamp rice farming, groundnut and vegetable
production and who are also heads of households in rural communities have been identified as particularly vulnerable to food insecurity as large swaths of submerged rice fields will inevitably result in loss of crops.

*Why are they food insecure:*

Food is available in sufficient quantities in major markets and lumos. However, communities and households interviewed both in rural and urban areas reported almost uniformly that staple food prices are higher than in the previous year. This is contrary to GBOS data on retail prices of major food commodities in 28 markets across the country, which point to little variation (and even slight decrease) in average food prices compared to the previous year. For example, the average price of one kilogram (1 kg) of small grained imported rice was 15.4 Dalasi in August 2009 and 15.0 in August 2010. Other coarse grain prices follow a similar trend reflecting the stable international and regional market prices, which are significantly lower compared to the 2008 soaring food price crisis levels. Regardless of the conflicting picture of market prices, the majority of both rural and urban households are in need of additional cash to recover damaged housing and purchase food given the loss of crops for own consumption in addition to the usual expenses in terms of school fees and health services. This will deteriorate household purchasing power and in turn have consequences for food access.

*Coping:*

The most common coping strategy employed by affected households in both urban and rural areas is to reduce the quantity and number of meals. Borrowing from neighbours or seeking assistance within the community (e.g. community run emergency cereal stocks) is also commonly observed. Normally, rural households depend on the early maturing crops such as early millet and maize to cope towards the end of the lean season. However, this year the growth performance of these crops are poor (i.e. stunting, poor head formation and mouldings) resulting in low yields. This will have implications on the availability of good quality seed for next cropping season (more details provided in the next section. A number of households in rural farming communities, are foreseeing a change of food sources from own production to purchase of food via sale of livestock and firewood, migrant labour and remittances. Some households reported of increasing horticulture production if possible and will start planting early.

*Response:*

Households’ reports of available food stocks for consumption vary from a few days up to three months and the majority of the households interviewed asked for immediate food assistance. However, results from the focus group discussion revealed that the need for building materials and support for access to clean water and improvement in infrastructure are more imminent priorities. Since the first heavy rains in mid July, the Government has swiftly responded to assist selected households in affected communities mostly with food items (rice, cooking oil, and sugar) whereby NGOs have contributed other types of emergency relief items (non-food) as well. As at September, the total value of donated cash and cheques for relief and rehabilitation amounts to approximately 12 million, which includes the

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President’s 10 million Dalasi contribution for emergency rice and cooking oil$^4$. However, food assistance to date has not reached all affected households identified and recipient households reported that food received will not last for more than a month or two$^5$.

**Conclusion:**
Given all of the above, the Assessment Team concluded that the heavy rains and floods led to the deterioration in food security amongst vulnerable households whose livelihoods and assets have been directly impacted. At the same time, evidence suggests that affected households have been able to partially, if not fully, cope with food insecurity while resorting to alternative livelihood strategies. Household food security may improve over the mid and longer term, provided that firstly, there is no further deterioration of the generally favourable prospects for the 2010 agricultural season$^6$, and secondly, livelihoods in urban areas will be restored via increased income generating opportunities (in particular with the advent of the tourist season) and critical shelter support. Therefore it is recommended to provide emergency food assistance to the most vulnerable households as a buffer to bridge the remaining period (one month) until the dry season, which coincides with the harvest/marketing and tourist season.

### 4.2.2 Main findings agriculture (crop and livestock)

**Areas Affected**
- NBR: Sitanunku, Illiassa, Janjari, India, and Ndungu Kebbeh.
- CRR: Balanghar (Mbentenki), Genjy Wollof, Jahally Pacharr, Kuntaur Fulla Kunda, Nema and Tabanani.
- URR: Badari, Sare Alpha, Fatoto, Seyfulla Kaitel, Sare Jarjeh, Tabanjang, Fatako, Dembanding, Bakadaji, Mama-sutu, Kossemar Tenda, Tamba Sangsang, Madinako/Sutukonding, Kaba kama, Birifu, Foday Kunda, Sutukoba/Koli, Bassending, Samba Tacko, Dampha Kunda, and Basse Koba Kunda.
- WR: Siffoe and Yundum (rice and vegetable garden schemes).

**How is farming affected: Crops**
The Major food crops planted include rice, maize, early and late millet, sorghum, cassava, sweet potato, while cash crops include groundnut, beans and water melon. However most of the communities and households visited reported that this year’s food crops prospect in particular swamp rice, early millet, maize and to some extent upland rice is limited.

This is mainly attributable to the heavy rains and floods resulting in water logging and erosion; erosion and washing off of top soil; nurseries and matured rice fields submerged (e.g. in Niani Sukuta); first

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$^4$ For details on pledges, donations and response up to date, refer to Annex 2.
$^5$ For example, a total of 219 households in LRR received a predetermined ration of rice - 12 kg per person - with the President’s contribution.
$^6$ The Department of Water Resources reported in the latest Early Warning Bulletin for the 3rd decade of September 2010 that most upland rice fields have reached maturity and harvesting is in progress in URR, CRR, LRR and NBR.
planting - seeds washed off by the rains; height of water not permitting timely transplanting; high weed infestation; damaged dikes and bridges; flooded access roads, making it impossible to pass through to fields; leaching, in particular, of nitrogenous fertilizers, siltation due to erosion from upland to low land fields; and formation of gullies due to erosion of water from the upland continuum to the lowland continuum. As such, some if not all of these factors will impact food and in particular seed security.

The rains also washed off top soil and striga was a big problem. Flowering also coincided with the heavy rains. This affected gain filling of the head. Visibly the crops are stunted and grain quality is low. This reduced the crop to reach its potentials, in CRR, URR, LRR and NBR those cereal harvested and left to dry in the fields are moulded and some are re-generating in the fields.

Rice, maize and early millet yields are predicted to drop below expected levels and more likely to result in reduction of income of producers while the on-going increase in prices of basic commodities may affect farmers access to food to meet their basic needs and availability of seeds and other inputs next cropping season.

Vegetable production particularly in NBR, URR and WR was affected by the floods. Fences and wells were destroyed in Villages visited in NDR (Illiassa, Ballangar, Soma, Badari and Dampfa Kunda. Pest and fungus were the major problems that affected growth of the crops and reduce yields and quality of the crops. Water melon a crop being gradually adopted by farmers as a cash crop did not perform well in CRR and LRR, especially those planted in July. And most farmers in CRR depend on water melon for cash crop.

Furthermore, the Regional Agricultural Center and farmers predict that if the rain continues to fall beyond September, the quality of the harvest for all crops will be affected as moulds will manifest itself in groundnuts, cereals, melon, beans and cassava. This may also affect the seed quality set aside for next year’s cropping season.

*How is farming affected: Soil erosion*
Severe erosion was experienced in Balangharr, Fulla kunda and Nema where there was high incidence of water logging, due to flooding which resulted in the moulding and re-re-sprouting of cereal crops, loss of Nerica rice planted in fields, as well as the local “Tadako” rice varieties. In some of the Nerica rice fields, the seedlings got lodged and uprooted by the erosive force of the runoff (overland flow) and eventually got submerged (inundated). Vegetables such as pepper, egg plant, beans suffered from moulding, caused by excessive humidity.

In Badari, due to erosion, water logging and leaching of nutrients, the groundnut crops were stunted and flowering inhibited, leading to crop failure. According to the Regional Agricultural Office for URR, 10 out of 18 villages in Fulladu East, URR, experienced flooding of crops.

At Sare Alpha, Bassending, Kundam and Bureng there was total submersion and loss of rice crops in the lowlands, while those mostly in the uplands survived, with limited losses.

*Livestock*
The loss of livestock, in particular small ruminants and poultry was very high in most of the rural communities visited. The heavy rains and floods resulted in high moisture levels in pens which affected small ruminants and poultry, especially in Sitanunku, ballangar, Dampha Kunda, Basseding, Fatoto, Nema, Somading, Kondong, Sare Alfa, and Bureng where animals (such as goats and sheep), suffered from foot-rot and dysentery. Goats in particular, suffered from skin diseases (streptomyicosis) and ticks, PPR, anorexia and pneumonia resulting in high mortality rate. Other water-borne diseases contracted by the animals were coccidiosis (poultry) and calf scour (diarrhoea). Some of the animals were reported to drown or washed away by the heavy rains.

Fishing is a main source of livelihoods and nutrition for the communities such as Balangharr, CRR, URR and LRR were income losses due to low catches and the poor quality of fish and increased risks presented by high water levels and rough tide.

**Possible Impact**

- Crop and livestock losses (especially regarding rice, which is a subsistence crop) lead to increased food insecurity levels for the affected population, which could affect their nutritional status and coping mechanisms.
- As rice for consumption is not available for affected households, this will affect the income earnings from groundnuts, since they will need to purchase rice for consumption. Farmers that did not plant groundnuts will depend on other sources of income.
- From most of the responses, it was clear that the communities use a high proportion of their incomes to buy rice, to fill the gap not covered by production, especially during the lean season, in addition to health and education related expenses (especially for boys, as girls education is free) and social ceremonies. With high food prices, crop losses therefore places heavy toll on other basic needs, which also influence livelihoods to some extent and has implications for their vulnerability.
- Loss of possible source of seeds for the next season. All the households interviewed explained that they keep seeds from the last harvest for subsequent re-planting. Farmers whose crops got damaged will need other sources of seeds in particular, rice, cereals and groundnuts and melon.
- Although cereals are available on the market, these are from last harvest. Given the fact that the rains not only affected subsistence, but also cash crops, there may be shortages of such on the market in due course (depending on the magnitude of the losses), if the demand becomes high due to less reduced yields of, despite the onset of the cropping season projections of a good harvest.
- Loss of parent stock of livestock especially sheep will have a devastated effect on the income of farmers earned during the EID festivals and as a buffer for crop losses.
- Damages to conservation structures and access road to fields especially that of swamp rice fields.

**Coping strategies**

Some of the coping strategies mentioned by the farmers across the country are: sale of remaining small ruminants of which the funds are use to buy food; concentrating more on horticultural activity during
the dry season; explore the harvest; engage in petty trading at lumos and sale of forest products. Although 20% of the farmers, according to the focused group discussions do receive remittances, other farmers will resort to reducing their number of daily meals, provide loans to each other (the less affected give loans to those worse-off), while others will try to get jobs as unskilled labour in the semi-urban areas (mainly construction), and sell firewood (while noting the impact on the environment).

Response
While the government of the Gambia provided initial food assistance, as well as other basic items, across all regions it is important to note that there are still gaps, that resulted in an international appeal for help. Since an agricultural assessment was not previously conducted, assistance given so far was not specially geared towards the needs of farmers.

Conclusion
The heavy rains have caused considerable damage to crops and resulted in loss of livestock in identified villages, countrywide listed above. The various scenarios that led to crop losses are: submersion of rice fields due for harvest; water logging and leaching of nutrients, diseases related to high prevalence of moist and damp conditions, amongst others. It is clear that while vulnerability and food insecurity is inherent in almost all regions of the Gambia, this has been exacerbated by the crop loss situation.

4.2.3 Short-term recommendations

1. As an immediate measure to be implemented in the next two months, provide emergency food assistance to the most vulnerable households for a minimum period of one month until the beginning of the dry season. The total duration of assistance may be revised depending on the risk factors as highlighted above (harvest outlook and recovery of livelihoods in urban areas). As a planning figure for the total number of beneficiaries, the number of displaced persons as reported by NDMA could be used as a proxy for vulnerable households (as at September 22, 2010 the number of displaced is 7,640 or approximately 30% of the total number of affected population). The targeting and identification of beneficiary households will be determined based on NDMA’s in-depth assessments which are ongoing.

2. Food for work to swamp rice farmers for three months to clear their fields and prepare them for the next crop.

3. Provision of swamp rice seeds for the second crop production for farmers in the swamp land irrigated areas, i.e. Jahally, Pacharr, Fulla Kunda, and Kuntaur area.

4. Provision of seed and fertilizer for vegetable production during the dry season production to affected villages.

5. Provision of drugs and vaccines for livestock disease control.

6. Restocking of lost livestock especially small ruminants and poultry, rearing and fattening for sale.

7. Rehabilitation of collapsed vegetable garden fences and wells in affected areas.

8. Provision of seed dressings.

Recommendations 1 – 5 are purported for immediate interventions (within the first two months).
4.2.4 Mid- and long-term recommendations
1. Capacity building for the maintenance and management of the dikes and bounds.
2. Provision of seed, seed dressings and fertilizer for the next cropping season for rice, maize, millet, sorghum and groundnuts.
3. Construction/rehabilitation of soil conservation structure (bounds, dikes, causeways, and bridges) to ease access and minimize flooding in rice fields.
4. Rehabilitation of access roads to the rice fields in affected areas.
5. Monitor the situation of vulnerable households in rural and urban areas to detect any deterioration of food security in the mid- and long term (via a food security monitoring system).

4.3 Health, water and sanitation, education and protection

4.3.1 Main findings health
Diarrhoeal diseases, malaria, skin, eye and acute respiratory infections present the most significant risk to morbidity and mortality in the floods affected communities. Increased cases of malaria, diarrhoea, skin and acute respiratory infections are already being witnessed or reported in some of the affected areas. In the case of CRR North, schistosomiasis has re-emerged and poses threat to women and children who work in the rice fields.

Inadequate nutrition and increased cases of malaria could be a contributory factor to the high prevalence of anaemia among pregnant women reported in CRR North.

In the event of a disease outbreak, health facilities would be faced with challenges due to limited numbers of skilled health workers and laboratory staff that would be required to diagnose and manage cases.

According to the Regional Health Team in CRR, which has been echoed in all the regions/municipalities visited, the stock level of essential drugs and supplies has dwindled during the course of the past 3 months. While most of the health facilities are equipped with some essential drugs to provide initial response to disease outbreaks, they mostly lack detergents and other sanitary materials.

While there has not been any significant damage to health infrastructure, access to medical facilities (including services for pregnant women) are hindered due to damage on road networks in some affected localities.

4.3.2 Main findings water and sanitation
Most commonly, communities are using hand pump wells, traditional open wells and pipe borne water supply for drinking. In some communities, where water supply pipes have either been broken and or perforated, there is a high risk of contamination from flood water. The extent of problem of possible contamination of such water sources has not been determined and further assessments may be required. However, communities complained of changes in the taste and appearance of water from their water sources.
In many communities, water sources have been damaged, limiting access to safe water. In some communities such as Kerr Sulay in the North Bank, residents have to travel to neighbouring Senegal to buy water. This has serious implications in the quantity of water available for family use. Similar findings were also observed in Kotu in KMC, where people travel to other communities to get safe drinking water.

Poor access to safe sources of water and adequate sanitation facilities contributes to the transmission of water and food borne disease. In urban settings, populations are at risk of outbreaks of diarrhoeal diseases such as cholera and shigellosis.

Even before the floods, sanitation has always been a daunting challenge in most of the affected communities prompting defecation in the open or in bushes and indiscriminate waste dumping in the open and in drains. In KMC, some communities complained of irregular waste collection by the municipal council due to damaged access roads which resulted heaps of garbage in the waterways.

Traditional pit latrines are the sanitation facilities mostly affected. Basic sanitation facilities such as toilets and bathroom consist of temporary structures that were not able to withstand the force of water and a high proportion collapsed in the process.

4.3.3 Main findings education and protection

Even though the school infrastructure in most regions was not severely affected; at least one school in URR continue to host some of the affected families. Six classroom blocks at Badari are presently occupied by displaced families. This has caused the school to introduce double shifts with thin numbers of staff, obviously with negative implication on school contact hours.

In Mayork, the roof a classroom block was completely blown off by strong winds destroying a good proportion of teaching and learning materials during the process. As a coping strategy, the school has introduced afternoon shifts. This certainly has implications on the safety of children who have to travel long distances to get back home after school closes late in the evening.

In KMC, two Nursery schools in Tallinding and New Jeshwang (unregistered) collapsed during the flood and will require reconstruction.

4.3.4 Short-term recommendations
1. Poor access to safe sources of water and adequate sanitation facilities contributes to the transmission of water and food borne disease. Therefore, rehabilitation of damaged water sources and treatment of water sources is a key priority.
2. Affected households whose latrines have collapsed should be supported with improved pit latrines.
3. Education of the affected population especially on improved sanitation and hygiene and the need for prompt seeking of health care services for sick children needs to be carried out in affected communities.
4. Health facilities would face serious challenges in case of an outbreak of diseases. Therefore, the provision of essential medicines (antibiotics, injection materials, ORS) and other supplies such
as detergents and laboratory reagents and equipment are necessary to strengthen the capacity of the health facilities to timely respond to any major disease outbreak. Further to this, health workers need to be trained on emergency preparedness and response including management of associated diseases.

5. Train service providers in the provision of reproductive health in humanitarian situations.

6. The extent of the health impact of the shock has not been fully determined and further in-depth health impact assessment is required. A similar exercise is also needed to determine the contamination of water sources.

7. The affected schools will need support through provision of lost resource materials as well as reconstruction of affected school blocks. The IDPs in schools should be relocated immediately to allow normal schooling for children.

4.3.5 Mid- and long-term recommendations

1. As access roads have been affected in some communities, thus cutting them off from accessing health service, the PHC needs to be revitalised to ensure drugs and other medical supplies are available in the community for treatment of common illnesses.

2. Laboratory capacity needs to be strengthened so as to improve the surveillance system.

3. Strengthening major health centres to provide basic and comprehensive EmOC services through the provision of RH kits.

5. Conclusion

While the total number of affected people is increasing as NDMA is progressing with follow up detailed assessments in the different regions⁸, evidence suggests that households have partially, if not fully, recovered from the heavy rains and floods while resorting to various coping strategies, as detailed in the report. In particular, rural farming communities and households as they have resumed with their livelihoods and are getting prepared for the upcoming harvest season immediately after the rains stopped. Therefore, the RJA team concluded that, even though assistance is urgently needed, not all dimensions addressed by this multi-sectoral mission need to be targeted equally.

It has been found that damage or inaccessibility of shelter and infrastructure are a matter of high importance in the aftermath of the 2010 heavy rains and floods. Mainly caused due to poor construction materials, techniques and geographical planning, many houses, and also some roads and bridges, urgently need to be rebuilt and/or repaired. Other houses are intact, but inaccessible due to standing, often contaminated water. As such, it is important not only to provide new building materials to the households affected, but also engage in trainings on building techniques, geographical planning and waste management (as several floods have been worsened as drainage systems were blocked by waste).

Concerning food and agriculture, the heavy rains and floods led to the deterioration in food security amongst vulnerable households whose livelihoods and assets have been directly impacted. In the case

⁸ According to NDMA the number of affected population as of September 22, 2010 are as follows: Banjul (802)-KMC (8,239)-WR (4,969)-NB (3,396)-LRR (3,815)-CRR (1,596)-URR (2,706).
of the rural farming communities, damages to crops will likely have a negative impact on food and in particular seed security. At the same time evidence suggests that affected households have been able to partially, if not fully, cope with food insecurity while resorting to alternative livelihood strategies and the support of the emergency food assistance to date. Therefore it is recommended to provide food assistance to the most vulnerable households as a buffer to bridge the remaining period until the harvest and marketing season (minimum one month). It is also recommended to provide drugs and vaccines to mitigate the outbreak of livestock diseases and pest; and to provide vegetable seeds and fertiliser for dry season cultivation of horticulture crops.

In the category of health, water and sanitation, education and protection, those affected continue to live under precarious conditions; i.e. pregnancy related complications as a result of the shock, STIs, lack of shelter, limited access to clean water, sanitation and health. Women and children are the most affected/vulnerable groups. Support is urgently needed to compliment delivery of NFIs such as clean water, medicine, mosquito nets, and hygiene and dignity kits in the immediate future. Support should be provided for to rehabilitate and reconstruct destroyed water and sanitation infrastructure. The risk of an outbreak of disease is high and as such, Regional Health Teams are proposing to strengthen the capacity of health facilities in medicines and essential supplies. They require assistance with detergents, medicine, ORS, treated mosquito nets and other essential medical supplies.
6. Annexes

6.1. Terms of Reference

<table>
<thead>
<tr>
<th>Terms of Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rapid Joint Assessment for an Update on Heavy Rains and Floods in The Gambia, 2010</strong></td>
</tr>
<tr>
<td><strong>September 23 – 30, 2010</strong></td>
</tr>
</tbody>
</table>

**Background**

Heavy rainfalls since mid July have resulted in flooding and damages to infrastructure and livelihoods in The Gambia. Most heavily hit areas are Western Region, KMC and Greater Banjul areas while loss of lives and livelihoods have been reported up-country as well. With the support and overall coordination by NDMA, local authorities have quickly assessed the situation on the ground and already initiated with the immediate response, distributing food and non-food items in selective districts/wards.

Meanwhile, the Government declared a state of National Disaster in the country on September 7\textsuperscript{th} and is currently launching an appeal both in country and abroad for additional relief and rehabilitation efforts on the basis of NDMA’s preliminary estimate of approximately 21,000 people affected in total to date.

**Assessment Objectives**

The overall objective of the Rapid Joint Assessment is to determine whether there is a gap in meeting the immediate needs of affected people that calls for an intervention by partners (civil society, donors, UNCT) in addition to the assistance that is currently being provided by the Government and identify what are the longer term livelihoods needs.

More specifically, the assessment will answer the following four key questions:

1. What is the impact of the floods on lives and livelihoods? Who were the most affected?
2. How does the affected population currently cope with the situation?
3. What are the implications of the floods on food, nutrition and health security situation (with an emphasis on the short term needs while being mindful of mid and longer term needs)?
4. What assistance is needed for whom and for how long? What are the immediate gaps to be addressed?

The Rapid Joint Assessment will be multi-sectoral (shelter, food, water, health and sanitation, infrastructure, education) with a view to focusing primarily on implications for livelihoods and is supplementary to the ongoing post disaster assessments by the Regional Disaster Management Committees. Stocktaking of other assessments will be ensured via consultation through the RDMCs. Further, a Joint MoA-FAO Floods Impact Assessment is being undertaken simultaneously looking specifically at the impact of floods on crop and livestock, the findings of which will be complemented with the findings of the Rapid Joint Assessment and consolidated in one final con report.
Methodology
For the purpose of a rapid initial investigation, a largely qualitative methodology will be applied. Selection of districts and villages to be visited will be based on secondary data, in particular those which were reported to have been most severely affected according to NDMA reports. The following key assessment tools will be used in the course of the assessment at the village level: key informant interviews, focus group discussions, household visits (household sampling to be conducted on a purposive basis, selected by the VDCs or Alkali based on guidance from the assessment team), and village transect walks.

Mission composition (tbc)
- Local Authorities (inc Governor’s Office)
- Ministry of Health
- Ministry of Agriculture – DoA
- Ministry of Forestry and Environment
- NDMA
- NaNA
- NEA
- UN Disaster Management Group (FAO, UNDP, UNFPA, UNHCR, UNICEF, WFP, WHO)
- Civil Society including GRCS, Concern Universal, Action Aid, Muslim Aid

Output, responsibilities and timeline
The final output is a concise report summarizing the key findings of the mission, with recommendations on necessary forms of assistance to meet immediate and longer term needs.

Planned activities with timeline and responsibilities are as follows (tbc):

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
<th>Responsible Organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 22</td>
<td>Briefing (All stakeholders); finalisation of ToRs, assessment planning</td>
<td>Chair of UN DMG (WFP)</td>
</tr>
<tr>
<td>September 23–24</td>
<td>Development of Analysis Plan and Assessment Tools</td>
<td>All Team Members</td>
</tr>
<tr>
<td>September 27–29</td>
<td>Field visits</td>
<td>Field mission teams (tbc)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- One team for Banjul, KMC, Western Region</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- One team for Western Region &amp; LRR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- One team for North Bank &amp; CRR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- One team for URR</td>
</tr>
<tr>
<td>September 30</td>
<td>Consolidation of field mission findings, analysis, report writing</td>
<td>1. Overall coordination – NDMA, WFP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Shelter, infrastructure section – NDMA, UNFPA, UNHCR, Muslim Aid</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Health, water, nutrition section – MoH, UNICEF, WHO, Concern Universal, GRCS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Food – FAO, WFP, MoA, Action Aid</td>
</tr>
</tbody>
</table>
6.2. Pledges, donations and response as of October 21, 2010

Pledges/donations up to date that can be expressed in monetary units

<table>
<thead>
<tr>
<th>Date</th>
<th>Who</th>
<th>What</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NDMA</td>
<td>50,000 Dalasi in cash for immediate relief</td>
</tr>
<tr>
<td></td>
<td>Action Aid</td>
<td>500,000 Dalasi</td>
</tr>
<tr>
<td>July - August</td>
<td>Private</td>
<td>158,000 Dalasi in cash</td>
</tr>
<tr>
<td>September</td>
<td>Concern Universal (CU)</td>
<td>• Wuli and Sandu Development Association (WASDA): 18,250 Dalasi</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Freedom from hunger campaign (FFHC): 18,250 Dalasi</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Agency for village support (AVISU): 18,250 Dalasi</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Trust agency for Rural Development (TARUD): 18,250 Dalasi</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Njawara Agricultural Training Centre (NATC): 28,750 Dalasi</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Method Mission Agricultural Programme (MMAP): 18,250 Dalasi</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Saint Joseph Family Farm Centre (SJFFC): 20,250 Dalasi</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Kanifing Municipal Council (KMC): 36,750 Dalasi</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Banjul City Council (BCC) NDMA/ DMC (Equipment): 6,875 Dalasi</td>
</tr>
<tr>
<td></td>
<td></td>
<td>This funding is aimed at facilitating the assessment processes at KMC and Regional levels</td>
</tr>
<tr>
<td>September</td>
<td>United Methodist Church (UNCOR), through CU</td>
<td>3 million Dalasi ($10,000) to support up to 50 families affected by the flooding in the KMC area and Western Region, by means of providing building materials, food items and hygiene kits</td>
</tr>
<tr>
<td>September 9</td>
<td>President</td>
<td>10 Million Dalasi in cash for relief and rehabilitation efforts (including 1 water pumping machine) * 5 million used to purchase 4,411 bags (50kg) of rice and 2920 gallons (20 ltrs) of oil, for immediate delivery in all seven regions</td>
</tr>
<tr>
<td>Date</td>
<td>Organization</td>
<td>Description</td>
</tr>
<tr>
<td>------------</td>
<td>--------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>September 21</td>
<td>Taiwan</td>
<td>1.5 million Dalasi ($50,000) in cash for disaster relief and rehabilitation efforts</td>
</tr>
<tr>
<td>September 21</td>
<td>Private</td>
<td>16,000 Dalasi worth of non food items – i.e. 200 used bath towels, 200 used hand towels, 200 single bed sheets, 100 double bed sheets, 100 single blankets, 80 drinking cups, and 50 used plates</td>
</tr>
<tr>
<td>October 21</td>
<td>UNFPA</td>
<td>1.5 million Dalasi ($50,000) in the form of Dignity and Reproductive Health kits (incl. condoms, Vacuum Extraction Delivery kits, Blood Transfusion kits)</td>
</tr>
<tr>
<td>October 22</td>
<td>UNHCR</td>
<td>Up to 300,000 Dalasi ($10,000) on material assistance, allocated according to need assessment by NDMA</td>
</tr>
</tbody>
</table>

**TOTAL donated cash and cheques for relief and rehabilitation: D19,907,875.00**
### Donations received by NDMA in 2010

*Note: Some donations are also quoted under “Pledges/donations up to date that can be expressed in monetary units”*

<table>
<thead>
<tr>
<th>Date</th>
<th>Who</th>
<th>What</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>UNICEF</td>
<td>• 60 Improved pit latrines</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• More than 150 people were sensitized on basic hygiene and hand washing promotion</td>
</tr>
<tr>
<td>January</td>
<td>UNICEF (through Department of Water Resources)</td>
<td>• Bleach: 425 boxes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Soap: 1,240 bars</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Water bags: 23 boxes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Chlorine: 1 box</td>
</tr>
<tr>
<td>January</td>
<td>GAB</td>
<td>• Pampers: 13 bags</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Difference box: 14 pieces</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Clothing: 326 rolls</td>
</tr>
<tr>
<td>June</td>
<td>WFP</td>
<td>• Computer sets: 8 Dell sets</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Printers: 7 HP Lasjet</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Scanner: 2 HP Scanners</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Plastic Sheets: 24 (6x10m); 18 (8x12m) pieces</td>
</tr>
<tr>
<td>July</td>
<td>Gambia Scout Association</td>
<td>• Bed liners: 10 pieces</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Bunka beds: 15 pieces</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Mattresses: 15 pieces</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Pillows: 15 pieces</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Duvets: 15 pieces</td>
</tr>
<tr>
<td>July</td>
<td>Great Commission Movement</td>
<td>• Second hand computers sets: 10 pieces</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Rice: 40ft container (1,254 boxes)</td>
</tr>
<tr>
<td>July</td>
<td>WHO (through Ministry of Health)</td>
<td>• Mosquito net: 400 pieces</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Bed sheets: 300 pieces</td>
</tr>
<tr>
<td>Date</td>
<td>Donor/Recipient</td>
<td>Donations</td>
</tr>
<tr>
<td>------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| August     | UNICEF (through Department of Water Resources)                                  | • Water containers: 2,600 pieces  
• Chlorine: 1 box                                                     |
| August     | Salifu K. Jaiteh                                                                | • Second hand clothing: 13 bales                                          |
| August     | Humanity first                                                                  | • Rice: 75 bags  
• Second hand clothing                                                  |
| August     | Gambia Red Cross Society (GRCS)                                                 | • Corrugate sheets: 35 pieces  
• Soap: 1,032 bars  
• Blankets: 688 pieces  
• Mat: 688 pieces  
• Buckets: 688 pieces  
• Mosquito nets: 1032 pieces                                          |
| September 9| Government of the Republic of the Gambia                                        | • Rice: 4,411 bags  
• Oil: 2,920 cans (20 litres)  
• 5,000,000.00 Dalasi for Disaster Mitigation (Infrastructure update)  |
| September 9| NDMA Support                                                                    | • Rice, oil, sugar and salt amounting to 702,750.00 Dalasi                |
|            |                                                                                 | • Logistics support: 150,000.00 Dalasi                                   |
| September 9| Muslim Aid The Gambia                                                           | • Aqua Boxes: 50 boxes  
• Mutton in tin: 400 boxes                                                 |
| September 15| His Excellency Sheikh, Professor, Dr, Alh., Yahya A. J. J. Jammeh, President of the Republic of The Gambia | • 1 water pumping machine                                              |
| September 18| His Excellency Sheikh, Professor, Dr, Alh., Yahya A. J. J. Jammeh, President of the Republic of The Gambia | • Paddy Rice: 192 bags  
• Sugar: 313 bags  
• Oil (10 litres): 313 gallons                                              |
| September 20| Kairaba Beach Hotel                                                            | • Bath towels: 200 pieces  
• Hand towels: 200 pieces                                                  |
<table>
<thead>
<tr>
<th>Date</th>
<th>Organization</th>
<th>Items</th>
</tr>
</thead>
</table>
| September 20 | Great Commission Movement            | • Single bed sheets: 200 pieces  
• Double bed sheets: 100 pieces  
• Blankets: 100 pieces  
• Drinking cups: 80 pieces  
• Plates: 50 pieces  
• Mana Pack Rice: 500 cartons |
| September 21 | Jammeh Foundation for Peace          | • Curtains: 1000 pieces  
• Trousers: 1000 pieces  
• T-shirts: 1000 pieces  
• Bed sheets (BB Hotel): 50 pieces  
• Towels (BB Hotel): 100 pieces  
• Shoes: 4 bags  |
| September 21 | Mariama Saho and Isatou Jallow       | Several clothing items, kitchen utensils and bed sheets                                                                               |
| September 21 | World Mission Agency                 | • Rice: 10 bags  
• Oil (20lttrs): 3 gallons  
• Shoes: 30 pairs                                                                 |
| September 27 | DHL                                  | • Oil (5lttrs): 25 cartons  
• Rice (50 kgs): 42 bags                                                                                                               |
<p>| September 27 | Gamworks                             | • T-Shirts: 150 pieces                                                                                                                  |
| September 27 | Munazamat                            | • Rice (50kgs): 100 bags                                                                                                                 |
| September 29 | Gambians in France                   | • Clothing: 5 boxes                                                                                                                     |</p>
<table>
<thead>
<tr>
<th>Date</th>
<th>Organization/Recipient</th>
<th>Contributions</th>
</tr>
</thead>
</table>
| September 29 | Ocean Bay Hotel and Resort                      | • Single bed sheets: 500 pieces  
• Double bed sheets: 44 pieces  
• Pillow cases: 500 pieces  
• Pillows: 100 pieces  
• Large towels: 63 pieces  
• Medium towels: 700 pieces  
• Hand towels: 500 pieces  
• Single mattresses: 16 pieces  
• Assorted plates: 400 pieces |
| October 4   | UNICEF (through Department of Water Resources)   | • Bleach (5ltrs): 200 boxes  
• Soap: 1200 bars |
| October 6   | Ahmadiya Muslim Jamaat                          | • Rice: 100 bags |
| October 6   | Senegambia Beach Hotel                         | • Single beds, including mattresses: 100 pieces  
• Double bed sheets: 200 pieces  
• Single bed sheets: 350 pieces  
• Pillow case: 350 pieces  
• Hand towels: 300 pieces  
• Double blankets: 30 pieces  
• Single blankets: 50 pieces |
| October 6   | Harriet Ndow                                    | • Clothing: 4 boxes |
| October 11  | Access Bank                                     | • Single mattresses: 20 pieces  
• Oil (5 ltrs): 30 cans  
• Bucket (15 ltrs): 50 pieces  
• Rice (30 kgs): 30 bags |
<table>
<thead>
<tr>
<th>Date</th>
<th>Who</th>
<th>What</th>
<th>Nr. of assisted</th>
<th>Where</th>
<th>Gaps</th>
</tr>
</thead>
<tbody>
<tr>
<td>June</td>
<td>Great Commission Movement</td>
<td>175 cartons of packed rice (13.5kg each)</td>
<td>50 households identified by NDMA</td>
<td>LRR</td>
<td></td>
</tr>
<tr>
<td>July 19</td>
<td>Regional Disaster Management Committee – GRCS</td>
<td>Emergency food needs worth of 50,000 Dalasi identified: * NDMA provided 25,000 for</td>
<td>n/a</td>
<td>URR</td>
<td>25,000 Dalasi?</td>
</tr>
</tbody>
</table>
| October 19 | World Islamic Call Society – Gambia Office | • Children dresses: 700 pieces  
             |                                                                 | • Shoes: 40 pairs  
             |                                                                 | • Wheelbarrows: 27 pieces  
             |                                                                 | • Spades: 40 pieces  
             |                                                                 | • Paint: 50 gallons  
             |                                                                 | • Rakes: 10 pieces  
             | October 20 | NAPSA                              | • Exercise books: 30 pieces  
             |                                                                 | • School bags: 25 pieces  
             |                                                                 | • Pencils: 60 pieces  
             | October 20 | Social Security Housing Finance Cooperation | • Rice (30kgs): 50 bags  
             |                                                                 | • Soap: 30 bars  

*Note: Some donations are also quoted under “Pledges/donations up to date that can be expressed in monetary units”*
<table>
<thead>
<tr>
<th>Date</th>
<th>Organization</th>
<th>Action</th>
<th>Affected Households</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 18</td>
<td>Regional Disaster Management</td>
<td>Food and non food items:</td>
<td>n/a</td>
<td>Building materials including corrugated iron, nails, cement, tarpaulin</td>
</tr>
<tr>
<td></td>
<td>Committee – LRR</td>
<td>✓ NDMA donated rice, oil, sugar, bed sheets etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>✓ Great Commission Movement donated 100 cartons of rice</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>✓ GRCS donated buckets, blankets, mats, mosquito nets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>August 19</td>
<td>NDMA</td>
<td>Food and non food items</td>
<td>68 households (761 persons)</td>
<td>4 households did not get assistance</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>August 23</td>
<td>RDMC - URR</td>
<td>Food and non food items donated by NDMA, Humanity First, great</td>
<td>45 families for a period of one month</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Commission Movement and other partners?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>August 25</td>
<td>RDMC - WR</td>
<td>Food and non food items donated by NDMA and GRCS?</td>
<td>22 displaced</td>
<td>83 families not assisted (total of 128 affected families)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>households</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6.3. State of preparedness and available resources for emergency relief in 2010 of the UN agencies, as of August 2010

In view of the recent incidences of flood and heavy rains, it was agreed by the UN Disaster Management Group that each agency would submit resources available towards a joint UN coordinated response in the case of a disaster. The following are the available from each agency:

**WFP:**
- Can launch flash appeal to quickly raise resources for emergencies.
- Stands ready to quickly deploy staff, and food if need be to relevant areas, if need be.
- The WFP Representative has the facility to approve funds, within certain limits to quickly save lives in the event of a disaster declaration by the government, with the possibility of local procurement, to save on time.

**UNICEF:**
- Provided 8 drums of chlorine for water disinfection in flood affected communities to the Department of Water Resources, from the 2009 flood response resources, to be used in 2010.
- Procured and stored at the Department of Water Resources 1300 (10 L) and 1300 (20 L) collapsible water containers for household use. Ready to be distributed at any time.
- Essential drugs and medical supplies (ORS and essential antibiotics for cholera and diarrhoea) are available in the Central Medical Stores and. (see stock level attached).
- 300 gallons of bleach and 300 bags of soap powder procured and prepositioned in all the health regions to equip isolation wards with disinfectants during emergency.
- Procured 8 water tanks and prepositioned in strategic locations during the Ebo Town flooding. These tanks are available at the Kanifing Municipal Council Head Office for use.
- Conducted education in emergencies training for 60 education cluster monitors for the education sector. This is to ensure that the minimum capacity exist with the education sector to plan, implement and coordinate education response and preparedness for emergencies.
- Worked with NDMA and stakeholders to develop and agree on a common tool for joint rapid assessment of emergencies including monitoring.
- Assessment and identification of temporary health posts in case of cholera outbreak in agglomerated settings – 3 have been identified in Banjul area.
- Health and water sector Contingency plans have been developed for floods which will be integrated into the national contingency plan.
- The procurement of additional twelve drums (45kg) of chlorine for Department of Water Resources to disinfect contaminated water systems in flood affected communities is in progress. Logistics support has already been provided to DWR for this exercise.
In the pipeline:

- Additional 12 drums of chlorine are being procured.
- Procurement of 2060 gallons of bleach and 1200 packets of soap and water treatment tablets.
- Funds have been transferred to Department of Water Resources to support NDMA to conduct regional sensitization in disaster risk reduction.
- Procurement of laboratory equipment and reagents for DWR Lab for water quality monitoring is in progress and will arrive in August.
- At the Bansang RHT, all the essential drugs are available at the regional drug store. The Regional pharmacist also confirmed that the 9 facilities and 2 health posts are stocked with a significant quantity of essential drugs and supplies for both routine and emergency. Most of these supplies and drugs were provided by UNICEF.

### Stock available in 3 regions at the time of the UNICEF field visit 2-5 August

<table>
<thead>
<tr>
<th>Name of Region</th>
<th>Bleach</th>
<th>Soap</th>
<th>Water containers</th>
<th>ORS</th>
<th>Cipro</th>
<th>IV line</th>
<th>Normal saline</th>
<th>Omo/soap powder</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRR</td>
<td>25 gallons</td>
<td>360 bars</td>
<td>200</td>
<td>xx(^9)</td>
<td>xx</td>
<td>xx</td>
<td>xx</td>
<td>xx</td>
</tr>
<tr>
<td>CRR</td>
<td>79</td>
<td>609 bars</td>
<td>250</td>
<td>11,850 sachets</td>
<td>15,000 tabs</td>
<td>A(^{10})</td>
<td>A</td>
<td>5 bags</td>
</tr>
<tr>
<td>URR</td>
<td>75</td>
<td>576 bars</td>
<td>5000</td>
<td>2,100 sachets</td>
<td>0</td>
<td>A</td>
<td>880 sets</td>
<td>3 bags</td>
</tr>
</tbody>
</table>

**Notes:**

Need to procure at least six water tanks for URR to be installed at critical locations of Kaba Kama and engage Fire service to fill the tanks as a short term measure, while NDMA looks for connecting the tanks to the main supply system for billing.

**UNDP:**

- Twelve (12) water tanks of 2000 litres each are located at the regions in KMC (5), WR (4) and URR (3). They were provided to within affected communities in 2008.

\(^9\) xx means that the pharmacist could not be met  
\(^{10}\) A means that a large quantity is available for 2-3 months
• Seven (7) mini digital cameras provided to NDMA for evidence based flood emergency response in the regions.

• An additional US $30,000 was provided to NDMA (2009) for:
  • Installation of the water tanks
  • Orientation and capacity development of affected communities
  • Training of Water Management Committees in KMC, WR, URR
  • Support to ongoing flood contingency planning process

• Quick environmental assessment can be mobilized after rains to inform recovery and other efforts.

WHO:

WHO stands ready to assist at any time, based on health needs as requested by the government.
6.4. Questionnaires

CHECKLIST – FOCUS GROUP DISCUSSION FOR COMMUNITY/VILLAGE LEVEL

Part I. Village/Community Profile

1. Number of households
2. What are the main livelihoods in the village?
3. What are the main problems faced by the households in the village IN GENERAL, before the floods? (poor housing, crop pest/ disease, illness/accident in the HH, livestock disease, lack of income, lack of food, etc.)

Part II. Extent and severity of the shock

1. How does this year compare to previous years regarding the shock?
2. What type of damage did the shock cause this year?
3. What geographical areas are affected? (Try to draw a map of affected areas and verify the areas that are low, moderate and severe damages)
4. What % of HHs is potentially affected?
5. How would you consider the damage level in your village/community (low, moderate, high)? Why?

Part III. Impacts of shock

1. Which groups of people (women, children, farmers, etc.) are having the most problems due to the shock(s)? Describe the people and the problems.
2. Food related
   a. Has the shock damaged food stocks? Try to quantify (i.e. amount available before shock, amount available after shock, how long will the food stocks last?)
   b. What are the main food sources of people? Have they changed since the shocks?
   c. Has the shock changed the income of some people? Are there alternative livelihoods that people are considering as another option?
   d. Is there a local/nearby market? Is there adequate food available? Are the prices affordable (has the price gone up or down compared to the same time last year)?
   e. Have you observed any households that reduce number of meals or skip meals? What % of people in the village/community does that?
   f. Are there mothers who have stopped breastfeeding their child (age 0-23 months) since the onset of the flood? What is the estimated proportion? Why?
3. Infrastructure/environment/ shelter related
   a. What are the infrastructural damages
      - Electric poles
      - Water facilities (pipes, boreholes, open wells, etc.)
      - Bridges
• Roads
• Health facilities
• Schools
• Telephone
• Administrative facilities
• Other

b. What is the extent of damage?
c. What has been done already to recover the damage?
d. Map out shelter damage based on own observations
e. What are the local arrangements for shelter (coping)?
f. Wildlife displacements
g. Chemical leakages
h. Damage on vegetation
i. Damage to protected areas

4. Water/health/sanitation related
   a. What are the main diseases in the area? Any changes in the last 3 months?
   b. Do you have concerns regarding the impacts of shocks to human health condition (mention nutrition and disease)? Explain
   c. Have you observed a change in the no. of cases/patients due to the shock? Can you quantify the cases?
   d. Have you observed a change in the nutritional status of patients due to the shocks? Can you quantify the cases?
   e. If there is a disease outbreak, is the health centre able to cope with the situation? Explain (damage to infrastructure and supplies). Are basic essential medicine and supplies available?

5. Education and protection
   a. How many schools are affected by the shock?
   b. How many schools are occupied by IDPs?
   c. Are safe areas available for recreation and play for boys and girls of all ages?
   d. What are the major threats for children in the area affected by floods?
   e. What are the main needs and issues related to protection in this area?

Part V. Assistance received and/or needed

1. Has any assistance already been provided – what type, to whom, where, and by whom?
2. What immediate assistance do you need most in the short term?
3. What assistance do you need most in the medium-long term?
CHECKLIST – HOUSEHOLD INTERVIEW

Part I: Assessment Information (to be filled by team leader and before starting the interview)

1. Date of assessment:
2. Assessment team name:
3. Place of assessment [Village/Community] [Ward] [District] [Region]: __________________________
4. What is the status of the household [poor/vulnerable] [normal] in the village/community (impression of assessment team)?
5. What % of household in the village is similar to this household (impression of assessment team)?

Part II: Household Background information

1. What are your household’s main livelihood activities (Tick all that apply)?
   - Farmer - Crops
   - Farmer - Crops, gathering and hunting
   - Farmer - Crops and livestock
   - Unskilled worker
   - Skilled worker
   - Salaried
   - Trader, shopkeeper
   - Other: __________________________ (specify)

Part III: Damage caused by shock

1. Is your household affected by the shock? Yes No

2. What types of problems did your household face during the shock(s)? Tick all that apply
   - Loss/damaged crops in the field
   - Loss/damaged food stock
   - Damaged/spoiled seeds
   - Damaged vegetable garden
   - Food shortage
   - Had to consume non-staple/ unconventional food
   - Unavailability of foods in market
   - High price of daily commodities
   - Death of household member
   - Injury/illness of the household members
   - Disease/injury to poultry
   - Disease/injury of other livestock (incl. wildlife)
   - Damaged fish pond/fish source
   - Damaged house
• Damaged/loss of business establishment
• Reduced/loss income source (incl. wage rate)
• Interrupted education
• Lack of safe drinking water
• Other:________________ _________________________________________________(specify)

3. If HH food and non-food stocks have been affected, please fill in the below table (optional, based on answer in Q2)

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount available before shock (bags/months)</th>
<th>Amount damaged by shock</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-food</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. Has your HH recovered from the shock (has everything gone back to normal now)? How/why not?

**Part IV: Food Security Situation and coping**

1. Does your household have food to eat now?
2. How long will the current food stocks last your HH? |___________|months/weeks/days
3. For the period in which you do not have food will you be able to purchase/collect/borrow the food?
4. Is the household food consumption pattern affected by the shock (smaller meal, skip meals, or go a whole day without eating)?

**Part V: Health**

1. What impact did the shock have on the accessibility to the nearest health services for your household? (this includes PHC)
2. What type of health problems did members of this household have during the last 3 months? (list)
3. How many of the household members are affected by malaria?
4. How many of them are under 5?
5. Are there cases of diarrhoea among children under 5? Yes  No
6. If yes, how many were affected in the last 2 days?
7. Has any member of the household died from diarrhoea? Yes  No
8. If yes, how many?

Part VI: Access to water, sanitation and hygiene

1. What is your current source of drinking water supply?
2. Has this source of water supply been affected by the shock? If yes, how?
3. Is there a latrine for the household? Yes No
4. If No, where do members of the house defecate?
5. Has the latrine been affected by the recent flood? If yes, how?
6. Where do you dispose of solid waste?
7. Please Observe the following:
   - Sanitary situation of household
   - hygiene practices

Part VII: Response

1. Did you receive any help to support your household after the shock(s)? Yes No

2. If yes, what type of help/support did you receive? From whom? When? Tick all that apply
   - Food
   - Cash
   - Seeds
   - Building materials
   - Sanitary items
   - Other: __________ (specify)

2. From your point of view, what are the priority needs of your household in terms of assistance?
6.5. Pictorial

- Compound with standing water in Bansang (CRR)
- Rotten early millet in Ceesay Kunda (URR)
- Completely damaged house in Badari (URR)
- Partially damaged building in Badari (URR)
Affected household compound in Banjul (BCC)

Collapsed house in Kwinella, Kiang West (LRR)

Affected household compound in Banjul (BCC)
Harvest damage observed during the joint MoA-FAO Floods Impact Assessment