Papua New Guinea
El-Niño Response Plan

18 April 2016

PNG Disaster Management Team
Figure 1. Food Security Classification, by LLG in Papua New Guinea (World Food Programme, March 2016)

1,473,000 people affected
180,000 people needing food relief
US$37.57 million required
23% of target funded to date
EL-NIÑO IN PAPUA NEW GUINEA

In Papua New Guinea, eighty percent of the population is semi-dependent on rain-fed subsistence farming, and more than three quarters of the food consumed in the country is locally grown. As a result, any disruption to household food production has an immediate, severe and lasting impact on food security in the country. The highlands, with approximately 2.2 million people in many thousands of small and isolated villages, are more vulnerable to these weather extremes.

Since April 2015, much of rural Papua New Guinea (PNG) has been severely impacted by a major drought and, at a number of high altitude locations (2200-2800 m), by repeated frosts. By September many areas were having only 40% of average rainfall. During the period of Nov 2015 – March 2016, some regions in the country received only 30% of norm. The reduced cloud-cover associated with these dry conditions resulted in frosts at high altitudes. Temperatures as low as minus 2°C were recorded between mid-July and mid-August, with the worst frosts on 11-14 August 2015.

This created a series of cumulative shocks to food security. From April to August, growth of staple crops (largely root crops) was stunted, with frosts wiping out crops in higher altitude areas completely. Replanting during the peak of the drought (August – November) was impossible, and existing stocks were depleted. Following the increase in rains in November to December, communities have resumed replanting of food gardens. However, in some areas, including the Highlands, the sudden and heavy rains on dry ground have further delayed agricultural recovery as flooding and landslides destroyed properties, food gardens and agriculture infrastructure. Increase in pest infestation and excessive nitrogen content of the soil have also contributed to continued crop failure. Having now lost staple crops multiple times, by January 2016 reserve stores of food and other coping mechanisms had been exhausted. In certain areas of the Highlands, the total loss of crops meant that there would not be a harvest for 6-9 months1.

Beginning in September 2015, the Government of PNG led assistance efforts to respond to food needs brought about by the drought with an allocation of PGK 25 million. Distribution of food by Government began as early as September 2015 and reached a number of affected areas. However, the extended drought resulted in distributed relief supplies and other coping mechanisms having been depleted by late 2015 while the cost of logistics and the challenging physical terrain made distribution of food relief highly complex and expensive. In November 2015 Government committed an additional PGK 178m (approximately $70m USD) for disaster relief to be implemented through Members of Parliament across 89 districts in PNG.

Local capacities, such as logistics and budgets at district level are variable and the level of assistance provided from district to district has fluctuated significantly. Humanitarian actors have been working alongside government partners through the Disaster Management Team and sectors/clusters to respond to the emergency by undertaking technical assessments and sectoral interventions. Notably, the National Disaster Centre (NDC), the Department of Health and the Department of Agriculture and Livestock have been working closely with humanitarian partners to address sectoral needs.

From January 2016, highly concerning field reports came in, including that of extremely malnourished children in the Western Province. This triggered the launch of a mobile Food Security Monitoring (mVAM) survey by the NDC, supported by the World Food Programme. The assessment, which consisted of over 3,700 interviews with key informants living in affected areas confirmed that the food security situation had in fact deteriorated significantly over the three months since January. Findings revealed that 1.31 million people were experiencing high food insecurity, with an additional 162,000 people in six Local Level Government areas (LLG) were faced with extreme food shortages and classified as severely food insecure. In addition, indications are strong of extreme food needs in Milne Bay outer islands.

1 Harvest in some high-altitude regions is expected only by September 2016.
where the District Provincial Administrator indicated that approximately 18,700 people might need assistance. Including other pockets of critical need around the country (43,000 people), there are therefore approximately up to 223,700 people requiring humanitarian assistance.

Anecdotal field reports from Nomad-Mougulu LLG identifying visible cases of oedema, numerous longitudinal ink spot technical assessments by NGO partners, and analyses by agricultural experts as well as a distinct increase in malnutrition rates in less-severely impacted and recovering LLGs across the country (WFP’s mVAM) provide a clear pattern of escalation and very strong indications that the malnutrition rates within extremely food insecure LLGs are likely to have increased beyond pre-El-Niño rates of 14% Global Acute Malnutrition (GAM) and subsequent increase in Severe Acute Malnutrition (SAM) cases as a result of the extended El-Niño induced food insecurity.

The El-Niño induced drought has also created a number of other critical ongoing needs including water shortages, lack of proper sanitation, and an increased incidence of communicable disease. To further strengthen the four pillars of food security (availability, access, utilization, and stability), urgent support for restoration of agricultural and livelihood activities are also required.

These needs remain well-aligned to the overall response strategy and sectoral priorities identified at government-led Strategic Response Planning and Resource Mobilisation Workshop which took place in mid-December 2015.

The humanitarian community is appealing for US$37.57 million to provide affected populations with life-saving assistance as well as recovery support. To date, a $4.73 million grant from the UN’s Central Emergency Response Fund (CERF) has been approved to immediately kick start a rapid response comprising a two-month food relief intervention ($3.99 million) coupled with a three-month lifesaving nutrition intervention ($736,000) to stabilise the food insecurity situation in four extremely impacted locations to avert mortality and excess malnutrition.

**COORDINATION ARCHITECTURE**

**National Structures**

Papua New Guinea has a well-established national structure for disaster response management. This comprises the National Executive Committee (NEC), the National Disaster Committee (NDComm), and the National Disaster Centre (NDC) at the national level. At the provincial level, there are Provincial Disaster Committees with Provincial Disaster Coordinators coordinating provincial responses. These structures are underpinned by the Disaster Management Act 1984 as well as a disaster risk management framework. Papua New Guinea has a standing informal cluster system which brings together government line departments, and a network of humanitarian actors, with United Nations agencies and international and national NGOs. For the most part, these clusters are co-led by respective government line departments and UN agencies.

**The Disaster Management Team (DMT)**

The Government of PNG and the UN system have an effective joint coordination mechanism. Disaster Management Team (DMT), which comprises all the key agencies working on disaster risk management with Government, including development partners, NGOs, church-based organisations, various arms of the Red Cross, is co-chaired by the Director of NDC and UN Resident Coordinator with secretarial support from a Humanitarian Coordination Specialist from UNDP.

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2 The WASH cluster is co-led by National Department of Health and World Vision.
### MAIN HUMANITARIAN NEEDS

Existing information and field observations suggest that the humanitarian priorities are:

<table>
<thead>
<tr>
<th>Priority</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>Lifesaving food relief for people in areas suffering from extreme food shortages</strong></td>
<td>There is an urgent need to provide lifesaving food assistance to those who have exhausted other viable means of subsistence to prevent a further escalation of the situation and limit incidence of negative coping strategies.</td>
</tr>
<tr>
<td><strong>Recovery of household gardens that were damaged or destroyed by drought/frost</strong></td>
<td>Ensuring the availability of seed and planting material to enable replanting while strengthening the capacity of subsistence farmers through drought resilience training activities and adaptive farming practices training.</td>
</tr>
<tr>
<td><strong>Treatment of severe acute malnutrition</strong></td>
<td>Ensure that children with acute malnutrition in targeted areas have access to therapeutic food while also ensuring community members at risk of malnutrition in targeted areas have access to micronutrient powders.</td>
</tr>
<tr>
<td><strong>Improved access to clean water and hygiene practices</strong></td>
<td>Address the short and longer-term access to clean water through the provision of WASH NFIs and improving water supply systems for affected communities coupled with hygiene promotion.</td>
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<tr>
<td><strong>Diversification of livelihoods of affected communities</strong></td>
<td>Provide support for sustainable livelihoods and community-based development as well as the strengthening of early warning system for enhanced preparedness at the community level.</td>
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<tr>
<td><strong>Continued functioning of health facilities and provision of preventive and curative services</strong></td>
<td>Ensuring access to water and medical supplies to enable the continued functioning of the selected critical health facilities as well as providing health services to affected populations. Disease surveillance and outbreak preparedness will be strengthened in the most affected areas.</td>
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### PEOPLE TARGETED

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
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<tbody>
<tr>
<td>Agricultural Recovery</td>
<td>210,000 people</td>
</tr>
<tr>
<td>Food Assistance</td>
<td>180,000 people</td>
</tr>
<tr>
<td>Early Recovery</td>
<td>180,000 people</td>
</tr>
<tr>
<td>Nutrition</td>
<td>up to 21,000 children</td>
</tr>
<tr>
<td>Health</td>
<td>up to 1.4 million people</td>
</tr>
<tr>
<td>WASH</td>
<td>50,000 people</td>
</tr>
</tbody>
</table>
STRATEGIC OBJECTIVES

1. Address the immediate food and nutritional needs of people in areas suffering from extreme food shortages
   - Providing emergency deliveries of food to areas suffering critical shortages
   - Ensure that cases of Moderate and Severe Acute Malnutrition, particularly among vulnerable groups are addressed

2. Support the restoration of basic services and agricultural and other livelihood activities
   - Ensure a rapid transition to early recovery for the affected people
   - Address WASH and Health needs arising from the drought

PRIORITY ACTIONS AND REQUIREMENTS

Food Security (Food Assistance)

Contact Information: Ahmed Zakaria (Ahmed.zakaria@wfp.org); Farshad Tami (farshad.tami@fscluster.org; +675 7122 9716)

Meet the urgent food needs of people for up to three months in areas suffering from extreme food shortages who have exhausted other viable means of subsistence in areas severely impacted by the El-Niño induced drought/frost and to protect livelihoods, limiting the incidence of negative coping strategies. The target beneficiaries would be approximately 180,000 people in areas with severe food security impact.

Priority Actions
1. Procurement, delivery and distribution of emergency food relief.
2. Conduct of additional VAM and field assessments to monitor food security situation.

Food Security (Agricultural Recovery)

Contact Information: Ken Shimizu (ken.shimizu@fao.org; +675 7110 8771; Farshad Tami (farshad.tami@fscluster.org; +675 7122 9716)

The main agricultural recovery priority is to ensure timely recovery of household gardens that were damaged or destroyed through various agricultural interventions. Capacity of subsistence farmers will be strengthened through drought resilience training activities and adaptive farming practices training. In addition, national capacity for seed and planting material production/multiplication will be institutionally strengthened, by supporting appropriate national agencies such as Department of Agriculture and Livestock (DAL), National Agricultural Research Institute (NARI) and Fresh Produce Development Agency (FPDA). Agricultural recovery in Papua New Guinea will be further strengthened through institutional development of local and national drought monitoring and reporting systems.

Priority Actions
1. Coordinate food security and livelihoods assessments and monitoring activities that involve all segments of affected communities across gender, age and disability.
2. Provision of farming inputs such seed or other planting materials as well as tools and toolkits required for household garden recovery.

3. Training and capacity development for farmers and farming households. Adaptive farming techniques, drought resilience farming practices, post drought insect control, and low water farming techniques will be training priorities.

4. Promotion of “smart irrigation” infrastructure and techniques (drip irrigation hose).

5. Support DAL to develop and implement a national Joint Agricultural Sector Recovery plan with NARI and FPDA.

6. Development of national institutional capacities for drought monitoring and reporting systems.

7. Provide support that strengthens national institutional capacity for seed production and planting material multiplication activities and infrastructures through support of appropriate national agencies.

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**Nutrition**

Contact Information: Hanifa Namusoke (hnamusoke@unicef.org; +675 7909 3830)

Address short term needs to ensure that children with acute malnutrition in targeted areas have access to therapeutic food while also ensuring community members at risk of malnutrition in targeted areas have access to micronutrient powders for up to three months. Targeted children with severe acute malnutrition would be treated for up to four months to achieve full recovery through either inpatient or outpatient treatment. The cluster also aims to support health service providers and volunteers in targeted areas have the capacity to address acute malnutrition as well as enable behavioral change on nutrition sensitive practices.

**Priority Actions**

1. Procure and distribute therapeutic feeds for targeted treatment of cases diagnosed with severe acute malnutrition (SAM).
2. Provide skilled training of service providers and volunteers on the management of SAM.
3. Procure and offer a blanket distribution of multiple micronutrient powders (MNPs) to remainder of the population conscious of the risk to hidden hunger resulting from ‘improvised’ diets
4. Supported National Department of Health to develop a full package of Infant and Young Child Feeding (IYCF) promotion interventions.

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**Water, Sanitation and Hygiene**

Contact Information: Sonia Yeung (Sonia_Yeung@wvi.org; +675 7002 0827)

The Water, Sanitation and Hygiene (WASH) cluster plan will be focused on addressing both the short term as well as longer-term needs. In the immediate term, the priority would be to provide access to clean water through the provision of WASH supplies/Non-Food Items (NFIs) to communities and improving water supply systems for affected communities. This will be coupled with hygiene promotion to improve understanding and application of basic hygiene practices.

**Priority Actions**

1. Distribution of WASH NFIs
2. Improvement of water supply systems for affected communities (including gravity fed systems, spring protection, boreholes with submersible pumps, rainwater harvesting systems, pumping station etc.)
3. Continued drought (WASH focused) assessment, monitoring, reporting, and documentation of lessons learned
4. Equipping Disaster Management Coordinators with guidelines on improving water supply systems especially rural areas, schools and health facilities.
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Early Recovery

Contact Information: Khusrav Sharifov (khusrav.sharifov@undp.org; +675 7005 9112)

Key to early recovery from drought impacts is the diversification of livelihoods of affected communities through longer term recovery and community-based development as well as the strengthening of early warning system for enhanced preparedness at the community level. The resilience of vulnerable communities will be improved through having a more diverse livelihood as well as being better prepared for climate related risks through early warning.

Priority Actions

1. Identifying community-level needs for livelihood interventions and defining appropriate sustainable livelihood interventions
2. Provide training and information to diversify food supply and income generating opportunities.
3. Provided communities with access to the identified diverse planting materials and livestock
4. Identifying community-level needs for early warning
5. Identifying bottlenecks for early warning messaging from national level to province/district/community level
6. Establish simple/low cost options for early warning at the community level
7. Develop simple options for drought related preparedness and mitigation measures for communities

Health

Contact Information: Boris Pavlin (pavlinb@wpro.who.int; +675 7335 2366)

The Health sector response plan will be focused on providing access to water and medical supplies to ensure the continued functioning of the selected critical health facilities as well as providing direct preventive and curative services to affected populations. In addition, the plan will aim to strengthen disease surveillance and outbreak preparedness in the most affected areas. The priority locations identified for targeting areas experiencing high and extreme food insecurity as food shortage is the predominant underlying cause of current worsening of health outcomes.

Priority Actions

1. Set up or rehabilitate water systems at health facilities using most locally appropriate means (tanks, boreholes, etc.)
2. Improve waste management at healthcare facilities
3. Hygiene promotion in communities
4. Health Resources Availability Mapping System (HeRAMS) assessments
5. Mid-Upper Arm Circumference (MUAC) screening
6. Outbreak preparedness training and mobile phone surveillance rollout in affected areas
7. Engagement of health logistician to support distribution of health commodities
8. Hiring of information management and communications officer for IM and advocacy
9. Technical guidance to hospitals for management of health consequences of El-Niño
10. Implementation of the Minimum Initial Service Package (MISP) for sexual and reproductive health

$3 million
Required to reach 180,000 people

$1.97 million
Required to reach up to 1.4m people
Papua New Guinea – El-Niño Response Plan

FUNDING STATUS

Overall Response $37.57m

- Food Assistance $13.09m (30%)
- Nutrition $8.4m (10%)
- WASH $6.5m (38%)
- Agri Recovery $4.6m (17%)
- Early Recovery $3.01m (0%)
- Health $1.97m (33%)

Percentage funded denotes actual funding received by implementing partners for completed, ongoing and planned activities.

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