Cyclone Nargis 2008: Rehabilitation in Myanmar

Recovery Status Report 03
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<tr>
<td>AADMER</td>
<td>ASEAN Agreement on Disaster Management and Emergency Response</td>
</tr>
<tr>
<td>ADPC</td>
<td>Asian Disaster Preparedness Center</td>
</tr>
<tr>
<td>AFXB</td>
<td>International Association of Francis Xavier Bagnoud</td>
</tr>
<tr>
<td>AHTF</td>
<td>ASEAN Humanitarian Task Force</td>
</tr>
<tr>
<td>ASEAN</td>
<td>Association of Southeast Asian Nations</td>
</tr>
<tr>
<td>ASEAN-ERAT</td>
<td>ASEAN Emergency Rapid Assessment Team</td>
</tr>
<tr>
<td>AUSAID</td>
<td>Australian Agency for International Development</td>
</tr>
<tr>
<td>CCB</td>
<td>Central Coordination Board of Myanmar</td>
</tr>
<tr>
<td>CFS</td>
<td>Child-Friendly School (of UNICEF)</td>
</tr>
<tr>
<td>CFW</td>
<td>Cash for Work</td>
</tr>
<tr>
<td>DALA</td>
<td>Damage and Loss Assessment</td>
</tr>
<tr>
<td>DEC</td>
<td>Disaster Emergency Committee</td>
</tr>
<tr>
<td>DFID</td>
<td>Department for International Development of United Kingdom</td>
</tr>
<tr>
<td>DMH</td>
<td>Department of Meteorology and Hydrology in Myanmar</td>
</tr>
<tr>
<td>DMIC</td>
<td>Disaster Management Information Center</td>
</tr>
<tr>
<td>DPDC</td>
<td>District Peace and Development Council</td>
</tr>
<tr>
<td>DPRE</td>
<td>Disaster Preparedness and Response Education Working Group</td>
</tr>
<tr>
<td>DRR</td>
<td>Disaster Risk Reduction</td>
</tr>
<tr>
<td>EC</td>
<td>European Commission</td>
</tr>
<tr>
<td>ERC</td>
<td>Early Recovery Committee</td>
</tr>
<tr>
<td>ETWG</td>
<td>Education Thematic Working Group</td>
</tr>
<tr>
<td>EWARS</td>
<td>Early Warning Surveillance System of WHO</td>
</tr>
<tr>
<td>FAO</td>
<td>United Nations Food and Agriculture Organization</td>
</tr>
<tr>
<td>FRC</td>
<td>French Red Cross</td>
</tr>
<tr>
<td>FREDA</td>
<td>Forest Resource Environment Development and Conservation Association</td>
</tr>
<tr>
<td>GAA</td>
<td>German Agro Action</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GFDRR</td>
<td>Global Facility for Disaster Reduction and Recovery</td>
</tr>
<tr>
<td>ICERF</td>
<td>Integrated Community-based Early Recovery Framework</td>
</tr>
<tr>
<td>Acronym</td>
<td>Description</td>
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<tr>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>IEC</td>
<td>Information, education and communication (materials)</td>
</tr>
<tr>
<td>IFRC</td>
<td>International Federation of Red Cross and Red Crescent Societies</td>
</tr>
<tr>
<td>ILO</td>
<td>International Labour Organization</td>
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<tr>
<td>INGO</td>
<td>International Non-government Organization</td>
</tr>
<tr>
<td>IOM</td>
<td>International Organization of Migration</td>
</tr>
<tr>
<td>JICA</td>
<td>Japan International Cooperation Agency</td>
</tr>
<tr>
<td>LIFT</td>
<td>Livelihoods and Food Security Trust Fund</td>
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<tr>
<td>MAA</td>
<td>Myanmar Architecture Association</td>
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<tr>
<td>MAPDRR</td>
<td>Myanmar Action Plan on Disaster Risk Reduction</td>
</tr>
<tr>
<td>MES</td>
<td>Myanmar Engineering Society</td>
</tr>
<tr>
<td>MIMU</td>
<td>Myanmar Information Management Unit</td>
</tr>
<tr>
<td>MISP</td>
<td>Minimum Initial Services Package of UNFPA</td>
</tr>
<tr>
<td>MRCS</td>
<td>Myanmar Red Cross Society</td>
</tr>
<tr>
<td>MSWRR</td>
<td>Ministry of Social Welfare, Relief and Resettlement of Myanmar</td>
</tr>
<tr>
<td>NCEA</td>
<td>National Commission for Environmental Affairs of Myanmar</td>
</tr>
<tr>
<td>NDPCC</td>
<td>Natural Disaster Preparedness Central Committee of Myanmar</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-government Organization</td>
</tr>
<tr>
<td>NMTPF</td>
<td>National Medium-term Priority Framework</td>
</tr>
<tr>
<td>NRC</td>
<td>Norwegian Refugee Council</td>
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<tr>
<td>NZAID</td>
<td>New Zealand Aid</td>
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<tr>
<td>PONAC</td>
<td>Post-Nargis Assistance Column</td>
</tr>
<tr>
<td>PONJA</td>
<td>Post-Nargis Joint Assessment</td>
</tr>
<tr>
<td>PONREPP</td>
<td>Post-Nargis Recovery and Preparedness Plan</td>
</tr>
<tr>
<td>PROTRACK</td>
<td>Project Tracking system</td>
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<tr>
<td>PRRP</td>
<td>Participatory Review and Reflection process</td>
</tr>
<tr>
<td>RCC</td>
<td>Recovery Coordination Center</td>
</tr>
<tr>
<td>RF</td>
<td>Recovery Forum</td>
</tr>
<tr>
<td>RHO</td>
<td>Recovery Hub Offices</td>
</tr>
<tr>
<td>RIAS</td>
<td>Recovery Information and Accountability System</td>
</tr>
<tr>
<td>RIS</td>
<td>Recovery Information System</td>
</tr>
<tr>
<td>RLC</td>
<td>Recovery Liaison Coordinator</td>
</tr>
<tr>
<td>Acronym</td>
<td>Description</td>
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<tr>
<td>---------</td>
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</tr>
<tr>
<td>SDC</td>
<td>Swiss Development Cooperation</td>
</tr>
<tr>
<td>SIM</td>
<td>Social Impact Monitoring</td>
</tr>
<tr>
<td>TCC</td>
<td>Township Coordination Committee</td>
</tr>
<tr>
<td>TCG</td>
<td>Tripartite Core Group</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
</tr>
<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
</tr>
<tr>
<td>UNESCO</td>
<td>United Nations Educational Scientific and Cultural Organization</td>
</tr>
<tr>
<td>UNEP</td>
<td>United Nations Environmental Programme</td>
</tr>
<tr>
<td>UNFPA</td>
<td>United Nations Population Fund</td>
</tr>
<tr>
<td>UN-HABITAT</td>
<td>United Nations Human Settlement Programme</td>
</tr>
<tr>
<td>UNHCR</td>
<td>United Nations High Commissioner for Refugees</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
</tr>
<tr>
<td>UNOCHA</td>
<td>United Nations Office for the Coordination of Humanitarian Affairs</td>
</tr>
<tr>
<td>UNOPS</td>
<td>United Nations Office for Project Services</td>
</tr>
<tr>
<td>USD</td>
<td>United States Dollar</td>
</tr>
<tr>
<td>VTA</td>
<td>Village Track Assessment</td>
</tr>
<tr>
<td>VTRC</td>
<td>Village Tract Recovery Committees</td>
</tr>
<tr>
<td>WASH</td>
<td>Water, sanitation and hygiene sector</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
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</tbody>
</table>
OVERALL DESCRIPTION OF THE STATE OF RECOVERY

1.1 Background of the Disaster

Based on the historical records, Myanmar has experienced various types of hazards mostly frequent but either small or medium scale. The most common is urban fires that account for 70 percent of all disaster events, followed by floods (11%), storms (10%) and others (9%) that include earthquakes, tsunami and landslides. Notably in the recent years, the 2003 Taungtwingyi earthquake, the 2004 tsunami, the 2005 landslides in the mountainous region and Cyclone Mala in 2006. However, 2008 Nargis Cyclone was by far the most devastating disaster the country has faced in history. As per Post-Nargis Joint Assessment (PONJA) report ‘over the last 60 years, 11 severe tropical cyclones hit yanmar, only two of which made landfall in the Delta region’.

Cyclone Nargis made landfall on 2 May 2008 near Haigyigyun in Ayeyarwaddy Division of Myanmar with wind speed up to 200 km/h accompanied by heavy rain and storm surge of 12 m in certain areas. Approximately 140,000 people were killed or unaccounted for and close to 2.4 million people affected in 37 townships in Ayeyarwaddy and Yangon Divisions. Out of the 37 townships, seven in Ayeyarwaddy Division and nine in Yangon Division were considered the most affected. Hailed as the most destructive disasters in Asia over a decade, total economic loss of Nargis was calculated at USD 4 billion, approximately 2.7 % of Myanmar’s projected GDP in 2008.

The destruction was more pronounced in the Ayeyarwaddy Delta region, also known as the country’s rice bowl, where Nargis struck just as the Delta’s paddy farmers were at the very last stage of harvesting the “dry season” crop. Yangon, the former capital of Myanmar, also suffered significant damage particularly in transportation sector as many roads into and out of the city, as well as vital roads into the Delta region, were blocked by flooding or debris.

Box 1. Statistics of Nargis’ Loss and Damages

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Death toll</td>
<td>84,537 persons</td>
</tr>
<tr>
<td>Missing</td>
<td>53,836 persons</td>
</tr>
<tr>
<td>Affected population</td>
<td>Approximately 2.4 million</td>
</tr>
<tr>
<td>Affected areas</td>
<td>37 townships in Ayeyarwaddy and Yangon Divisions</td>
</tr>
<tr>
<td>Damaged no. of houses</td>
<td>450,000 totally destroyed and 350,000 partially destroyed</td>
</tr>
<tr>
<td>Damaged health facilities</td>
<td>75% of health facilities in affected areas</td>
</tr>
</tbody>
</table>

1 Most of the cyclones that enter Myanmar territory make landfall along Rakhine coast in the west of the country.
<table>
<thead>
<tr>
<th>Damaged schools</th>
<th>4,071 buildings</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of school children</td>
<td>600,000 children</td>
</tr>
<tr>
<td>affected</td>
<td></td>
</tr>
<tr>
<td>Damaged drinking water</td>
<td>13% in Yangon and 43% in Ayeyarwaddy</td>
</tr>
<tr>
<td>ponds</td>
<td></td>
</tr>
<tr>
<td>Affected farmlands</td>
<td>63% or over 700,000 ha of paddy land in 19 affected townships inundated</td>
</tr>
<tr>
<td>Affected fish farms and</td>
<td>15,000 ha of fish and shrimp ponds and 9,000 ha of salt farms</td>
</tr>
<tr>
<td>salt farms</td>
<td></td>
</tr>
<tr>
<td>Loss (death) of livestock</td>
<td>50 percent of the buffaloes and 25 percent of the cattle</td>
</tr>
<tr>
<td>Damaged forest areas</td>
<td>17,000 ha of natural forest, 21,000 ha of forest plantations and 35,000 ha of mangrove forest</td>
</tr>
<tr>
<td>Overall Economic loss</td>
<td>4 billion USD</td>
</tr>
<tr>
<td>Economic loss in housing</td>
<td>686,000 million kyats (close to 690 million USD)</td>
</tr>
<tr>
<td>sector</td>
<td></td>
</tr>
<tr>
<td>Economic loss in health</td>
<td>18,894 million kyats (close to 19 million USD)</td>
</tr>
<tr>
<td>sector</td>
<td></td>
</tr>
<tr>
<td>Economic loss in education</td>
<td>116,323 million kyats (close to 117 million USD)</td>
</tr>
<tr>
<td>sector</td>
<td></td>
</tr>
<tr>
<td>Economic loss in agricultural, livestock and fishey</td>
<td>571,583 to 694,654 million kyats (between 570 to 700 million USD)</td>
</tr>
<tr>
<td>Environmental services</td>
<td>46,000 million kyats (close to 47 million USD)</td>
</tr>
<tr>
<td>sector</td>
<td></td>
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<tr>
<td>Economic loss in industry and commerce</td>
<td>521 million kyats (close to half million USD)</td>
</tr>
<tr>
<td>Water supply sector</td>
<td>8,516 million kyats (close to 9 million USD)</td>
</tr>
<tr>
<td>Transport and communication sector</td>
<td>184,671 million kyats (close to 185 million USD)</td>
</tr>
</tbody>
</table>

Source: PONJA

1.2 The Road from Response to Recovery

Despite the initial hurdles during the first few days following the Cyclone created by the lack of collective national experience and capacity in large scale disaster relief and response and poor coordination mechanism between the various agencies, the relief aids were able to reach the affected population in the most remote areas within four to five weeks under the leadership of the Tripartite Core Group (TCG). TCG is a collaborative mechanism established between the Government of Myanmar (Government of Myanmar), Association of Southeast Asian Nations (ASEAN) and United Nations (UN), representing the international humanitarian agencies in the country, which effectively oversee the facilitation and distribution of external aids into Myanmar. TCG also proves to be crucial in bridging the gap between the Government of Myanmar and non-government agencies (NGOs), bringing them together to express grievances, find solution to smooth things out and most importantly share information and expertise.
The sole focus on relief of providing basic food/non-food items and medical care ran from May to July 2008 and consciously, starting from August 2008, the relief operations were carried out simultaneously with the early recovery activities that include drawing up of systematic plans for resettlement, restoration and improvement of transportation, communication and other basic facilities (schools, hospitals, etc.) and re-establishment of livelihoods in the affected areas. In line with the policies of Government of Myanmar and the international humanitarian community, the transition from relief to recovery was seamlessly undertaken with the introduction of early recovery and “build back better” concepts.

Currently, intensive recovery interventions are under implementation in the Nargis affected areas. The focus of recovery is slightly different in the perspectives of international humanitarian community and the Government of Myanmar; Government of Myanmar focuses more on infrastructure development and the international humanitarian community on creating more disaster resilient community through capacity building and community led disaster risk reduction programs.

The Government, as stated in the “Programme for Reconstruction of Cyclone Nargis Affected Areas and Implementation Plans for Preparedness and Protection from Future Disasters”, is concentrating on structural preparedness and protection measures such as construction of walls, barriers, embankments and storm shelters. The scheme to build new major roads within the Delta, providing over 200 miles of paved highways, to boost the region’s economy is already being executed by the Ministry of Construction. These roads also serve as flood barriers and embankments. In terms of livelihood recovery, the strategy of the Government of Myanmar is to replace the loss assets of fishing and agricultural communities.

Meanwhile, the approach adopted by the international humanitarian community, under TCG-led Post Nargis Recovery and Preparedness Plan (PONREPP) as well as under individual organization’s program, has dual aspects of building the capacity of the affected communities to enhance their understanding on disaster risk reduction and providing of various livelihood support activities, thereby empowering them with skills as well as financial means (through micro-finance schemes and direct financial support) and productive assets to manage and improve their own lives.

However, there still remains grave concern over shrinking international aids. The main apprehension is that the inadequate assistance may hamper the affected communities in the Delta to recover their livelihoods. According to the recommendations presented by second Nargis Social Impact Monitoring (SIM-2), priorities need to be given to long-term recovery activities such as livelihood strengthening, community infrastructure and disaster risk reduction. In addition, the mandates of TCG and the ASEAN Humanitarian Task Force (AHTF) are time bound and will come to an end at the end of July 2010. Questions have been raised about what other coordination mechanism can be put in place to ensure continued collaboration between various stakeholders.
OVERALL RECOVERY APPROACH

2.1 Institutional and Planning Framework for the Recovery Process

2.1.1 An Exclusive Institutional Arrangement for Nargis Response and Recovery

The unprecedented damages and losses caused by Nargis overwhelmed the in-country limited resources and capacity to deal with the disasters. During the first few days after the cyclone, the Government of Myanmar exercised tight control over relief assistances arriving from abroad. However, realizing the massive scale of Nargis impacts, the Government of Myanmar, the ASEAN, the international humanitarian agencies led by UN and the donor organizations agreed upon establishment of a new mechanism to facilitate the flow of international aid into the country with a proper tracking system in place.

Firstly, the ASEAN created ASEAN Humanitarian Task Force for the Victims of Cyclone Nargis (AHTF), endorsed at the Special Meeting of the ASEAN Foreign Ministers in Singapore on 19 May 2008. AHTF is chaired by the Secretary General of ASEAN and consists of 20 high level and senior officials from ASEAN member countries. AHTF is supported by Myanmar Central Coordination Board (CCB) and Advisory Group, comprising representatives from neighboring countries such as China, India and Bangladesh, UN Agencies, Red Cross and Red Crescent Movement, the World Bank, the Asian Development Bank and invited international organizations and donor countries. ASEAN’s role as a neutral party is central to facilitating policy dialogues among stakeholders in critical areas.

Mooted at the ASEAN Ministerial Meeting in Singapore in late May 2008, AHTF formed a Tripartite Core Group (TCG) to oversee the relief and long-term recovery works. TCG is made up of 9 representatives from the Government of Myanmar, ASEAN and UN. The main purpose of TCG is to coordinate, facilitate and monitor the international assistance to Myanmar, an ASEAN led mechanism that serves to bring together international community represented by UN and Government of Myanmar.

2.1.2 Government Institutions

Natural Disaster Preparedness Central Committee (NDPCC)\(^1\) is the main body at the national level responsible for the formulation of policy and the provision of guidance on disaster preparedness in the country. The Central Committee is further sub-divided into ten Sub-committees\(^2\), headed by senior Ministers and reporting directly to the Central Committee. Under the NDPCC, a Yangon office was set up immediately after Nargis to administer relief and response operations in the Delta and the surrounding areas of Yangon together with the Armed Forces. Due to the severe damages, NDPCC

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\(^1\) NDPCC was constituted in 2005 and consisted of 37 members; the chairmen of the 16 State and Division Peace and Development Councils, the senior Ministers from 17 Ministries and the two Chairmen of the Yangon and Mandalay City Development Councils.

\(^2\) News and Information, Emergency Communication, Search and Rescue, Information on Damage and Emergency Support, Confirmation on Damage, Transportation and Road Clearing, Reduction of Risk and Establishment of Emergency Shelter, Health, Rehabilitation and Reconstruction and Security.
assigned 12 ministers to take control of the overall coordination of relief and recovery works in each of the 12 Nargis most affected townships. At the ministerial and department levels, the extent of involvement varies from department to department. The Ministry of Social Welfare, Relief and Resettlement is the principal agency that oversees relief operations during an emergency, in particular are its Department of Fire Services and Department of Relief and Resettlement. Disaster forecasting and early warning dissemination falls under the mandates of Department of Meteorology and Hydrology (DMH) of Ministry of Transportation. Other government collaborators of disaster risk reduction include the Department of Health, Department of Irrigation, Department of General Administration, Police, Armed Forces and the semi-government body Myanmar Red Cross Society.

In terms of the institutional arrangements for disaster risk reduction at the sub-national levels, State/Division/Township Disaster Preparedness Committees are already in place, headed by the Chairmen of the State/Division/Township Peace and Development Councils. Under the circumstance that a hazardous event occurs, the above mentioned agencies will be responsible for relief and recovery works with very little or no external assistance. In the Nargis relief and recovery phase, they have been actively participating in collaboration with their international counterparts.

At the institutional level, sectoral, divisional/state and township disaster management plans have been developed with the support of Ministry of Social Welfare, Relief and Resettlement (MSWRR). In 2009, MSWRR led the effort in updating the Standing Order on disaster preparedness, response and rehabilitation. However, the existing plans and Standing Order are not widely shared with non-government bodies.

2.1.3 National, International and Regional Non-government Institutions Working for Nargis Recovery in Myanmar

As the key partners of the Tripartite Core Group (TCG), Association of Southeast Asian Nations (ASEAN) and the various agencies of the United Nations (UN) are the leading actors in the response and recovery of Cyclone Nargis. While the involvement of ASEAN is more towards coordination of recovery efforts, UN agencies focus more on operational side of recovery programs.

Equally active are the international non-government organizations (NGOs) namely International Federation of Red Cross and Red Crescent Societies (IFRC), Action Aid, Caritas, CARE International, Malteser, Norwegian Refugee Council (NRC), PACT, Save the Children, World Vision, etc. The international NGOs work closely with the relevant government agencies and the national/local NGOs in their delivery of relief and recovery programs. Majority of the local NGOs, that can be roughly categorized into faith based and non-faith based organizations, started working in disaster risk reduction only after Nargis.

2.1.4 Assessment for Planning

In the immediate aftermath of Nargis, different assessments were undertaken by different agencies such as deployment of UNDAC team by UN, ASEAN Emergency Rapid Assessment Team (ASEAN-ERAT) by ASEA Humanitarian Task Force (AHTF) and the Government of Myanmar also carried out its own assessment in the affected areas.

After the establishment of TCG, in response to the donors' call for an objective and credible need assessment, a joint ASEAN-UN assessment “Post-Nargis Joint Assessment (PONJA)” was designed and conducted in the affected areas. PONJA provided baseline data for the formulation of humanitarian

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4 Labutta, Haiguigyun (Ngapudaw), Dadeye, Pyapon, Kaygyidaunt, Kungyangon, Kawaymum Twantay, Thongwa, Kyauktan, Bogale and Mawlamyinegyun Townships.
and recovery programs incorporating early recovery and disaster risk reduction. During 10 to 19 June 2008, 250 enumerators undertook field missions to 291 villages spread out over 30 townships. PONJA utilized Village Track Assessment (VTA$^5$) and Damage and Loss Assessment (DALA$^6$) methodologies. The PONJA team faced numerous challenges in the lack of stand-by ethical capacity to support the conception, planning and implementation of assessments, but successful completion of the PONJA was widely accepted and served as the basis for various action plans and strategies for recovery of Nargis.

Box 2. Key Findings of Post-Nargis Joint Assessment (PONJA)

<table>
<thead>
<tr>
<th>Key findings of PONJA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recommendations for immediate and short term needs</strong></td>
</tr>
<tr>
<td>• Community based disaster preparedness and enhancing risk awareness</td>
</tr>
<tr>
<td>➢ To enhance community preparedness to respond to disasters and minimize the loss of lives and livelihoods.</td>
</tr>
<tr>
<td>➢ To involve community based organizations in disaster risk reduction programs</td>
</tr>
<tr>
<td>➢ To form village disaster preparedness committees</td>
</tr>
<tr>
<td>➢ To perform community based risk assessment and mapping and identification of priority interventions at the community level.</td>
</tr>
<tr>
<td>• Strengthening local level elements of early warning systems</td>
</tr>
<tr>
<td>➢ To match improved forecasts and warnings with effective communication systems, public awareness and social infrastructure at the community levels so that the warnings can be acted on.</td>
</tr>
<tr>
<td>• Introducing disaster risk reduction in reconstruction and recovery efforts</td>
</tr>
<tr>
<td>➢ To “build back better” with the use of locally appropriate construction technologies, training of building artisans and production of manuals on constructions technologies. There is a need to initiate the process of setting design and safety guidelines for the housing sector, as well as for settlement planning, infrastructure, health and education facilities, water and sanitation and livelihoods.</td>
</tr>
<tr>
<td><strong>Recommendations for medium term needs</strong></td>
</tr>
<tr>
<td>• To carry out comprehensive multi-hazard assessment to guide the reconstruction process and the development.</td>
</tr>
<tr>
<td>• To strengthen the institutional and legislative arrangements including strengthening local level disaster preparedness and response systems to increase capacity to manage risks.</td>
</tr>
<tr>
<td>• To foster national public-private partnerships to contribute to a holistic approach towards disaster risk reduction</td>
</tr>
</tbody>
</table>

To explore the development of micro-insurance mechanisms could serve to guard against natural hazards for small farmers as well as small and micro enterprises, while the construction of multi-purpose evacuation shelters would provide physical safety.

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$^5$ Household survey, focus group and key informant discussions.
$^6$ To assess the impacts on physical assets and the effect on economy arising from the loss of such assets.
2.1.5 Existing Plans on Recovery

Based on the assessments carried out; PONJA and Government’s assessment, following two major documents emerged to guide the relief and recovery of Nargis:

1. Government’s Programme for Reconstruction of Cyclone Nargis Affected Areas and Implementation Plans for Preparedness and Protection from Future Disasters

The document was prepared by the Government of Myanmar and was completed in August 2008. Three major tasks were identified for the Programme: (a) rebuilding of damaged or destroyed towns and villages, (b) rehabilitation and development of economic activities and (c) preparedness and protection from future natural disasters (construction of shelters and reforestation). The Programme was to be implemented under the direct supervision of NDPCC.


Launched on 9 Feb 2009, Post-Nargis Recovery and Preparedness Plan (PONREPP) provides a framework for humanitarian community to consolidate progress of their interventions and promote durable recovery in the affected areas that compliments the Government’s Reconstruction Plan mentioned above. The overall plan is based on PONJA findings and it serves as a platform for the transition from emergency relief and early recovery towards medium term recovery. PONREPP considers the communities both as beneficiaries of assistance and as the implementers of the recovery process. In late 2009, a revised PONREPP aptly named “Post Nargis Recovery and Preparedness Plan: Prioritized Action Plan - To Address the Critical Needs of the Survivors of Cyclone Nargis” was published listing priority sectors and their focus areas of action covering a period of 2009-2011. In sustaining a coordinated effort guided by the framework of PONREPP, the Prioritized Action Plan also ponders such crucial questions as how to increase the political support, how to capture and maintain the best expertise available and how to mobilize new resources while exploring means to sustain the current funding. The coordination support structure envisaged under PONREPP is to promote real interaction on substantive recovery matters between the Government and the international aid community at both the Township and Yangon levels. For more information on PONREPP, please visit http://www.aseansec.org/CN-PONREPP.pdf.

NOTE: At the national level, the key reference documents with regards to disaster risk reduction are the “Action Plan on Disaster Risk Reduction, Preparedness, Relief and Rehabilitation of NDPCC” and the “Myanmar Action Plan on Disaster Risk Reduction (MAPDRR)” prepared by Ministry of Social Welfare, Relief and Resettlement” with technical assistance from Asian Disaster Preparedness Center (ADPC).

2.2 Measuring the Progress of Recovery Efforts

Once the relief and recovery initiatives were in full swing, TCG commissioned a series of review exercises as a measure to what extent humanitarian relief and recovery efforts had succeeded in meeting the needs of the cyclone affected population. Until December 2009, three Periodic Reviews have been completed and findings presented to the humanitarian communities within and outside of Myanmar. All three reviews realize that the pre-existing conditions in the Delta prior to Nargis exacerbated the impacts of the cyclone, plunging the poor population of the Delta further into greater destitution.
Another complementary periodic qualitative monitoring of the social impacts of the Cyclone and the aid efforts, Social Impact Monitoring (SIM), was supported by the World Bank. The first Social Impact Monitoring findings indicated that though remote villages in the most affected areas also received relief aids within 2-3 weeks after the disaster, the level of aid varied between and within villages. Particularly those farthest from urban areas receive less than the ones nearby. It is clearly stated in both the Social Impact Monitoring reports that as the time passed by new needs emerged and the recovery programs in particular have to be flexible enough to meet those changing requirements. In the latest and second report of Social Impact Monitoring, the current needs are identified as livelihood restoration, food security and shelter.

Box 3. Summary Findings of Social Impact Monitoring Report I and II

<table>
<thead>
<tr>
<th>Summary Findings of Social Impact Monitoring Report</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The reports assess three major areas:</strong></td>
</tr>
<tr>
<td>1. <strong>Aid effectiveness:</strong> that analyses the recovery effort at the village level as experienced by affected villagers. It examines how much and what type of aids people are getting, needs and shortfalls, how assistance is being targeted and delivered, how decisions are made and how complaints are resolved.</td>
</tr>
<tr>
<td>2. <strong>Socio-economic impacts:</strong> this analyses the ongoing impacts of Nargis on key occupational groups such as farmers, fishermen and casual labourers. It examines livelihood, debt and credit and land tenure.</td>
</tr>
<tr>
<td>3. <strong>Social impacts:</strong> that analyses how Nargis and subsequent aid effort have affected social capital, the capacity in villages for collective action, group relation within villages (among gender, age, religious and ethnic groups), inter-village relations and relations among villagers and their leaders.</td>
</tr>
</tbody>
</table>

**Social Impact Monitoring- 1 (November 2008)**

1. **Aid Effectiveness**
   - Relief and recovery assistance has reached even the most remote villages. 40 percent of the affected villages studied received help within two weeks; 80 percent received help within a month. This assistance came from a wide range of providers: the government, private individuals and groups, religious organizations, the private sector, local and international NGOs, UN agencies, ASEAN and its member countries, and many other bilateral donors.
   - Levels of aid vary between and within villages. Although there is a broad correlation between the level of aid received and the level of damage and loss, there is a negative correlation between the level of aid received and distance from urban centres. A number of villages close to urban centres received high levels of aid despite being relatively less affected by Nargis. The types of aid most frequently received were food, household goods, and shelter and farming inputs. Health assistance and fishing inputs were received by fewer villages. Many moderately or highly affected villages were not recovering quickly despite receiving relatively high levels of aid. This suggests that the scale of aid and/or its effectiveness is still insufficient.
   - Livelihoods assistance, which has been limited to date compared to needs, has proven essential despite some technical shortfalls. Although villagers expressed appreciation for the livelihoods support they had received, they also reported problems with farming inputs, such as unsuitable seeds and tractors with inappropriate wheels. Fishing inputs, such as boats and nets, have not been distributed widely enough. Labourers who make up the majority of the
studied population have received relatively little livelihoods support. Cash has been the most effective form of assistance.

- As time goes on, needs are changing. According to villagers, the most important need now is support to re-establish livelihoods and food security. The positive experience in many villages during the immediate relief phase suggests cash grants to the needy are the most effective way to reduce food insecurity; they would also provide incentives to farmers to increase local production.

- The use of a wide range of mechanisms to target and distribute aid, which vary both between and within villages, has led to some confusion and perceived inequities within villages and has constrained local level coordination. In almost every village, aid providers rather than aid recipients determined what kind of aid would be provided to whom. The focus of the affected communities is on their immediate survival and recovery. Across almost all villages visited, villagers did not prioritise reducing their vulnerability to future disasters, even though many now fear storms and lacked the means to reduce their villages’ exposure to weather-related risks.

- In none of the affected villages studied did villagers know of project complaints systems. In some cases reduced aid performance. However, villagers sometimes complained to their local leaders or emergency committees when there were problems with aid. In those cases, checks and balances existed to help ensure that aid was then delivered more transparently.

**Socioeconomic Impacts**

- Farming productivity and crop yields have decreased significantly. Reasons for this include the intrusion of salt water and loss of key agricultural inputs such as animals, tractors, seeds and credit. Reductions in harvests have increased the debt burden of farmers, who have been unable to repay old loans and have had to borrow to meet their consumption needs. Fishing has also been severely affected and the fishermen are struggling to recover. Reduced catches and a lack of fishing boats and nets mean fishermen have been unable to repay their debts. This has prevented them from gaining access to new credit. This downturn in fishing is having knock-on economic impacts on those previously employed in supporting industries, often as day labourers.

- The opportunities for paid work for landless labourers has been reduced due to reduced demand for their labour from the larger-scale farmers and fishermen. Labourers have received relatively little livelihoods support compared to other groups. As a result, many face immense difficulties in getting by. There has been an increased in debt burden. Debt levels were already high before the cyclone, but villagers reported being able to manage. If not addressed properly, this could lead to continued depression of the local economy, increased migration out of villages and the Delta, farmers and fishermen losing their land use or fishing rights in coming years, and a redistribution of assets to the few.

**Social Impacts**

- Social capital continues to be strong and has grown since Nargis. Villagers have worked together to overcome immediate challenges, which has strengthened social relations, such as cooperating in rebuilding houses, rehabilitating public goods, and sharing aid and basic necessities such as shelter. In most of the villages studied, crime and violence levels have not risen since Nargis.

- Gender relations had either remained the same or strengthened. In some cases the gender balance has changed, which has affected the gender division of labour. Widows and widowers have had to take on new tasks. Youth in affected villages have played an important
role in cyclone relief and recovery. In most cases, villagers reported being satisfied with this.

- The inter-ethnic and inter-religious relations have remained strong. Only two villages reported that some minority religious groups had given assistance exclusively to members of their own faiths and this had led to some tensions, indicating that aid targeting along exclusive ethnic or religious lines risks damaging social cohesion.

- Cyclone Nargis does not appear to have had large-scale impacts on inter-village relations. There are some signs of increasing interdependence. A number of villages helped their worse-off neighbours. The research found no cases of inter-village conflicts over natural resources.

- In most villages, significant collective community leadership emerged through village emergency committees. Since Nargis, village heads, elders, monks, men, youth and some women have taken on relief and recovery responsibilities. In about one-third of the villages, relations between villagers and formal and informal leaders (religious leaders, elders) improved, and in about half of the villages, relations have not obviously changed. In some cases, suspicion over aid distribution has increased levels of discontent with village leaders. Generally, though, relations between formal and informal leaders were good.

**Social Impact Monitoring- 2 (November 2008)**

1. **Aid Effectiveness**

- Cyclone survivors continue to prioritize livelihoods aid. In SIM 2, the villagers still prioritize health, education and aid to recovery small scale community infrastructure to enable them to have better linkages with markets and other villages.

- There has been a shift from emergency aid to longer term assistance. Disaster risk reduction measures also increased, initiated both by aid providers and communities themselves.

- However, aid levels have dropped and are too low to enable cyclone survivors to recover their livelihoods adequately. Overall aid levels have dropped sharply and livelihoods aid has decreased along with it. Highly damaged villages and very remote villages continue to receive more aid than less affected or less remote villages. SIM 2 found that neither damage nor overall levels of aid appear to strongly determine the pace of recovery.

- Villagers mostly preferred cash or affordable credit but sometimes they preferred in-kind assistance that allowed them to avoid social pressure to repay debts to creditors, reflecting the importance of consulting with and giving choices to villagers in aid decisions.

- Nevertheless, aid providers continue to make aid decisions rather than aid recipients and aid distribution is more formalized through formal leaders and village emergency committees. Community contributions to the aid efforts have increased though the amount of information shared among villagers about aid varied.

2. **Socioeconomic Impacts**

- Social economic conditions are still challenging and are exacerbated by the wider economic environment. There has been little overall progress with livelihoods recovery. Wider economic constraints such as falling farm gate prices and a scarcity of credit made the recovery efforts harder.

- Farmers, fishermen and casual laborers continue to struggle. Farmers have been unable to afford adequate farming inputs which have caused farming yield to drop. Moreover, on average, the prices of the most commonly grown types of paddy were about 20 to 25 percent lower than before the cyclone meaning the farmers are growing less and making less
from what they grow. As for the fishing industry, most fishing aid provided has been small scale fishing gear that enables fishermen to earn subsistence living rather than the kind of large scale aid and capital necessary to revive the fishing value chain. As in SIM-1, the inability of the big farmers to recover has reduced the job opportunities for casual labour within the village. Furthermore, some farmers and fishermen have become casual labour themselves putting more pressure on the competition.

- Debt levels are rising and interest rates remain high. Some of the people in villages and town who previously faced the risk of debt trap are now in a debt trap. The cyclone destroyed people’s assets and their ability to repay pre-existing debts. Many households are now in a debt trap, from which the prospects of escape are few without external support. High interest rates have not changed after Nargis and the lowest interest rates available were offered agricultural development banks or micro-finance institutions but the supply of such credit was extremely limited.

- The credit supply has shrunk. Demand for credit far outweighs supply. The credit market in the delta mainly dominated by the informal lenders and pawn/gold shops has faced high levels of default since the cyclone, even with the flexible repayment terms. Many private money lenders have also lost their capitals and have seen their business decline, which has led to decrease in the overall supply of credit in the system.

- Farmers and fishermen have downgraded their livelihoods and produce less, which has impacts up and down the value chain. Villagers have begun to lose their lands to moneylenders.

3. Social Impacts

- Social capital is still strong but is getting weaker in a few villages. Social cohesion is strengthened by the mutual participation of community members in the aid effort. However, the rising aid-related tension in some villages has weakened the social capital in some villages.

- Gender relations remain good but widows, widowers and orphans face the greatest challenges. In villages with high overall or disproportionately high male or female death tolls, gender work roles within household have shifted. This has created a noticeable double burden for windows and widowers. For the orphans whose relatives cannot afford to take care of them, they have had to start work as child labourers.

- Relations among age groups continue to be strong. Villagers reported that relations among young people and the elderly continue to be good and that youth groups have become more involved than before in community-wide affairs.

- The roles of religious leaders in the aid efforts have changed somewhat with Buddhist monks appearing to focus more on providing support for education and Christian and Muslim religious leaders continue to be involved in day-to-day activities. A few cases of social tension arising from exclusive faith-based targeting, however, arose.

- Relations among villagers and their leaders remain the same or improve. Formal leaders continue to play a strong role in aid-related affairs though the roles of village leaders in aid-affairs decreased somewhat since SIM-1.

- Inter-village interactions have increased. Social and religious interaction has increased somewhat but business and administrative interactions have decreased, especially where pathways and bridges connecting villages remain destroyed.
2.3 Integration of Disaster Risk Reduction into Nargis Recovery

With the exception of a handful of organizations, like Myanmar Engineering Society that has been working on hazard maps well before Nargis; since 2005 Department of Hydrology and Meteorology has been a member of the Regional Early Warning Committee and UNICEF has been promoting mainstreaming disaster risk reduction into education sector; from around year 2000, UNDP, IFRC and MRCS has their community based disaster risk reduction programs, disaster risk reduction is a concept introduced to humanitarian sector in Myanmar primarily after Nargis. Although Myanmar is a signatory of Hyogo Framework for Action (HFA) disaster risk reduction is relatively a young sector in humanitarian field in Myanmar. This leads to low indigenous capacity but it creates new learning opportunities for local agencies.

Hitherto the integration of disaster risk reduction into overall Nargis recovery is weak. Gender and DRR are widely acknowledged as cross cutting issues but in actual implementation of recovery programs, little has been done. One of the influencing factors is the background of the implementing agencies: development oriented organizations invest more efforts in mainstreaming disaster risk reduction into their recovery operations aiming for a long term impact while relief oriented institutions focus more on the distribution of relief aids as the sole objective. Another cause identified is the poor donor’s commitment on promoting disaster risk reduction in their funded activities. Moreover, lack of a comprehensive and transparent disaster management framework nationally also contribute to the insubstantial incorporation of DRR. On the whole, shelter can be termed the best performing sector in Nargis recovery with regards to integration of disaster risk reduction notwithstanding the low funds it receives.

The following table, adapted from the DRR PONREPP Sector Plan, looks into the contributing factors that become constraints or enabling factor for mainstreaming disaster risk reduction in the Nargis recovery operation.

Box 4. Constraints and enabling factors for DRR integration in Nargis recovery

<table>
<thead>
<tr>
<th>Constraints</th>
<th>ISSUES</th>
<th>Enabling Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>DRR sector in Myanmar is still in its stage</td>
<td>x</td>
</tr>
<tr>
<td>X</td>
<td>Needs for (due to insufficient) risk and vulnerability mapping</td>
<td>x</td>
</tr>
<tr>
<td>X</td>
<td>Absence of disaster management policy</td>
<td></td>
</tr>
<tr>
<td>X</td>
<td>Limited availability of resources for DRR</td>
<td></td>
</tr>
<tr>
<td>X</td>
<td>Inadequate capacity of local institutions in DRR</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Constraints</th>
<th>ISSUES</th>
<th>Enabling Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>Absence of a multi-hazard approach</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Existing community and family coping mechanisms</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Existing national and local institutional arrangements on DRR</td>
<td>x</td>
</tr>
<tr>
<td>X</td>
<td>A stand-alone DRR working group</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Access to education materials for DRR</td>
<td>x</td>
</tr>
</tbody>
</table>
At the same time, noteworthy performances by agencies like IFRC and MRCS is apparent from the beginning as they promote ‘build back stronger’ through a framework for community safety and resilience for recovery that incorporates cross-cutting components such as gender, psychosocial support and DRR.

In 2008, within months after Nargis, UNDP launched its two-year Integrated Community-based Early Recovery Framework (ICERF) initiative builds on the Early Recovery Strategy of the UN system and its partners in Myanmar. ICERF utilizes UNDP Myanmar’s existing capacity in the hardest-hit region of the country, the Ayeyarwaddy Delta, focusing on coordination arrangements for implementation and monitoring of early recovery projects, livelihood restoration and community infrastructure rehabilitation, revival and strengthening of community-level mechanisms to support recovery and disaster preparedness and risk reduction with gender mainstreaming, HIV/AIDS and capacity development as cross-cutting themes.

Purely disaster management focused activities, so far, have been implemented by agencies other than UNDP and MRCS-IFRC such as Action Aid, Mingalar Myanmar, Metta Foundation, All India Disaster Mitigation Institute (AIDMI), OXFAM, Save the Children (child led disaster risk reduction), etc. Many humanitarian agencies already have or are on the verge of developing individual disaster risk reduction strategy and it is encouraging to see the increased level of preparedness for the future disaster events. Yet, the DRR initiatives seem a bit isolated from the other recovery sector works.

In 2010, AHTF jointly with Asian Disaster Preparedness Center (ADPC) are working to advocate the incorporation of disaster risk reduction into post-Nargis recovery processes through development of sector specific guidelines. Priority ministries selected are construction, health, education, planning and social welfare.

But given the limited resources available for Nargis recovery, care needs to be taken not to turn the humanitarian agencies from being partners into competitors vying for the same and limited number of funding sources. Furthermore, some donors find it confusing to have too many individual plans and strategies and they prefer to see a consolidated plan that demonstrates a united front for all humanitarian players in the country.
2.4 Overall Coordination System

As the relief phase transited into recovery, TCG adopted the recommendation proposed in PONREPP to establish Recovery Forum (RF) and Recovery Coordination Center (RCC) for the overall coordination of PONREPP implementation.

Box 5. Seven Core Elements for Coordination of PONREPP Implementation

| The seven mission-critical or core elements regarding coordination of PONREPP implementation |
| 1. **Focusing** on the beneficiaries – households, villages and towns – addressing their needs and their priorities, and responding as quickly and efficiently as possible. |
| 2. **Seeking** greater effectiveness and efficiency of international aid and assistance by coordinating and sharing information with actors and stakeholders on the ground. |
| 3. **Strengthening local coordinating bodies**, particularly the Township Coordination Committee (TCC), so that decision-making is well-informed and timely, and focuses on critical needs identification, prioritization and appropriate responses. |
| 4. **Defining** the level and detail of coordination and consultation needed for stakeholders to carry out their work most effectively with beneficiaries. |
| 5. **Resolving** the constraints faced by implementing agencies and partners in the field, acting as an information and problem-solving conduit between the field and Yangon, and liaising with the TCC, so that all may be able to work more efficiently and collaboratively. |
| 6. **Backstopping coordination efforts in the field**, addressing unresolved field-priority issues with Yangon-based expertise, informing the deliberations of the Recovery Forum through analytical papers and reviews, and monitoring aid flows and funding gaps. |

The Recovery Forum (RF) is a high-level body that reviews the overall post-Nargis recovery effort in an inclusive and transparent manner. It holds the central role in bringing together all stakeholders, with high level government representations, to discuss and debate how well recovery assistance is being applied, and make recommendations on operational and financial matters. Although RF is not a decision-making body, it will make recommendations to the TCG, and to any other party involved in the recovery effort. So far, a series of consultative meetings have been convened under RF since December 2009.
Box 6. RCC and its Three Working Groups

The Recovery Coordination Center (RCC) was established in June 2009 by pooling together resources from UNDP and TCG. Key responsibilities of RCC can be listed as:

- Aid coordination and tracking,
- Identification of gaps and emerging needs based on inputs from the field (by facilitating two way information flows through the Recovery Hub Offices),
- Management of a recovery information system (RIS) including dedicated website, building upon and improving the current products and services of the Myanmar Information Management Unit (MIMU) and also drawing on other data and information sources as necessary,
- Provision of joint secretarial services to TCG and the Recovery Forum (RF),
- Administration of three Yangon-based Recovery Working Groups, the proposed successors to the Yangon clusters for the Delta.

It is envisaged that the RCC would remain in place until PONREPP had been implemented and would have useful insight into the progress of the Government’s Reconstruction Plan.

Integral parts of this coordination system are the Recovery Hub Offices (RHO) that continue to assist the Township Coordination Councils after the UNOCHA hub offices phased out. Each office is staffed with a Recovery Liaison Coordinator (RLC), a National professional or assistant, an Information Officer and one administrative support person. Under RCC, regular coordination and information sharing is ensured through regular meetings of three workings groups. The Hub Offices in Bogalay, Labutta and Pyapon employ the same structure called Field Recovery Working Groups to oversee the coordination of humanitarian works on the ground.

The Recovery Hub Offices report directly to RCC and their monthly township level general coordination meetings, chaired by District Peace and Development Council (DPDC), address and discuss policy and programmatic matters relating to recovery. By improving the coordination framework both vertically and horizontally, the entire structure also functions as a capacity building support to the Government counterparts.
Box 7. Institutional Arrangement for Nargis Recovery Coordination

Box 8. Terms of Reference of the Field Recovery Working Group

**Terms of Reference of the Field Recovery Working Group**

The Field Recovery Working Group modality is expected to be the main forum at the Township level for agencies involved in recovery work to:

1. discuss matters related to implementation, including coordination with other actors in the Township;
2. identify emerging needs, gaps and overlaps;
3. participate in and thus influence recovery related policy and programme dialogue both at the Township level, and initiated at the Yangon level;
4. identify needs and opportunities for capacity building of Township Coordination Committees (TCCs) members/staff;
5. identify common matters of concern and channel them through a coherent and dedicated structure that ties implementing agencies, Government and donors together at both the Township and Yangon level:
6. promote complementarity amongst partners; and
7. participate in a continuous process to build trust and comfort between the Township authorities and partners.

The Field Recovery Working Groups are serviced by the Recovery Hub Offices (RHO) with information, facilities, backstopping, and receive support and guidance from the Senior Coordination Officer in the Recovery Coordination Centre (RCC) and the Yangon Recovery Groups. As the involvement of local NGOs and local authorities is at the core, that meetings are to be conducted in Myanmar language, with English translation. The memberships of the Working Groups are to be taken up by voluntary participation of UN, INGOs, NGOs, and representatives from the Township authorities and private sector, as appropriate.

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7 Thematic Working Groups also operate at the national level, overseeing the coordination of nation-wide humanitarian and development works in Myanmar. Their basic structures are similar to the cluster systems of UNOCHA. Information compiled from the meetings of RCC’s Recovery Working Groups is shared at the Thematic Working Group meetings.
A parallel coordination system that exists at the township level is the one ran by the Township Peace and Development Councils. Weekly meetings convened in the early days of Nargis response have been reduced to once monthly meetings in the recovery phase. Opposed to the Recovery Hub Offices, the township structures are present in all Nargis affected townships.

At the 2nd Recovery Forum organized by the TCG on 12 March 2010, in-depth discussion took place with regards to the transition strategies for the end of TCG’s mandate in July 2010. It was agreed that Ministry of Social Welfare will take most of the coordination responsibilities for the remaining projects under PONREPP beyond July 2010. Additional line ministries, such as the Ministry of Health, Ministry of Education, Ministry of Agriculture and Irrigation, Ministry of Progress of Border Areas and National Races Development Affairs as well as the National Disaster Preparedness Central Committee (NDPCC) will be involved. Township authorities will play an important role in coordinating recovery activities on the ground.

With already strong presence in the affected townships, UNDP will be upholding the already established coordinating mechanisms under the RCC, which, with a reduced staff, will remain in order to coordinate cooperation with the Ministry of Social Welfare, to provide secretarial functions to the Recovery Working Groups and to support the coordination of international assistance. So too will remain two Recovery Hub Offices. In collaboration with MIMU, RCC will continue to produce the quarterly newsletter in Myanmar and English.

### 2.5 Management of Financial Resources for the Recovery Programs

Over the period of May 2008 to end of June 2009, total of 330 million USD was received from the international community, 69% of the 477 million USD requested under the Flash Appeal. For the implementation of the PONREPP Prioritized Action Plan, international financial pledges have totaled 91.83 million USD, 88% of the estimated 103 million USD. With European Commission leading the long list of donors with 21 million USD, other donor countries pledging to financial assistance include Australia, Denmark, Indonesia, Japan, Netherlands, NZAID (New Zealand Aid), Norway, Singapore, Sweden, Switzerland, Thailand, UK and USA.

Five months after the Post-Nargis and Regional Partnership Conference, out of the USD 54.25 million released fund, USD 32.24 million went to individual implementing partners and USD 22.01 million to Trust Funds such as Livelihoods and Food Security Trust Fund (LIFT), Health PONREPP and Global Facility for Disaster Reduction and Recovery (GFDRR).

Although a systematic approach in monitoring the fund movements has not been set up since the beginning of response and relief phase, currently the UN Resident Coordinator’s Office is leading the effort in order to facilitate the contributions from donors and to ensure the commitments made are translated into real recovery projects in collaboration with RCC.

In addition to the international assistance streamed through ASEAN mechanism for PONREPP, there also exist other multilateral and bi-lateral funding schemes that go directly to the implementing agencies. Under these schemes, it is principally the responsibility of the recipient organization to manage the resources and a considerable number of the funding agreements contribute to the PONREPP implementation.

In November 2009, 100 million USD multi-donor Livelihood and Food Security Trust Funds (LIFT) for the poorest and the most vulnerable people of Myanmar launched its First Round of Call for

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proposals. But currently LIFT is a one year endeavor waiting for approval from Myanmar Government for longer term support.

Box 9. Livelihood and Food Security Trust Funds (LIFT)

Livelihood and Food Security Trust Funds (LIFT)

Overall objective: To progress towards the United Nations Millennium Development Goal No. One.

Purpose: To improve the food and livelihood security of the poorest and most vulnerable populations in rural and peri-urban areas in Myanmar.

Objectives:
- Increased crop and livestock production, fisheries and sustainable harvesting of NTFP
- Diversified and increased household incomes
- Expanded local employment through business development
- Improved food and nutrition security and strengthened existing mechanisms providing social protection
- Improvements in the enabling environment.

Governed by a donor consortium including Australian Agency for International Development (AusAID), the European Commission (EC), the UK’s Department for International Development (DFID) and the governments of Denmark, France, Germany, the Netherlands, Norway, Sweden and Switzerland, LIFT’s priority geographical areas in the country cover townships in the Ayeyarwaddy Delta, Dry Zone, Shan State, Chin State, Rakhine State and Kachin State. Through the competitive bidding process, the LIFT funds are to be disbursed to implementing NGOs. Specifically with regards to the Nargis recovery in the Delta, LIFT is aligned to the National Medium-term Priority Framework (NMTPF) and to PONREPP. UNOPS is the fund manager of LIFT and the proposals will focus on community based interventions targeting the poorest and most vulnerable groups.

A first round Call for Proposals has been launched on 11 November 2009 for interested implementing partners including UN Agencies, international and local non-governmental organizations and professional associations authorized to operate in the prioritized areas. Geographical areas include prioritized townships of the Delta, Dry Zone, Shan State, Chin State, Rakhine State and Kachin State.

Nonetheless, the slow trickle of funding in general for Nargis recovery has raised concerns with regards to the strategy of the donors that mix politics and humanitarian priorities. Considering the still dire needs in the Nargis affected areas, greater commitments from donors to continue supporting the Nargis recovery process is critical.

Case Study 1. Post-Nargis Assistance Column (PONAC) and Project Tracking

Following the Post-Nargis and Regional Partnership Conference held by ASEAN with the support of Post-Nargis humanitarian community on 25 November 2009 at the United Nations Conference Centre (UNCC) in Bangkok, Thailand, a monthly update namely Post-Nargis Assistance Column (PONAC) was launched to provide information to stakeholders on the delivery of the Prioritized Action Plan. Subsequently, ASEAN is making all efforts to follow-up with donors in order to turn pledges into commitments. Together with other components of the TCG, ASEAN will continue its coordination to ensure transparency and good governance in the implementation of international

\[9\]

In general, UNRC office is tracking the overall Flash Appeal funding, covering relief phase, and AHTF project tracking covers mainly the PONREPP funding.
assistance to address the critical needs of Nargis-affected communities.

PONAC tracks the funding to deliverable outputs on the field through its Project Tracking system (PROTRACK). The purpose of PROTRACK is to provide a monthly update on project delivery status on the field from organization that received funding from the Post-Nargis and Regional Partnership Conference. A delivery unit was also set up, consisting of a monitoring and evaluation officer and four data analysts, to intensively monitor on how achievement reach against the Priority Action Plan.

Delivery unit of AHTF, with close coordination with RHOs, captures progress on the ground through regular field visit to each of registered projects. The delivery unit builds up the regular communication with donors to update the status of Aid delivery. A complete list of project tracking activities is stored in PONAC database, Recovery Information and Accountability System (RIAS).

Some of the products under PONAC include the table below depicting the status of funds released by each donor, comparing the pledged amount and the actual quantity released so far with remaining balance shown for monitoring purposes. The graph underneath indicates the amount of fund needed to support each sectors as stated in Prioritized Action Plan, the amount of fund stated by Donors to support Prioritized Action Plan and the amount of fund that has already been disbursed from donor to trust fund or implementing partners directly.

The figures presented at PONAC are based on information provided by donors, implementing partners and relevant agencies.

<table>
<thead>
<tr>
<th>Status of Funds Released by Donors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Country</strong></td>
</tr>
<tr>
<td>Australia</td>
</tr>
<tr>
<td>Denmark</td>
</tr>
<tr>
<td>EC</td>
</tr>
<tr>
<td>Indonesia</td>
</tr>
<tr>
<td>Japan</td>
</tr>
<tr>
<td>Netherlands</td>
</tr>
<tr>
<td>New Zealand</td>
</tr>
<tr>
<td>Norway</td>
</tr>
<tr>
<td>Singapore</td>
</tr>
<tr>
<td>Sweden</td>
</tr>
<tr>
<td>Switzerland</td>
</tr>
<tr>
<td>Thailand</td>
</tr>
<tr>
<td>United Kingdom</td>
</tr>
<tr>
<td>USA</td>
</tr>
<tr>
<td>Estimated Total</td>
</tr>
</tbody>
</table>
A monitoring tool presented by PROTRACK is the summary of achievement table as shown below.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Donor</th>
<th>Implementing Partners</th>
<th>Activities</th>
<th>Unit</th>
<th>Completed</th>
<th>On going/Blinder Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shelters</td>
<td>Switzerland</td>
<td>SDC</td>
<td>Construction of New houses</td>
<td>Numbers</td>
<td>125/3</td>
<td></td>
</tr>
<tr>
<td>Livelihood</td>
<td>Denmark</td>
<td>GRSI</td>
<td>Power祈修/Therchefs</td>
<td>Numbers</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Training (farmers, Ex-visit)</td>
<td>Persons</td>
<td>3978</td>
<td></td>
</tr>
<tr>
<td>LIVELIHOOD</td>
<td>Norway</td>
<td>IDE</td>
<td>Shelter/ rehabilitation</td>
<td>Numbers</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Awareness training about DRR</td>
<td>Persons</td>
<td>12,000</td>
<td>15000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Training (fuel stove making)</td>
<td>Numbers</td>
<td>1500</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cash for work</td>
<td>Persons</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>Switzerland</td>
<td>SDC</td>
<td>Const. schools</td>
<td>Numbers</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Thailand</td>
<td>Thai Army</td>
<td>Const. schools</td>
<td>Numbers</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>HEALTH</td>
<td>Indonesia</td>
<td>GoUM</td>
<td>Construction of Hospital</td>
<td>Numbers</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Thailand</td>
<td>Thai Red Cross</td>
<td>Construction of Hospital</td>
<td>Numbers</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Healthcare Center</td>
<td>Numbers</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Renovation of Blood Center</td>
<td>Numbers</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>WASH</td>
<td>Australia</td>
<td>Meri</td>
<td>Formation and training of Village</td>
<td>Numbers</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Hygiene Education</td>
<td>Numbers</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Portable water distribution</td>
<td>Numbers</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Distribution of household water</td>
<td>Numbers</td>
<td>40,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Construction/ renovation of pond</td>
<td>Numbers</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Renovation of hand dug-well</td>
<td>Numbers</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Distribution of HH rain water collec</td>
<td>Numbers</td>
<td>1,5000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Construction of household latrines</td>
<td>Numbers</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Distribution of latrine pipe &amp; pipes</td>
<td>Numbers</td>
<td>3,0000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Save the Children</td>
<td>RO Construction</td>
<td>Numbers</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Dry season response</td>
<td>Numbers</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>RWCT</td>
<td>Numbers</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>New pond construction</td>
<td>Numbers</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Pond improvement</td>
<td>Numbers</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Pond sand filter</td>
<td>Numbers</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Hand Dug Well</td>
<td>Numbers</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>World Vision</td>
<td>Purified water distribution</td>
<td>Gallons</td>
<td>86,900</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Hygiene Education</td>
<td>Numbers</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Rehabilitation of waterbonds</td>
<td>Numbers</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

For ease of the users, each project is charted on the existing map and respective brief explanation.
Key Lessons Learned

- The accountability is a two-way process and the funding agencies are as equally responsible as the implementing institutions in ensuring the accomplishment of recovery objectives.

- Monitoring is an effective tool that enables the beneficiaries to demand high quality outputs from both donors and project execution organization.
3.1. Policy support and coordination

After a slight delay at the beginning of the Nargis response phase, the transition from response to rehabilitation to recovery has been relatively smooth. TCG has been instrumental in making the transitions seamless by means of championing continual information sharing among implementation agencies and maintaining persistent dialogue with donors to generate consistent funds.

Though differential recovery focus between the Government and non-government sectors exist where the Government favours structural interventions with tangible results and the non-government agencies prefer an approach combining structural and non-structural methods (capacity building, awareness raising, socio-economic development), the coordination mechanism applied through Recovery Hub Offices has strengthened the understanding and partnership between the local government authorities and the non-government agencies.

Particularly at the township levels, recovery coordination is overseen by the four hub offices where they exist or by the government system under the Township Peace and Development Council\(^{10}\). Regular information sharing meetings at the township levels are usually attended by implementing NGOs and the township authorities, especially the representatives from Township Department of General Administration.

Box 10. 2010 Priority Areas for Humanitarian Country Team

<table>
<thead>
<tr>
<th>2010 Priorities</th>
</tr>
</thead>
<tbody>
<tr>
<td>• An estimated 150,000 households are in urgent need of shelter assistance.</td>
</tr>
<tr>
<td>• Need for construction of schools, provision of supplies, and capacity building of teachers.</td>
</tr>
<tr>
<td>• Need to enhance health and welfare services to all vulnerable groups.</td>
</tr>
<tr>
<td>• Clean drinking water is desperately short in some Nargis affected areas, due to increased salinity, polluted or insufficient freshwater ponds.</td>
</tr>
<tr>
<td>• Livelihood activities must be scaled-up to ensure income opportunities and self-sustainability for households and communities.</td>
</tr>
<tr>
<td>• Develop disaster risk reduction capacity to ensure communities are better prepared should they be faced with another disaster.</td>
</tr>
</tbody>
</table>

Prepared by the Humanitarian Country Team, made up of UN agencies, international NGOs, national NGO consortia and IOM, with IFRC and ICRC as observers.

\(^{10}\) The government coordination system present in every township.
At the national level, the Government of Myanmar has sustained its support to the on-going recovery efforts through TCG. Bi-lateral collaborations between different NGOs and concerned ministries are also fostered for specific sector focused activities. Some of the examples are the long standing partnerships between UNICEF, UNESCO and the Ministry of Education, WHO with Ministry of Health, FAO with Ministry of Agriculture and Irrigation, UNEP and FREDA with Ministry of Forest, etc. Overall political support, in general, for recovery operations have been deemed satisfactory by many NGOs apart from some minor delays present at the project approval stage.

NOTE: For information on Nargis projects implemented under PONREPP, information on who is doing what kind of activities in what area (3W – who, what, where) can be obtained at Myanmar Information Management Unit (MIMU) (http://www.themimu.info/index.html) and ASEAN Humanitarian Relief Efforts for Victims of Cyclone Nargis http://www.aseansec.org/CN.htm. For financial related information “appeals and funding” page on relief web (http://ocha.unog.ch/fts/pageloader.aspx) also offer basic data.

Challenges and Lessons Learnt

- Building a relationship of trust with the government from the beginning can result in realistic expectations of what the local and national governments can do.

- Although the improved coordination between government and non-government agencies is an undeniable evidence of the ASEAN and UN led recovery efforts in Myanmar, the fundamental mechanism of working group and cluster creation, at the same time, generate isolated units that concentrate exclusively on their specific areas with very little cross sectoral integration. An assessment of the cluster/ working group approach need to be undertaken for enhanced integration.

- The coordination at the township level is lauded as a success story by all players involved but the existence of two parallel mechanisms (HUB offices and official township meetings) and the lack of clear linkage between the two can be baffling to many implementing agencies. The development of a clearly defined strategy on information exchange between the two would be of great help to all concerned institutions.

- More engagement between the central and the hub levels are required to focus on the response to hub level issues.

- Language is still a problem at the various coordination meetings as some of the local staffs feel shy or not used to speaking English. Providing interpreters/ translations and simplifying reporting methods can better facilitate the participation of the local staffs and local NGOs one of the outcomes could be greater utilization of useful guidelines and resource materials already developed under various technical working groups at the ground level.

- Though government staff attended some meetings they are insufficiently engaged. To ensure more active participation of the government, it would be more effective for the negotiations to take place between Resident Coordinator/ higher level representative from ASEAN/ international NGOs and senior ministers/TCG.

11In the international arena, monthly partnership meetings are organized, mostly outside the country, attended by all international agencies and the donors, though the involvement of government at these meetings is not clear.
The existence of numerous working group and other coordination meetings, taking place at the same time do not exactly help the local organizations as some small agencies do not have adequate staff to attend all the meetings and as a result some very useful guidelines and resource materials developed by the various clusters are not fully utilized in the field.

At the regular coordination meetings, information sharing is sometimes not sufficient enough to cause overlaps of activities, resulting in unequal supports within a single area that can cause conflicts within the communities. Basic principles on how much details should be shared have to be discussed and agreed upon among the working group members to avoid waste of resources. The township authorities are requesting for more cooperation from the NGOs so as to have a better control of who is doing what and where to avoid overlap.

At times, overlaps are caused by simple misspelling of the name of a place that leads to different codes being assigned to that same spot. The advantage of regular information sharing through coordination meetings can be highly appreciated in this case and should be underscored to promote more open discussions.

A number of localized solutions in the Delta go unnoticed due to lack of proper documentation process, diminishing chances of replication. A systematic recording of such practices and guidelines on adaptation to suit differing situations can be of great assistance in guaranteeing the sustainability and ownership.

Real ground level situation reports need to be prepared regularly with the new emerging needs targeting not only at the implementing agency but also to be shared with the government counterparts as well as the donor agencies.

Relatively small investments in coordination can pay off a great deal in terms of overall improved response.

It proved effective in Myanmar context to assign experienced staff from trusted source to work with the government authorities; specifically the ASEAN Secretariat itself.

### 3.2. Shelter & Habitat Development

The PONJA reported that Nargis left close to 790,000 homes damaged or destroyed in the Ayeyarwaddy and Yangon Divisions with major damages focused in the townships of Labutta, Mawlamyingyun and Bogale. It was assumed that 80% of the homes destroyed have been self-repaired by the community though this figure is regarded by many to be an overstatement. General feedback is that the standard of the self-repair houses are nowhere near the safe minimum standards regarded by the Shelter Recovery Working Group. The cause is cited as poverty and lack of land, forcing people to construct houses (mainly huts) on marginal lands not suitable for such purposes and also using materials they can easily get hold of in the river or on waste land.

Even from August 2008, roughly considered as the beginning of the early recovery phase, many donors indicated that durable shelter would not be a priority and that their focus would be in livelihoods and other sectors. Over the past 24 months, the shelter sector has been facing the problems of insufficient sum and as per the Periodic Review III of TCG, there were around half a million people without adequate shelter, many of them still living in temporary or informal camps, more than 20 months after the disaster. As recently as February 2010, International Organization for

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12 Particularly in trust fund arrangements, the donors only hear from the middle managers who are mostly removed from day-to-day activity implementation and their report may not necessarily cover the real conditions on the ground.

13 It is important to note that many of the destroyed houses are substantial structures which had been in existence for years and in many cases, decades, on the contrary to popular beliefs that they are all simple shacks.
Migration (IOM) has appealed for 17 million USD to meet the shelter needs of 50,000 families in the Delta ahead of the coming wet season. Furthermore, as highlighted by the Shelter Recovery Working Group, the temporary shelters that received emergency assistance in the early phase of the relief effort have now gone through two complete monsoon seasons and the deteriorating materials cannot be considered of much practical value at this time and there is no guarantee it could withstand the 2010 monsoon season.

**Safer Shelter Initiatives under PONREPP**

Under PONREPP prioritized sector plan, two types of shelter are named as essential in the recovery phase: permanent houses for families who lost their homes to Nargis and community cyclone shelters, both to be constructed in consideration with future probable hazards in the area. Shelter assistance options range from provision of a basic grant starting from USD 35 to a more comprehensive grant of USD 400-500, provision of necessary construction materials and kits to build an adequate shelter, conducting of carpentry skill trainings, provision of technical assistance and development of guidelines manuals and handbooks.

Considering the capacity and the experiences gained by NGOs, private companies and the communities during the 2008-2009 interventions, where repair and reconstruction of various types of shelters were undertaken, AHTF and TCG believe that the target of the PONREPP Prioritized Action Plan on shelter can be reached provided that funds be available. Presently shelter is the most under-funded among the PONREPP prioritized sectors. To this day, more than 170,000 new shelters have been provided, over 31,000 shelters rehabilitated and close to 29,000 households assisted with materials under PONREPP Plan 14. It is envisaged that by July 2010, another 29,000 more houses will be completed under PONREPP.

Although the Shelter Recovery Working Group under the umbrella of RCC Protection Working Group has developed safe shelter standards, their mandate does not allow them to enforce the standard but only to encourage shared responsibility with the implementing partners or any agencies involving in shelter construction. Even though most of the local and international NGOs follow the design standards, some of them have to lower it due to budget restraints. In many cases, these organizations develop their own design standards and specifications and the major reference material for household shelter is the blueprints generated by Shelter Technical Working Group. These standards in turn were born out of the design competition organized by UN-HABITAT, Myanmar Engineering Society (MES) and Myanmar Architecture Association (MAA) in 2008 which was based on the “Build Back Better” and “Build Back Safer” concepts and SPHERE Standards. For consolidation purpose, UN-HABITAT is currently compiling data on shelter interventions in the delta to be superimposed on the delta population density map to determine the gap between the demands and the supplies.

Training of local masons and carpenters on safer building techniques have also been taken up by the international agencies. UN-HABITAT, the chair of the Shelter Recovery Working Group, has developed three sets of guidelines: one for carpenters, one for village shelter committee and a safer shelter guide for implementing partners (local construction companies) also featuring facilities for water and sanitation. The trainings and the guidelines highlight the use of local resources: materials and craftsmen, to boost the local economy and create job opportunities. An estimate of over 5,100 carpenters have undergone training to incorporate DRR into their housing construction methods and around 1,000 skilled carpenters were trained to become trainers themselves.

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15 The Technical Working Group established shelter standards at approximately 160 sq ft to 200 sq ft costing around USD 700 and the government adopted a standard of 320 sq ft with the cost of USD 2,500.
As part of their disaster risk reduction capacity building in Myanmar, SEEDS Asia also conducted a series of technical training for safer shelter construction with support from SEEDS India and the Myanmar Engineering Society (MES). The trainings, held at national, district and township levels, aimed to build capacities of local artisans and change agents such as local NGOs, not to directly offer shelters for the affected people, so that the local Myanmar people themselves will gain capacity to build back even better than the pre-Nargis housing conditions on their own in sustainable manner.

Another venture UN-HABITAT is undertaking is the establishment of Disaster Management Information Center (DMIC) at the township levels to relay critical but basic disaster risk reduction information to the community. These Centers once fully operational will be handed over and managed by the township Peace and Development Councils. The posters below, designed and published by UNHABITAT and adopted by many other agencies, demonstrates the main hazard resistance features applied in safer houses construction.

Contributing to PONREPP, many other international and local agencies such as ACTED, CARE, German Agro Action (GAA), IOM, JICA, Myanmar Business Coalition, Metta, Norwegian Refugee Council (NRC), Solidarities, World Vision, etc., are also building and retrofitting community buildings: religious structures such as monasteries, schools, etc., that can be used as “safe shelters”. Many communities receive cash and materials or packages or kits contributions, most of the time sufficient to build an adequate shelter, to repair damaged buildings and houses. The cost of full shelter with a life expectancy of 5+ years is US$700 - US$1,200 and the cost of individual shelter ranges from US$300 - US$2,500, depending on the type and materials used.

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16 At the national level workshop, the focus is to share experience from other countries on safer shelter construction. At the district and township levels, the focus is to train local engineers and artisans (carpenters and masons) on safer construction methods.

Safer Shelter Initiatives beyond PONREPP

Beyond the PONREPP plan, International Federation of Red Cross and Red Crescent Societies (IFRC) and Myanmar Red Cross Societies (MRCS) are also constructing sub-rural houses and household shelters for the affected communities that are furnished with water and sanitation facilities. The designs are based on the UNHABITAT safer shelter standard using local materials of bamboo and thatch. In areas where core red cross branches are located, red cross posts\(^{18}\) are being built to serve as information and health centers for the community. The IEC materials, specifically the posters, of UN-HABITAT are also being re-produced by IFRC-MRCS for distribution in their target areas. In terms of IFRC-MRCS shelter plan, there are adequate monetary resources available for continuation of the scheme.

Safer Shelter Initiatives of the Government of Myanmar

On the part of the Government of Myanmar, they have recently completed the construction of 20 cyclone shelters across delta\(^{19}\) that have different capacities of accommodating 300 or 500 people, with the direct involvement of the private construction companies. They were built according to the design specifications of the Department of Public Works under the Ministry of Construction, which took into consideration the maximum storm surge heights and earthquake factors. During the construction of hexagon shaped school cum shelters, monitoring processes were carried out through a third-party quality control team; usually a non-government local consulting company. Water, drinking water ponds including, electricity and sanitation facilities are an integral part of the design and evacuation routes with sign posts have also been installed in the community. Hillocks were also put up next to the shelter to provide a space to keep the animals safe.

The Department of Public Works, on top of the design specifications for cyclone shelter, has standard specifications for all type of buildings though it is not widely adopted nor shared. The presence of such standards receives a prominent mention in the Myanmar Action Plan on Disaster Risk Reduction (MAPDRR). Learning from Nargis, as part of the MAPDRR implementation, steps have been taken for reinforcement of building by-laws, codes of practices and city municipality acts jointly by the Public Works Department, Myanmar Engineering Society, Yangon, Nay-pyi-taw and Mandalay Development Councils and technical universities.

Resettlement of Affected Communities

In terms of resettlement of Nargis affected population, it is mainly handled by the Government of Myanmar. Since the aftermath of Asian Tsunami 2005, the Urban and Regional Planning Division, under the Department of Housing Development of Ministry of Construction, has prepared basic procedures for construction in hazard prone areas\(^{20}\). Immediately after Nargis in 2008, the Division worked on new village plans in the Delta for relocation of affected communities. The plans were accompanied by recommendations, made based on internationally recognized town/village planning practices for new settlements in the low lying coastal areas, completed with detail drawings. These plans and recommendations serve as the basis for setting up of new villages in the Delta. Department of Development Affairs under the Ministry of Home Affairs oversaw the ground level implementation of housing for these settlements while the Department of General Administration held the responsibility in issuing housing permits through the local Peace and Development Councils. Private donors also provided money to establish new villages for resettlement of internally displaced people and homeless.

\(^{18}\) 150 posts have been completed. They will have communication equipment and will house IEC materials.
\(^{19}\) Close to 40% of allocated fund for shelter under PONREPP has been set aside for the government cyclone shelter construction.
\(^{20}\) National Land Use Commission of Myanmar, established in 1995, is responsible for reviewing and developing policies on land management.
UNHCR and UNHABITAT are also helping displaced families from the Nargis affected areas to resettle in areas through joint public awareness campaigns that feature presentations and talks on obtaining proper titles through official registration and application procedures to the authorities and residents in the Nargis hit areas of the Delta. The presentations and talks are conducted by the Government expert, the Land Advisor, on Land Laws in Myanmar. The combined efforts of these agencies have benefited more than 3,000 displaced families (see case study 2) in the Delta to obtain rights and legal settlements in a new place that also offers livelihood opportunities for the new settlers. A “Guidance Note on Land Issues” in Myanmar, a booklet, was also published jointly by UNHABITAT and UNHCR to serve as a quick reference for local authorities and NGOs to gain an understanding of relevant land laws and the context of land use in Myanmar.

**Challenges and Lessons Learnt**

- Though most sectors have received minimum commitments against the appeals, in line with the implementation timeframe of the PONREPP; the Shelter Sector, which experienced 1/3 of the total damage impact as a result of Nargis, has not been addressed in the same way and remains in dire need of support. Shelter is the LEAST funded post-NARGIS sector and with no clear resources nor mechanisms to address the issue of re-housing vulnerable families which may reverse the gains made by other sectors.

- Building the capacity of the local communities on safer shelter construction can impart life skills for greater job scopes, increase the resilience of the communities at the same time and raise the awareness of the communities to demand more accountability from the donors and implementing agencies and vice versa.

- Permanent shelter is linked to other basic necessities of self-maintained communities. Lack of permanent shelter means lack of safe water resources, access to health facilities, livelihood opportunities and land. Permanent shelters act as assets and collateral for families to be eligible for loans and other financial support schemes. In addition, cross sector integration with WASH and livelihoods need to be pursued to ensure more holistic approach.

- There is a need to consolidate the various design standards developed by different agencies with endorsement from Ministry of Construction of Myanmar Government.

- Technical standards are important but they are feasible only when they are matched to the reality of funding.

- The standards were often ignored because government began promoting much higher specifications. To resolve this issue, greater engagement with the government agencies need to be promoted. At the lessons learned workshop held in June 2009, the shelter cluster members proposed chairing of the Shelter Cluster by the government and co-chaired by a UN Agency and a NGO. A stronger government involvement will provide legitimate ground for enforcement of such standards and further prevent sub-standards or low-standard constructions susceptible to future disaster risks.

- When seeking the crucial support from the government, written acceptance of agreed standards should be obtained from the government authorities.

- Still donor funding is the key driving force behind the design of many shelters and often donors limited inputs which could not meet any shelter standard.

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The track records of some of the private construction companies are debatable. NGOs face the problem of having to hire additional inspection firms to ensure at least the minimum construction standards are met and this involve extra costs. Involvement of private sectors in the shelter coordination mechanisms (clusters, working group, etc.) would bring about mutual understanding and greater efforts in coordinating design standards.

One size does not fit all and different types of designs may be needed depending on the level of damage and destruction, location of the shelter and for different cultural and livelihood mix.

The approach employed by certain stakeholders to deliver a maximum number of shelter without disaster resilient features, sets precedent to serve more, while increasing visibility and appearing high impact and could end up with tragic results in future hazard events.

Some agencies receiving funding with conditions such as cap of 200-300 USD per household, are hence not able to adhere to minimum standards set by the Shelter Working Group and compromise on the quality of shelters being built22.

Homeowner driven construction process provides an enabling environment for the women to get involved in construction and leadership roles in addition to a wide range of other benefits over contractor driven shelter provision.

Unambiguous shelter standards are indispensable with clear indications between emergency standards and early recovery shelter standards23.

There is a clear need for public information campaigns to make known to wider audience the eligibility of shelter related aids to avoid frustration, jealousy and negative rumors that can result in equity related social conflict.

Inadequate knowledge on land use planning and management with regards to new settlement delay some of the new shelter (house) construction projects. Stronger partnership has to be forged between the relevant departments, for instance the Ministry of Construction, Ministry of Home Affairs, Ministry of Agriculture, and international agencies to enhance the understanding on the crucial land and related issues.

In addition to the big cyclone shelters, it would also be extremely useful to construct smaller shelters in every village or every other village. They do not necessarily need to be huge edifice of several stories but simple community building such as schools or monasteries with storm resilience features reinforced or retrofitted.

Periodic assessments, brought about by TCG Periodic Review Processes, offer insights into the progress of shelter provision and remaining requirements. But care has to be taken to ensure that these processes also look deeper into such factors as whether the provided shelters meet the specific needs of local population (proximity to their source of livelihoods, availability of basic service facilities such as health and education, suitable for their religious practices, etc.).

Shelter provision need to be undertaken in conjunction with the community early warning system development and periodic drills/ exercises to keep up the community vigilance and to test the credibility of the early warning system in case improvements need to be made.

The shift from emergency to ‘early recovery’ coordination was probably too early at three months and should have been around five months for smoother transitional phase.

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Land Tenure Issues and Re-settlement of Displaced Families

Land issues in Myanmar

All land in Myanmar belongs to the state whether they have shelters build on them or are being used as agricultural farmland. The land within the perimeter of the village is property of the village community. Myanmar has a large number of landless poor peoples who do not belong to any village, are unable to afford the fees charged for ‘registration’ by the authorities, nor hold the legal status or the skills for sustainable employment. The situation is compounded by the fact when humanitarian aid makes its way to the people, the homeless are most of the time not entitled to the aid being offered.

In the post Nargis period, there was wide consensus within the humanitarian community of the urgent need to address the issues of securing tenure for the displaced families in the affected areas, in order to promote “building back better” and for upholding good humanitarian and donor-ship principles. Many affected families do not want to return to their home as they feel unsafe in their old villages. They moved instead to higher ground, areas classified by Myanmar law as “agricultural land”. Myanmar land law allows people to settle only on “village land”, and violators face up to six months in prison. Structures built in unlawful areas are destroyed. According to government figures, only 1.39 percent of land in the delta is village land. But most of the families facing displacements have little or no knowledge of the law.

Land policy for settlements planning & agricultural use

UN-Habitat in partnership with UNHCR initiated a study to target this issue from a shelter and settlement perspective. With support from the Norwegian Government, and in partnership with various Protection Agencies and local Village/Township Authorities, this initiative has assisted a total of 3,349 displaced families in the Kungyangone, Labutta and Bogale townships in the Delta, with provision of secure tenure.

A parallel component of this initiative was to conduct a comprehensive review of relevant land laws in Myanmar, focusing currently at the Delta/Yangon level. The intervention firstly involves gathering baseline data for policy work and will firstly contribute to improved information understanding and coordination on land issues. Secondly it looks into improving land practices on tenure, agricultural use, administration, management, property law and finally to gathering critical underlying information on secure tenure and land titling for developing national land policy. Future areas of intervention include providing information for spatial planning and habitation plans, identification of critical and cross-sectoral issues related to land as well as dialogue on policy discussion.

Raising awareness on land issues

To increase awareness and transparency on the steps and procedures that could be taken for legally resettling, and addressing the needs of Returnees, and for land use policy and planning with multi-stakeholder involvement, a Land Advisor has been seconded to these agencies by the Settlements and Land Records Department (SLRD) of the Ministry of Agriculture. The Land Advisor provides technical support on land laws to local authorities and NGOs, to address the issue and has made presentation at the community level events organized by UNCHR and UN-HABITAT on procedures in obtaining proper titles through official registration and application procedures in several townships in the most affected areas. The Land Advisor also assisted in obtaining legal rights for the displaced families in the Kungyangone, Labutta and Bogale townships.

Based on the findings of the study and the experience from the project, the partners produced a
3.3. Healthy Environment for long term security and sustainability

Generally in Myanmar and particularly in the Ayeyarwaddy Delta, the environmental and natural resources management practices have substantial bearings on the livelihoods of the local population. The rich biodiversity of the forests offer food and the communities rely on the mangroves and nipa palm forests to provide them with house building materials and fuel woods for household consumption as well as to sell in the market. The mangrove forests also play special roles in coastal protection serving as buffer zones for erosion, storm surges and wave action. However, over the last 75 years, nearly 75% of mangroves in the Delta have been lost mainly as a result of human activities.

Poverty is considered the main cause for the degradation of environment in the Delta. It plays an important role in the amplified desperation of the communities to over-exploit the forests for their day to day survival. Made worse by the impact of climate change such as increased salinity and water stress (more severe floods and drought occurrences), the anxiety for their continued existence limit the farming communities from adopting more sustainable farming practices. The expansion of paddy cultivation areas to increase the yield results in encroachment upon forest areas. The increase in paddy growing zones brings about the increased use of fertilizers and pesticides that have adverse effect on the quality of water and fishing industry. Additionally, the drive for profits lead to more invasion of mangrove and other forest areas by extension of salt farms, shrimp ponds and even human settlement. With the loss of mangroves comes the loss of a number of fish species that utilize mangrove forest as natural habitats for breeding grounds.

Over and above these problems, lack of awareness on natural resources management issues and poor implementation and enforcement of environmental laws set the environmental conditions of the Delta area fragile even before Nargis struck in May 2008. Nargis additionally caused extensive damage to 35,000 ha of mangrove forests, pollution of surface and ground water by contaminating 43% of drinking water ponds in the region, salination of agricultural land, sedimentation in the rivers and waterways and strewn the areas with debris and waste.

Environmental Conservation as Disaster Preparedness

Following Nargis, environmental management has been recognized as one of the key priority areas and it was assimilated in PONREPP as a cross cutting issue spanning across all sectors and also as a stand-alone sector. Initiatives planned include capacity building, institutional strengthening, systematic assessments of natural resources, strengthening of monitoring and surveillance systems for environment and natural resources and support for livelihoods-related schemes based on sustainable management of natural resources. So too in NDPCC’s Reconstruction Programme, the crucial role of the environmental management was acknowledged and a priority action was set to rehabilitate forests and mangrove resources as a mean of preparedness and protection from future disasters.

Most of the on-going environmental recovery initiatives are undertaken with the active participation of all stakeholders from UN agencies, donor community, Government (Department of Forest, National Commission for Environmental Affairs) to NGOs, collectively known today as Environmental Working Group. The coordinated activities of the Working Group center on strengthening the system
in Myanmar and raising the awareness of the environmental and natural resources management at all levels. Moreover, the Delta region is one of the focused areas, especially after Nargis, under the Ministry of Forestry and Ministry of Agriculture and Irrigation joint program on reforestation of watershed areas to prevent sedimentation in the reaches.

UN Food and Agriculture Organization (FAO) is also implementing a project funded by the Italian Government to support small-scale fisheries and aquaculture livelihoods in coastal mangrove ecosystems and pilot community-based livelihood initiatives that will serve as demonstration models for the future. UNDP, International Tropical Timber Organization, FAO, Japan International Cooperation Agency (JICA) and national NGOs the likes of Forest Resource Environment Development and Conservation Association (FREDA), Mingalar Myanmar and Pyopin, are all involved in mangrove re-plantation in the Delta in both government forest reserves and community-owned forests with the goal of promoting sustainable livelihoods and food security.

Capacity Building on Environmental Management

As part of the PONREPP implementation, UNEP is providing technical assistance to Myanmar Government, particularly to the National Commission for Environmental Affairs (NCEA) and Ministry of Forest, to develop capacity of the concerned government agencies in reviewing environmental considerations in Nargis recovery efforts and for integration of environmental considerations in disaster risk reduction and sustainable livelihoods. UNEP has teamed up with other international and local NGOs, UN agencies, namely Mingalar Myanmar, IOM and UNICEF, as well as government ministries: Ministry of Social Welfare, Relief and Resettlement, Department of Land-use Planning of the Ministry of Agriculture and Ministry of Forest, for specific activities ranging from conducting relevant sections at trainings, organizing workshops, providing equipment for systematic surveys of soil salinity, providing technical assistance and equipment for the assessment of mangroves resources in the Ayeyarwaddy Delta and offering technical expertise on the environmental education for school curriculum in Nargis affected areas.

Most of the donor-funded initiatives described here are undertaken in close association with the Forest Department. Under the LIFT scheme, funds are eligible for agencies working in energy and environmental sectors.

Alternative Energy

In terms of alternative energy research and application, UNDP, FREDA and Myanmar Engineering Society (MES) are implementing community energy saving pilot projects on usage of fuel efficient stoves, biogas and solar energy.

Box 12. Nargis Recovery Plan by the Ministry of Forest

<table>
<thead>
<tr>
<th>Recovery Plan by the Ministry of Forest</th>
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<tbody>
<tr>
<td><strong>Forest restoration activities</strong></td>
</tr>
<tr>
<td>Designated already as a wildlife sanctuary, the Meinmahla Reserved Forest will now be fully protected. The Forest Department will implement a five-year plan to restore 12,592 ha of damaged mangroves.</td>
</tr>
<tr>
<td><strong>Establishment of disaster prevention zones</strong></td>
</tr>
<tr>
<td>Mangrove forests in high risk areas, i.e. those areas exposed to the sea, “will be designated as</td>
</tr>
</tbody>
</table>

24 National Commission on Environmental Affairs (NCEA) was constituted in February 1990 to deal with all environmental matters.
Expanding private tree plantations
The Ministry of Forestry’s private tree plantation programme of 2007 suffered major impacts from Cyclone Nargis. Government intends to extend private plantations over the next five years to include an area of 20,987 ha and 607 ha in the Ayeyarwady and Yangon Divisions respectively.

Promoting community forestry
There are plans to revive forest users' groups in three townships in order to establish community forests, windbreaks and woodlots totalling about 16,187 ha and 364 ha in Ayeyarwady and Yangon Divisions respectively.

Involving local communities in mangrove planting along riverbanks
The government plans to plant 3,399 ha (8,400 acres) of mangroves along riverbanks in the Ayeyarwady Delta. The Forest Department will work in collaboration with local authorities and encourage people’s participation in planting activities.

Windbreaks
Windbreaks will also be established to protect villages against high winds and tidal surges. It will involve planting trees around settlements, along roads and in woodlots.

Reviving livelihoods of local populations
The plan aims to promote income-generating activities such as cultivating “migyaung kunbut” (Hygrophila obovata), 38 planting fruit trees, trapping crabs and fattening soft crabs in mangrove forest areas, as well as horticulture and livestock breeding suited to local conditions.

Awareness-raising and extension
The above activities will be supported by capacity-building for local populations to raise awareness on the full range of ecosystem services of mangrove forests and develop improved resource management skills.

Challenges and Lessons Learnt
- One of the key hindrances encountered in environmental recovery interventions in the Delta is the lack of base line data. A systematic collection and collation of data on natural resources, existing ecosystems and their status are urgently required to determine the conservation potential. The regular updates of the information will no doubt support decision making and planning on sustainable development.

- Combined with the poverty, lack of awareness and understanding of environmental issues can lead to more detrimental practices and activities against the remaining forest and natural reserves. At the institutional level, enhancing the capacities of government agencies, local authorities and the civil society organizations on environmental conservation should be a top priority. At the community level, similar capacity building initiatives can be undertaken to ensure improved community awareness and participation in decision making processes, fully supported by the...
government agencies and civil society organizations. At the individual level, nurturing and training of local scientists is essential to strengthen the local resource base. Recently, the Universities of Yangon and Maw-la-myaiing (Moulmein), that provide teaching and research in coastal aquaculture, have redrawn their curriculum in line with needs for the country’s development precedences. This can be the first step in building up the critical human resource gaps and basic facilities for further education and research.

- Just as important as the horizontal collaboration across sectors is the vertical cooperation between the different level of governments, from national level down to village level for effective implementation of the government policies and strategies to regulate and guarantee the productive usage of the forests, their produces and other natural resources.

- There is a need to explore and introduce effective coastal planning to support balanced development in coastal areas. As integrated coastal planning and management is a new concept in Myanmar, it is recommended by UNEP that the focus at present be given to developing one or two pilot areas for testing and development of a suitable approach, for subsequent wider adoption.

Case Study 3 Mangroves as Disaster Risk Reduction Shelter

Mangroves as Disaster Risk Reduction Shelter

Mangrove forests and mangrove plantations saved many lives during Nargis Cyclone in Ayeyarwady Delta. There were also many examples in 2004 Tsunami. Mangrove rehabilitation Guidebook which was published post Tsunami in Sri Lanka stated that 200 meters of mangrove forests were able to scale down the power of a marine surge to 75%. Kapuhenwala and Wanduruppa, two villages in the lagoon of southern Sri Lanka, Kapuhenwala was surrounded with 200 ha of dense mangroves, the Tsunami killed only two people. On the other side, Wanduruppa, surrounded by degraded mangroves was severely affected and more than 5,000 people died.

During Cyclone Nargis, there were concrete examples of mangrove forests saving lives in Kan Bala Tabin village in Labbuta township. Out of over 300 people only seven people died and the rest were saved from 12 foot storm surge because 380 ha of mangrove forests were planted and conserved by the villagers nearby. In addition Meinmahalakyun wildlife sanctuary in Bogalay township also saved lives and properties of the surrounding villages with its dense mangrove forests.

In Ma Pwe Tan forest village in Kadonkani reserved forest of Bogalay, the villagers worked as forest labours when mangrove, Avicenia officinalis (Theme Gyi), plantations were established near their village. Of 300 people in that village about 200 villagers were saved by the mangrove plantation from 10 foot storm surge. Similarly in Gwe Chaung forest village in Kadonkani reserved forest of Bogalay, 700 out of 1,000 people were saved by Avicenia officinalis plantation and trees coming to about one Theme Gyi tree saving 8 to 10 lives.

So too in Tha Yaw Chaung village in Kadonkani reserved forest of Bogalay, the villagers have
established community mangrove plantation, 10 ha, near their village since 1999 and have taken care of their Avicenia officinalis (Theme Gyi) plantation. During Nargis 100 people were saved by that mangrove plantation from 12 foot storm surge.

Mangrove plantations and trees saved about 900 lives during Nargis in Gwe Chaung and Nga Mwe Tan villages, Bogalay Township

100 lives in Tha Yaw Chaung and 70 lives in Chaung Bye Gyi villages in Bogalay township, were saved by community mangrove plantations during Nargis.

Source: UNDP Myanmar.

Key Lessons Learned

- With specific results in hand, disaster risk reduction aspect of community based forestry initiatives have to be made known widely to encourage replication in other areas.
- The community, once they understand the merits of disaster preparedness, can be the most active advocates of disaster risk reduction.

Case Study 4 Community Forest Restoration

Community Forest Restoration

Forest Resource Environment Development and Conservation Association (FREDA) has been engaged in a wide range of activities in sustainable forest management. From 1999 to 2008, the Phase I and Phase II of a project titled “Mangrove Reforestation Project”, implemented in collaboration with Action for Mangrove Reforestation (ACTMANG) of Japan, was undertaken to establish community
plantations in the Pyindaye reserved forest in the Pyapon District of Ayeyarwaddy Division, where natural mangrove forests were depleted due to encroachment by some farmers for rice cultivation. When the farmers abandoned their rice fields after some years due to extrusion of salt water and acid sulphate from below, the approach determined to address the issue was to restore the mangrove forest by the authority under the Community Forestry Instructions (CFI) of the forestry authorities.

When the Phase I and II of the project (1999-2003 and 2004-2008) concluded in 2008, a total of 1,293 ha (3,193 acres) had been forested with fast growing mangrove species. The benefits of the community forestation in Pyindaye were tested in May 2008 when Nargis Cyclone hit the area and the result was minimum casualty in the nearby villages as the forest formed an affective bio-shield or greenbelt and weakened the action of the storm surge. With the new batch of funds, Phase III of the project from 2009 to 2014 will continue the solid performances of the previous phases and about 750 ha (1,853 acres) of mangrove plantation will be regenerated in Pyapon District.

So far, millions of mangrove seedlings have been provided to the community and they have been planted. Forestry authorities have already issued community forestry certificates to the Users’ Groups for the right to management and utilize by the communities themselves for household consumption as well as to sell the surplus forest produces.

Source: FREDA. E-mail: FREDA@mptmial.net.mm. URL: http://www.fredamyanmar.com.mm

Key Lessons Learned

- Community forestry projects can serve multiple purpose of saving lives, securing food security and providing livelihoods to the community.

Case Study 5 Mangrove Nurseries in Makmyinmyaingkyun Village, Bogale Township

Mangrove Nurseries in Makmyinmyaingkyun Village, Bogale Township

Mangrove Service Network (MSN) is a local NGO working in the area of community development and environmental conservation in Myanmar. MSN signed a letter of agreement with FAO Myanmar on 29 May 2009 as a partner to develop mangrove nurseries and planting mangrove trees as demonstration at target villages in Bogalay Township, Ayeyarwady Delta.

During the Cyclone Margins it is estimated that about 14,000ha out of 56,000 ha of mangroves were destroyed. In addition one third of tree plantation in the delta area (about 63000 ha) were damaged by the cyclone leading to destruction of natural fisheries habitat. The program was successfully implemented at Laweinkyun-east and Makmyinmyaingkyun villages in Kadonkani Reserve Forest area in Bogale Township from 1st May to 30 June 2009. 110000 mangrove seedlings were raised for each nursery with active participation of project villagers. Seed sowing and transplantation were done by cash for work with the community to fulfill their daily consumption.
The nursery management committee has organized with 18 villagers who are interested in nursery management in respective villages to operate nursery sustainability in mid June 2009. The group members also collected 20000 seeds and seedling in each nursery with their own arrangement. The MSN(IP) made community awareness program through village meetings, power point presentation Community based Disaster Risk Management and community based sustainable coastal resource management, distribution IEC(Photo display, wall sheet poster). The program also provided a mangrove nursery technique training and two study tour program to a government mangrove protection area at Byonehmwe Island. MSN (IP) also conducted a tree planting trail with the participation of villages and in to make improvement of mangrove technology for the community. As per assessment of community participation, the local communities are happy to participate more in same program because they wish to protect natural disaster and to recover fishery resources.

Source: FAO Myanmar.

Key Lessons Learned
- Sharpened awareness on connection between environmental problems and other sectors should be capitalized on and more environmental management projects should be implemented with the intense participation of the community.

3.4. Gender

It is a well known fact that disasters impact differently on men and women. In a patriarchal society like Myanmar, the extra tasks they have to take on during emergencies, on top of their regular house-hold chores, are hardly acknowledged nor their exposure to higher risks due to their lesser physical strength. In addition, their traditional role as in-the-background care taker of the family provides women with hardly any opportunity to take on any prominent decision making roles. Fundamentally, the role of women in disaster risk reduction is not well understood.

According to PONJA, the majority of the cyclone’s victims are female: 61 percent of those dead are female, with the number much higher in some villages. This demographic change is expected to have significant impacts on the roles and relationships between different gender groups and may cause social and economic reverberations such as men needing to go to other villages and towns to find a partner, increasing the out-migration from severely affected areas and for the young unmarried women to leave the village to find work in other areas, who have very little urban life experiences and are vulnerable to exploitation, forced labor, forced prostitution and trafficking.

Women Protection Initiatives under PONREPP

The outcomes of the after-Nargis assessment, conducted through a series of focus group and small scale appraisals by Department of Social Welfare and the Women’s Protection sub-cluster25 (a subset of the protection Cluster), identified women, particularly young widows, women separated from their families, and single female heads of households, as the most vulnerable in their communities. The Women’s Protection Recovery Working Group which succeed the sub-cluster in the Nargis

25 Members include Sub-clusters members consist of UN agencies (UNFDA, UNICEF, UNDP, UNAIDS), international and local NGOs and representatives from Department of Social Welfare and Myanmar Women’s Affairs Federation.
recovery phase continues with the same members and same focus on multi-sectoral (protection, gender-based violence, livelihoods, education, health and reproductive health) and crosscutting (health, psychosocial and legal support) issues faced by women in the context of the cyclone-affected areas. Throughout the PONREPP implementation period, the non-government members of the Working Group led by UNFPA work closely with the Department of Social Welfare in the development of “National Action Plan on Advancement of Women” and its implementation, supporting capacity building issues within the Department.

Under the leadership of the Working Group, following interventions have been carried out in the Delta by the members:

- Human trafficking awareness activities,
- Increased access of women to sources of livelihoods through provision of skill trainings (sewing and agriculture) and cash grant programs to start small scale businesses,
- Increased safety of women in camps through distribution of minimum initial services package (MISP) and trainings of humanitarian workers on MISP including officers from Departments of Relief and Resettlement, Social Welfare and Health,
- Increased awareness of women on disaster risk reduction and health through provision of maternity waiting homes, organizing women group discussions and community trainings, and
- Organizing psychosocial support groups for women.

**Awareness Raising on Gender Issues**

The Women’s Protection Cluster (current Women’s Protection Recovery Working Group) has developed guidelines on handling gender based violence issues during emergencies particularly for health sector where the main objective is to ensure women’s and girl’s access to basic health services. This includes improving the knowledge of health workers on women’s and girl’s specific needs, taking into consideration the cultural and religious perspectives. PONREPP also stresses the need for increased protection of women and to support the implementation of gender based violence programs.

AFXB and UNFPA in particularly are active in advocating gender concerns and they have developed education materials like brochures, posters, leaflets and short documentary on a number of subjects ranging from household risk reduction measures to health to gender-based violence. Many of their staffs, including those of UNDP and other UN agencies, have been trained on disaster risk reduction in connection with women protection after Nargis and most of the recovery support initiatives being planned and implemented include disaster risk reduction considerations. IFRC-MRCS programs require participation of two women representatives in Village Tract Recovery Committees, formed to oversee the recovery interventions in IFRC-MRCS target areas. Specifically in their cash-for-work programs, guidelines have been prepared to ensure gender mainstreaming is applied in actual implementation.

Despite these successes, gender is still a sensitive topic in Myanmar though it has made considerable progress, pushed forward by the needs and gaps that Nargis has created. However, it is still considered “women’s problems” and a lot of sensitization needs to be done to ensure full acceptance and integration into various sectors.

**Challenges and Lessons Learnt**

- Since the field of gender and related issues are relatively new in Myanmar, sex and age disaggregated data are almost non-existent. With the lack of basis data, planning of women’s protection stand-alone
programs prove to be difficult and there is no assurance of equitable distribution of recovery resources between men and women.

- In addition to the inadequate data, there is also limited capacity and understanding within the country to address women’s protection issues, in both programmatic and policy terms. However there is substantial increase in awareness among decision-making bodies on the need to put them into effect. In the midst of improved consciousness, an escalation in funding would surely move the organizations forward to invest more efforts to understand and respond to women’s issues.

- One of the reasons women’s concerns do not get addressed widely is that the representation of women in decision making bodies is still low. Therefore greater participation of women in planning and development activities needs to be lobbied.

- Even though programs targeting at expanding the livelihood opportunity of women are already in implementation in the Delta, the diminishing funds for livelihood sector is a concern for continuation of such programs. For fear of decrease in funding, resources on hand might be diverted to other areas such as general livelihood development in agricultural and aquaculture industries and specific activities promoting roles of women’s in income generation activities might be forgotten.

- A recent study conducted by UNDP highlights that women who have experienced the most empowerment tend to have good livelihood outcomes. But even women who have had poor or moderate livelihood outcomes have experienced a positive change in areas such as decision-making, self confidence and increased social capital.

Case Study 6 Meeting the Recovery Needs of Women in the Aftermath of Cyclone Nargis

### Meeting the Recovery Needs of Women in the Aftermath of Cyclone Nargis

Throughout 2009, UNFPA offered humanitarian assistance to support the recovery of survivors of Cyclone Nargis, helping mothers deliver safely and meet other needs in reproductive health and women’s protection. Working with Myanmar Medical Association, Marie Stopes International and Relief International, UNFPA continued to operate two health clinics in the Ayeyarwaddy Delta. Maternity waiting homes were established in three of the most severely affected townships of Bogale, Labutta and Dedaye, to assist expectant mothers from remote areas to rapidly access emergency obstetric care.

The maternity waiting home scheme, providing temporary living space with full medical care and facilities to pregnant women, had been in operation since 2005 but post-Nargis establishment of such homes in the Delta was the first time such activity had been tested and proved to be successful in a post-disaster context in Myanmar. The homes also provided parental care and delivery referrals, with each acting as the base for a mobile clinic that travelled to cyclone-affected villages providing general and maternal health services.

Counseling and support for vulnerable women and girls was also maintained through six Women-friendly Spaces operating in Labutta Township. Implemented by the Agency for Technical Cooperation and Development and the Association of Francis Xavier Bagnoud, the Women-friendly Spaces offered psychosocial support where discussion groups were set up for women to talk freely and share grievances, reproductive health education, livelihood skill training, with basic literature and mathematic skills training, needed for income generation. These activities have proven to be a tremendous support to women who were severely affected by Cyclone Nargis.

Since May 2008, UNFPA has trained 2,136 medical and non-medical humanitarian actors in the Minimal Initial Service Package for Reproductive Health in Crisis Situation education model. This essential training model teaches humanitarian actors how to respond to the unique needs of women.
and girls in emergency situations. The model prioritizes the provision of services to prevent maternal and neonatal deaths and illness, HIV transmission, prevention and management of sexual violence, and how to plan for the provision of comprehensive Sexual and Reproductive health services in the recovery period.

San San’s Story
San San, 24, and her husband were among the many survivors who lost family members when Cyclone Nargis struck Myanmar in May 2008. In an effort to rebuild their lives, San San’s husband left their village to search for work. While he was able to return to San San from time to time, his visits soon became less frequent. By this time, San San was already pregnant and unable to support herself. She could not rely on her family as they had gone missing in the cyclone.

Six months after the cyclone, staff from International Association of Francis Xavier Bagnoud (AFXB) visited San San’s village and offered her a place at their Women-friendly Space in Labutta Township. There San San was able to meet women with similar experiences of her own. She benefited greatly from counseling, and was able to learn new skills in sewing and bookkeeping for income generation. Eager to prepare for the birth of her first child, San San joined five other women and started a small business. Borrowing money from AFXB’s revolving fund, the women hired a sewing machine to make children’s clothes.

AFXB also supported San San with her pregnancy referring her to UNFPA funded health clinics, operated by Marie Stopes International and Myanmar Medical Association. In September 2009, with assistance for transport to the hospital provided by AFXB, San San delivered a healthy baby boy. Due to the joint efforts of UNFPA and its partner agencies, San San’s situation has greatly improved and she is now able to support both herself and her newborn baby.

Source: UNFPA. E-mail: Myanmar.office@unfpa.org. URL: http://myanmar.unfpa.org

Key Lessons Learned

- Health sector is where gender considerations gets most prominent exposure in post disaster scenarios. This can be taken as the first step and gender concerns can be spread to other sectors by linking health aspects with need for food security and income generation activities.

- Women-friendly space in post disaster situations offer invaluable opportunities for women to raise their concerns/needs and express their feelings.

Case Study 7 Women Participation in Cash for Work Program of Myanmar Red Cross Society (MRCS) and International Federation of Red Cross and Red Crescent Societies (IFRC)

Women Participation in Cash for Work Program of Myanmar Red Cross Society (MRCS) and International Federation of Red Cross and Red Crescent Societies (IFRC)

Moving on from relief to recovery to address the long term recovery needs of the people affected by the cyclone, MRCS and IFRC designed a recovery program with an integrated multi-sector approach. The main focus of the recovery program is to ensure that the most vulnerable households regain a sustainable independent life during the post disaster situation. The recovery program also emphasizes building community capacities to be prepared for future disasters, and thus disaster risk reduction component has been identified as a main part of the recovery phase.

Cash for Work Program
MRCS identified livelihoods recovery of the most vulnerable households as one of the main sectors of
the recovery program. After necessary assessments at village tract level, the Cash for Work (CFW) program was implemented starting in the month of October 2008 and successfully completed by May 2009 with the following objectives.

- To generate wage employment opportunities for most vulnerable cyclone affected households.
- To ensure food and economic security among the most vulnerable households with specific reference to women.
- To restore community assets and infrastructures linked to community livelihoods systems.
- To restore natural and environmental resources affected by the cyclone at community level.

The program was designed to mainstream gender strategies at all levels of implementation and following demonstrates the key factors of gender mainstreaming that were considered and practiced throughout the project period.

1. Community Level Assessments

Multi-sector village tract assessments (VTA) was carried out by MRCS team comprising of Red Cross volunteers: 30-40% of the team members were women. Of the various methodologies adopted for assessments, during focused group discussion, women participation was ensured to understand the urgent needs of the community with gender perspective. Landless casual labor women expressed that they had difficulties in getting work opportunities in the post-disaster situation. Based on this prioritization, CFW program was planned with the utmost care in identifying projects that were easy for women to participate.

2. Design and Guidelines

To help support more gender sensitive project formulation, beneficiary selection, implementation and monitoring procedures, MRCS has developed the following guidelines emphasizing the importance of gender consideration.

- Only one person from selected vulnerable households should be selected as beneficiary. This will provide opportunity for more women to participate in the project.
- Emphasis should be given to cover more women beneficiaries. It was proposed to have 50% of women beneficiaries.
- Selection of activities that are easy for women to participate and contribute as priority.
- Equal wage payment of 2,000 kyats (2 USD) per day per beneficiary to both men and women.
- Wage payments to be made at the work site, which will be easy for community in general and women in particular.

3. Community Level Project Planning and Implementation

For the community level project planning process, MRCS established Village Tract Recovery Committees (VTRC), which had minimum two women representatives for overall coordination of the recovery program. Community mobilization was done through VTRC and all the details of the program as per agreed guidelines were explained in community meetings. This was followed by selection of nature of work to be carried out and selection of beneficiaries. Based on the community level action plan, MRCS hub team developed project proposals which were accordingly approved by the MRCS headquarter in Yangon.

Before actual start of the activity, more preparatory meetings were conducted to finalize the project monitoring and implementation and it was identified that the selected women beneficiaries, especially those with big family and women headed households, had difficulties in participating full
day due to their commitments to look after other family members. Under the circumstances, MRCS decided to have psychosocial program integrated with CFW and necessary facilities were provided to such women to bring their children to the work site so that they could productively participate in the program.

Payments were made every week after a cycle of five working days. As per the policy, wage payments were made to the actual beneficiaries and not to other family members which helped to ensure that women who took part in the CFW program receive the money directly and helped them to take necessary household level decisions on how to spend their earnings based on their family needs. The following table summarizes the nature of activities undertaken under CFW program.

<table>
<thead>
<tr>
<th>Type of activity</th>
<th>No. of sites/ villages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village road repair</td>
<td>115</td>
</tr>
<tr>
<td>Jetty reconstruction</td>
<td>7</td>
</tr>
<tr>
<td>Debris/ environment cleaning</td>
<td>11</td>
</tr>
<tr>
<td>Wooden bridge repair</td>
<td>9</td>
</tr>
<tr>
<td>Irrigation canal repair</td>
<td>20</td>
</tr>
<tr>
<td>River embankment repair</td>
<td>16</td>
</tr>
</tbody>
</table>

Out of the total beneficiaries covered, 33% were women. Overall distribution of beneficiaries is given in the chart below.

4. **Project Monitoring and Evaluation**

At the end of the project, Participatory Review and Reflection process (PRRP) was initiated for the community to discuss key achievements and impacts of the project. Issues of follow ups and further support to community were also brought up. The whole process aimed to promote community participation particularly among women.

**The Way Forward**

Since December 2009, MRCS has started livelihood asset recovery initiative with an overall target of 11,500 households out of which 30% of beneficiaries will be women. This initiative, to be completed in 2010, address livelihood security needs of disaster affected communities in general and women in particular.

**Ein Chan’s Story**

Ein Chan, a woman from the village tract of Bine Daunt Chaung in Labutta Township lost her husband and house in the killer cyclone waves. She managed to survive by holding on to a tree. During the months of November and December 2008, Ein Chan participated in a road repair project under the Cash-for-
Work program conducted by the Myanmar Red Cross Society/International Federation of Red Cross and Red Crescent Societies. The project involved the repair of a road in Ein Chan’s village tract which had been damaged by the cyclone. She was one of 40 beneficiaries from the village tract who participated in the project. Each participant was paid 2,000 MMK (around 1.8 USD) for each day of work. Ein used the income earned for her food and other daily needs, as well as for the purchase of housing materials for her temporary shelter.

“*The project has been very useful for women like me. It has given us hope that we can recover from the disaster*, she says.


### Key Lessons Learned

- Cash for work programs well for both men and women, creating jobs and providing security to households.
- Providing an opportunity for women (of the affected community) to come together and work at one place in the aftermath of disaster can help them psychologically.

### 3.5. Health, nutrition and psycho-social support

The collaboration between Ministry of Health and the international organizations like WHO, UNICEF, UNDP, UNFPA, JICA, OXFAM, Merlin, Marie Stopo International and other health focused agencies precedes Nargis, distinctively in the areas of supporting health care, health system development and public awareness raising. The 2005-2006 data from the Ministry of Health indicated that in-country health care system comprised of 826 hospitals including 19 specialist hospitals and 35 general hospitals with specialist services. However, outside of major cities, the existence of health care infrastructure was nominal and in Ayeyarwaddy Delta, there were 71 health facilities with 26 general hospitals and 45 health clinics.

After Nargis, 75% of the health facilities were destroyed in the affected townships of the Delta and the Yangon Division. The recovery objective of the Health PONREPP Working Group is to improve the access to health care services amongst hard-to-reach populations in areas most affected by Cyclone Nargis. The expected outcomes of the three year program include enhanced provision of, and access to, quality basic maternal and child health care services (including nutrition and immunization) and psychosocial support to affected populations.

**Post-Nargis Health Sector Related Initiatives**

Initiatives undertaking so far in recovery phase can be summarized as follows:

- Construction of new health centers and rehabilitation or retrofitting of damaged structures under initiatives of Ministry of Health, in collaboration with members of the shelter working groups.
- Provision of services such as family planning, mobile clinic, mother group support on child nutrition, psychosocial support, counseling, cooking demonstration, support to women’s health club discussion, etc.
- Distribution of IEC materials on various diseases (malaria, HIV/AIDS, dengue, etc.).
- Vaccination and immunization.
Provision of guidelines and trainings on communicable diseases, reproductive health, basic first aid refresher and multiplier courses, psychosocial support, mental care, voluntary health trainings and basic health education.

Distribution of materials such as delivery kit for women, hygiene kit, mosquito net, new born kit, recreation kit, vitamins and other essential medicines.

Distribution of food items to communities that are still facing food shortage problems.

WHO, through the Ministry of Health, also introduced early warning surveillance system (EWARS) with the involvement of many local and international NGOs that has efficiently prevented outbreaks of any water-borne diseases.

Capacity Building of Health Workers

With backings from WHO and Ministry of Social Welfare, Relief and Resettlement, Ministry of Health has been organizing trainings for its personnel, including the community health care worker and auxiliary midwives at the grass-root levels, and basic disaster risk management issues are part of the curriculum. Moreover, major establishment like Yangon General Hospital has its own preparedness plan on how to deal with mass casualties in time of emergency.

Psychosocial Support

The Ministry of Health in collaboration with WHO and other partner NGOs have been conducting trainings on psychosocial support for its health officers even before the Nargis incident, but the cyclone has placed the psychosocial concerns to the forefront as one of the key priority areas under Health PONREPP for it is believed that mentally strong communities have better chance of recovering. IOM, Action Aid, OXFAM, CARE and Myanmar Red Cross Societies (MRCs) are particularly active in extending psychosocial programmes to the affected communities to help them cope with the loss and the associated trauma.

Further, in partnership with Action Aid, UNDP is providing trainings to monks, nuns, teachers and other leading community figures and representatives to strengthen traditional coping mechanisms in addressing issues of trauma. Based on criteria that include gender balance, social mobilization skills, interest, talent in dance/drama and willingness to work, 60 youths from five townships were identified and trained in using theatre techniques for psychosocial support. Activities were implemented in 156 villages in 5 townships and information hubs for providing psychosocial support information were piloted in 30 villages for the communities.

Food Security Concerns in the Nargis Affected Areas

Another concern related to health is the food security and nutritious issue in the cyclone affected areas. Traditionally, Myanmar is a food surplus country though uneven distribution throughout the nation creates pockets of food deficit areas. As per the WFP-FAO Food Security and Vulnerability Information and Mapping Report, townships in Yangon and Ayeyarwaddy before Nargis were considered the least vulnerable in the country. Just after Nargis, PONJA identified food insecurity as one of the potential health hazard. Many agencies responded with contribution of food items including high energy biscuits to the affected communities.

Because the food insecurity in the Delta is the result of many factors such as lack of access to other food items (rather than rice), high cost of agricultural production and lack of income generating.

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26 Mainly by Myanmar Red Cross together with French Red Cross
opportunities that inevitably lead to higher debt situations for the families28, unless the regular incomes of many affected communities can be secured, they will still not be able to afford the intake of adequate amount of nutritious foods. Almost 2 years after the cyclone, there appear to be some contradictory accounts with regards to food security; while WFP-FAO report says no more food assistance are required, the November 2009 monthly livelihood report from four hub offices pointed out the need for continued food assistance in certain areas.

Challenges and Lessons Learnt

- Having Ministry of Education participated at the Health Working Group meetings help strengthen the political support and facilitate field-level coordination mechanism through official endorsement of the Working Group activities by a government body.

- The pre-Nargis affiliations between the Ministry of Education and its counterparts non-government agencies has already built the trusts between the organizations and makes it possible for the Nargis recovery health interventions to work effectively and accountably.

- In times of disasters, local health officers are the ones who have to interact first with the affected communities. Training the township medical officers offer invaluable benefits to the communities.

- Geographical coverage under Health PONREPP Plan of Action (part of PONREPP Prioritized Action Plan) is too limited, being able to implement only in three townships out of the intended eleven townships, due to the diminishing funds.

- The restoration efforts of rural health centers damaged by Nargis are delayed due to the restriction imposed by the donors. Only temporary measures have been undertaken and more permanent retrofitting or reconstruction activities need to be carried out soon for the rural population to get access to proper health services.

- The early warning surveillance system (EWARS) developed and introduced during Nargis became the single source of data and information with all NGOs committing to share data.

Case Study 8 Psychosocial Support Initiatives of Myanmar Red Cross Society (MRCS)

Since 2008 May, MRCS has been implementing an integrated health recovery program in the delta that methodically covers issues with regards to communicable diseases, reproductive health and psychosocial support. From the beginning, psychosocial support activities were closely associated with disaster risk reduction interventions as soon as the MRCS moved into the community to carry out early recovery initiatives. Three types of trainings were provided in 13 most affected townships under the program: Training of Trainers, Multiplier and Refresher, for township health officers, MRCS field officers and staffs and its volunteers. Teachers from selected areas were also invited to participate in the trainings.

IEC materials have been also been developed and distributed together with recreation kits for school based activities and community kits for village level activities. The MRCS staffs and volunteers, trained under the program, then facilitate community activities including games and discussion sessions to promote self-help recovery and self coping strategy.

Under the program, MRCS also offers psychosocial support to the carers/ helpers with “helping the helpers” objective. After a certain period is passed in the field, the helpers (MRCS staffs and volunteers) are brought together to listen to their problems and challenges they face in the field. In

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28 Extracted from the WFP Delta Food Security and the FAO Delta Crop Assessment Reports.
future, MRCS plans to expand the reach of the program by engaging religious personnel and representatives from NGOs.

Source: Myanmar Red Cross Society (MRCS).

**Key Lessons Learned**

- Providing psychosocial trainings to teachers have far reaching effect of helping the future of the society after a disaster: the children.
- The field staffs also suffer from terrifying experiences of the disasters and their ability to cope should not be taken for granted. Special care should be provided to help them recover.

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**Case Study 9 Early Warning Surveillance System (EWARS) of WHO and Ministry of Health**

**Early Warning Surveillance System (EWARS) of WHO and Ministry of Health**

**Introduction to EWARS**

In the aftermaths of large scale disasters, effective communicable disease control relies on effective response systems and in turn, the effective response systems rely on effective disease surveillance. A functional surveillance system is essential in providing information for action on priority communicable diseases; it is a crucial instrument for public decision making and can also be used for monitoring, evaluation and improvement of disease prevention and control programs.

**Setting up of an EWARS for Epidemic Prone Diseases in the Cyclone Nargis Affected Areas**

**Fundamentals of the EWARS**

Since the beginning of the disaster, WHO has collaborated with local authorities, UN humanitarian agencies and NGOs to develop an early warning surveillance system (EWARS) for early detection of infectious disease outbreaks. In a complex emergency with many national and international partners, building a system which is supported and adopted by all actors and stakeholders is a challenge.

In Myanmar, to improve the acceptance of the EWARS, three principles were taken into consideration:

1. National health authorities had to be involved from the outset
2. All international health partners had to participate
3. The EWARS had to comply as much as possible with the National Public Health programs (EPI, Malaria and Dengue control, waterborne disease control, Avian Influenza, etc.)

Fifteen health events are included in EWARS. Number of cases and deaths are collected in two age groups (under five and five years and above).

**Objectives**

The objectives of EWARS are to:

- Ensure timely detection, response and control of outbreaks by the early detection at local level of case clustering amongst the affected population.
- Monitor trends of communicable diseases to guide public health action.
- Estimate workload of different health units to identify gaps and rationalize resource
How it works

The EWARS has two components FORMAL and INFORMAL. The FORMAL component works through a standardized surveillance form that health units attending affected populations submit weekly with aggregated data to WHO Nargis operation unit in Yangon.

The INFORMAL component works through an active information sharing and verification process on a daily basis: all NGOs and humanitarian agencies have provided telephone numbers and name of focal points who are contacted everyday by a WHO epidemiologist. If an unusual health event occurs or an outbreak is suspected, WHO contact the health units immediately acting in the specific area that will verify the information and take action if needed.

To trigger potential outbreak alerts, thresholds based on a specific algorithm are used. A “free-share” computer application, produced by WHO ARO/HQ has been installed at WHO office for data entry, data analysis and production of a weekly feedback bulletin.

The National Healthy Laboratory in Yangon is acting as the reference laboratory. Standard procedures are established for rapid laboratory confirmation. Laboratory material has been pre-positioned at township level to facilitate specimen collection. Before launching the system, the EWARS was presented to Ministry of Health and NGOs at the Health Cluster meeting to ensure its simplicity, feasibility, acceptability and flexibility.

Benefits of EWARS

The main attributes of the surveillance are sensitivity to detect potential outbreaks, timeliness to allow prompt response and flexibility to adapt to any new threat. Moreover, in such natural disaster conditions with shortage of trained personnel, overburden of staff and poor accessibility to most affected areas, the system has to be simple. The close collaboration between international agencies, the national staffs and authorities is critical for an efficient EWARS. Additionally, the implementation of such a surveillance system during a crisis can contribute to strengthening the national capacities by bringing new resources and tools, by improving networking with international partners and by training human health resources.


Key Lessons Learned

- Effective monitoring of disease and food security situations on the ground can help eliminate in advance any potential outbreak of communicable diseases in affected areas following a disaster.
- An efficient information sharing mechanism is crucial in installing any surveillance system and the pre-Nargis partnerships of MoH and other health-oriented non-government agencies make EWARS a success in Nargis recovery phase.

3.6. Education

The early responses focusing on ensuring that teaching and learning resumed with minimal disruption under the Education Cluster has benefited an estimated 600,000 children in more than 27 cyclone affected Townships. In many affected villages, the 2008 school year was able to resume by June.
In July 2009 the Education cluster transformed into the Education Thematic Working Group (ETWG) to ensure that there was a forum for exchanging ideas on nationwide education issues and thus not only focusing on the Delta. Networking and cooperation amongst agencies have significantly increased due to the active nature of the ETWG. This has considerably expanded the possibilities for current and future programming for agencies as capacity has been built to develop the range of topics which can be included in education projects.

Safer School Construction Initiatives

To facilitate information sharing on technical issues of school reconstruction, School Construction Discussion Group was established in July 2009 by the members of the Education Cluster and it continues to meet under the new structure. The Group has developed a database on number of students, number and size of the school buildings and classrooms to avoid overlap and at the same time maximize the resources. The Group was first formed by UNICEF, Welt Hunger Hilfe and Norwegian Refugee Council (NRC) but membership was later extended to Myanmar Red Cross Society (MRCS), French Red Cross (FRC), Myanmar Red Cross Society (MRCS), Samaritan’s Purse, Caritas, Swiss Development Cooperation (SDC), Amurt, World Vision, JEN, Bridge Asia Japan and Concern. Immediately after Nargis, transitional school construction in the delta was undertaken by UNHABITAT where 38 transitional schools were constructed in the Delta in order to fill the gap until the completion of permanent structures.

To ensure the schools are built back better, UNICEF has developed specifications for school buildings, incorporating disaster resistant features and applying environmentally friendly construction methods. Prior to constructing Government schools agencies must seek permission from the Ministry of Education, who coordinate the information of where the needs are. However, it must also be highlighted that some agencies and private companies working on school construction projects in the Nargis affected areas, have used their own specific designs. Lately, the approval process of the school construction activities has become stricter with the Minister of the Ministry of Education approving all plans in person. The change came after it was discovered that in many of the completed school buildings, no risk reduction elements were integrated and many were not built back better. While the international NGOs were not allowed to make anything other than storm-resistant schools, local and private donors did not come under this rule.

To date 1,124 schools have been constructed by agencies including the Ministry of Education. Most of the newly constructed schools will serve also as village safe shelter. Ministry of Education is also implementing its own construction projects with the involvement of the private companies: in total 525 schools have been constructed. Damaged monasteries which offer formal education to local children are also repaired or reconstructed29 as part of the recovery scheme.

Support Services to Further Augment the Learning Initiatives

On top of the safer school construction, essential school furniture and student kits (bags and books) were also provided to the students and some NGOs even have teachers’ salary support programs. Of note is the provision of essential learning packages and text books to children in 5 Nargis-affected Townships, namely, Laputta, Bogalay, Mawgyun, Kungyangone and Kawhmu, by UNICEF in order for them to be able to return to school that began in June. The support aimed to reduce cost of schooling borne by families and these Townships have been incorporated into regular programme that promotes child-friendly schools. Teacher’s Kits were also distributed to all teachers in these 5 townships to facilitate school teaching and learning activities. Apart of the school buildings UNICEF provide rainwater harvesting infrastructure in all school and wherever it is possible also supply tube well and hand pumps.

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29 In Myanmar, monastic education is important and accredited by the Ministry of Education.
Furthermore, Save the Children is assisting the affected communities in the construction and running of Early Childhood, Care and Development (ECCD) centers and activities on early childhood and child nutrition have been conducted. Until now 550 ECCD centers have been completed and are operational and 1,600 teachers have been trained to the existing ECCD.

**Mainstreaming of DRR into Education Sector**

Just after Nargis, the Disaster Preparedness and Response Education (DPRE) Working Group, chaired by UNESCO, developed IEC materials on disaster risk reduction for schools in at-risk communities, covering the entire country. Of note in particular is the Resource Pack, developed jointly by UNESCO and Ministry of Education. Each Resource Pack contains nine booklets that look at approaches to psychosocial recovery and how-to guides on conducting school based risk assessments, on development of School Preparedness Plans and on development of appropriate drills. The resource pack also includes a radio for early warning. However, as the guideline was prepared in 2002 it did not incorporate tsunami and cyclone as risk factors. Hence, when tsunami and cyclone hit delta region in 2004 and 2005 many school buildings built following this guideline have been severely destructed.

Under the UNESCO’s Myanmar Education Recovery Program, implemented in unison with the Ministry of Education, 2,130 primary and middle school principals and teachers in 8 townships of Ayeyarwaddy and Yangon Divisions have been trained on school disaster risk reduction and preparedness with the aid of the Resource Pack. The orientation trainings also included the participation of Township Education officers who supported the trained principals and teachers to further disseminate the information to students and communities. At the orientation trainings, the participants were asked to develop lesson plans on how to effectively impart information from the Resource Pack to the students, to conduct risk assessment of the school and to identify escape routes from school to nearest safe areas.

In addition to UNESCO and key government partner agencies: Department of Basic Education and the Department of Educational Planning and Training, international and national institutions such as World Vision, Save the Children, Action Aid, Plan International, World Vision, French Red Cross, UNDP, UNICEF and Pyinna Tazaung are also involved in organizing the trainings. Records show that close to 4,000 resource packs have been delivered to 2,000 schools in the delta until March 2010. Eventually, DPRE will be introduced in all schools throughout Myanmar.

Another tool of incorporating DRR has been Child Led DRR (CLDRR), pioneered by Save the Children in 2009, where the children play leading roles in their communities to identify and minimize disaster risks and hazard and to better prepare for disasters. This has been introduced to over 100 villages and focusing on involving school going children and out of school children in 100 villages in the Ayeyarwaddy and Yangon divisions, facilitated by child protection and education field staffs of Save the Children.

Teamed with UNICEF, the Ministry of Education is implementing similar mainstreaming programs in the Nargis affected areas as well as in the rest of the country. One program that has been in action since 2006 is the Out of School Program (EXCEL) to help out-of-school kids to catch up with their peers by providing special classes. A set of 15 books have been prepared on various subjects one of which is on flood preparedness (what to do before, during and after). After the Nargis, the book set was distributed to Cyclone affected townships.

At the national scale, UNICEF, Department of Educational Planning and Training and Department of Basic Education has designed and developed two 35-minute lessons in Grade 5, mainly on Tsunami

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30 DPRE was established in pre-Nargis days and have been active ever since. But Nargis incident brought about more recognition to its works and facilitate the implementation of DPRE.
and related information, that has been included in Environmental Management subject. For Grade 6, 7 and 8, hazard related concepts and information are being integrated into the Life Skills subject. The topics cover different types and causes of most common disasters in the country such as fire, landslide, earthquake, tropical storms and floods. Local maps showing vulnerable areas are also included with basic disaster preparedness knowhow. In support of these activities, supplementary reading materials for students on disaster risk reduction titled “Ready-set-prepare” were also developed. The materials are for 4 to 7 grade students and eight hazards are covered (cyclone, earthquake, flood, landslide, thunderstorm, tornado, tsunami, wildfire). Selected Nargis affected townships in Ayeyarwaddy and Yangon Divisions have been identified for teachers’ trainings and curriculum testing as part of the education recovery plan of UNICEF. Integration of said subjects into the pre-service teacher’s trainings will also be tested.

So far, over 10,000 teachers trained in various subjects such as psychosocial support, Child Friendly School practices and disaster risk reduction in education.

**Challenges and Lessons Learnt**

- Despite the attempts to improve the educational facilities in the country, according to Social Impact Monitoring Report II (SIM-II), during the 2009 school year a reduction in attendance of students attending primary and middle schools was recorded. The main reasons cited were the need for extra hands in the fields or in other activities to supplement the families income and not being able to afford the costs of school materials. This highlights that the cost of education is a significant barrier to ensuring children receive an education.

- The mainstreaming efforts at the national levels are sometimes challenged by real situations at the school levels when the teachers find themselves completely overwhelmed with the completion of given curriculum. They end up ignoring or discarding the additional co-curriculum subjects.

- The evidence based proofs of behavior and attitude change of mainstreaming activities over time can garner greater political and financial support but the donors need to realize they entail considerable time to see any tangible results.

- The main concern when it comes to the structural mitigation aspect of school building is the long term maintenance. There is a need to for support services such as provision of technical advisory and guidelines on regular maintenance of school buildings should be developed by the original implementing institutions based on the specific design standards of the schools.

- In any disaster event, teachers as well as those they are teaching experience loss and trauma. Thus, psychosocial support services should be offered to the teachers to help them cope and to assure they are both mentally and physically fit to carry out their duties while also training them to provide same kind of support to the students.

- Due the lack of concise data on the damage and needs at the ground level, delays and overlap were unavoidable. The constitution of School Construction Working Group and Education Recovery Working Group eliminate that problem partially but there still is a need for more systematic data collection mechanism. The existing partnerships between the Ministry of Education and non-government agencies can help develop a proper system and procedures for such action where Township Education Offices can play the key role of data collection and monitoring the process.
Child Friendly School Approach

UNICEF is profoundly committed to securing safe, rights-based, quality education for each and every child, irrespective of his or her circumstances. Fully understanding that schools are not ‘one size fits all’ institutions, and that children have diverse needs, UNICEF has striven to create a comprehensive, multifaceted and dynamic educational model aimed at helping schools achieve safe, healthy and protective environments that meet the specific needs of their children.

The Child-Friendly School (CFS) model is a simple one at heart: Schools should operate in the best interests of the child. Educational environments must be safe, healthy and protective, endowed with trained teachers, adequate resources and appropriate physical, emotional and social conditions for learning. Within them, children’s rights must be protected and their voices must be heard. Learning environments must be a haven for children to learn and grow, with innate respect for their identities and varied needs.

The CFS model also builds partnerships between schools and the community. Since children have the right to be fully prepared to become active and productive citizens, their learning must be linked to the wider community. In the past decade, the CFS approach has become the main model through which UNICEF and its partners promote quality education in normal as well as emergency situations. UNICEF provides School-in-a-Box kits to temporary child-friendly learning spaces to help children recover from trauma and maintain a sense of normalcy by continuing their education.

Construction of Child Friendly Schools in Nargis Affected Areas

Since January 2009, UNICEF has been leading the efforts in 7 townships in Ayeyarwady and 2 in Yangon Division, to build Child Friendly model schools with ‘build back better’ approach. A total of close to 50 schools are to be built from the present budget available and 49 schools have been built so far. These schools are specially designed to reduce risk in disasters and are built with locally adapted child friendly design that includes adequate toilet and safe water storage facilities and makes provision for children with disabilities.

The structures are based on UNICEF’s own design and construction procedures are subject to rigid quality control guidelines. The competitive bidding processes are adopted to select the most economical as well as most capable construction company. Once selected, the construction crews are oriented on the new and improved school design.

Based on the type of soil and how much load it can support, soil-cement brick or cement fiber plaster blocks are used for construction. Soil-cement interlocking bricks developed by the Asian Institute of Technology are energy efficient since they require the transportation of only cement to the construction site, require no fuel wood for firing, and only minimal mortar, which makes it a very easy kind of brick to lay. Local population is often recruited for labor, since fairly unskilled workers can learn to build quickly and easily.
Each school can accommodate 100 students and features well-lit and ventilated classrooms, a library, water and sanitation facilities, access ramps for students with disabilities and a large playground. The schools are built to resist earthquakes up to 5.0 on the Richter scale and to withstanding strong winds. To prevent flooding, the buildings are raised above the highest surge level recorded in the respective area.

Maintenance manuals for each individual school have also been developed and disseminated that encourage the school authorities and the township education department to carry out regular inspections. Daily, weekly and periodic maintenance practices are explained and recommended in the manual.


Key Lessons Learned

- An inducive learning environment with child friendly features can help children their schooling process and help them grow physically and mentally strong.

- Safer school construction with multi-hazard resilient elements requires special skills and the local builders need to be trained on such techniques which they can apply in the constructions of other structures as well.

- In the process of maintaining the constructed schools, specific manuals and guidelines could assist the local and individual school authorities to look after the structures in a proper and sustainable way.

Case Study 11 Safer Schools Construction of Save the Children Myanmar

Save the Children partnered with Development Workshop France (DWF) to form the Safer Schools Project. Many of the schools repaired in the initial stages of the emergencies (by different agencies and/or communities) were built with a timber frame and brick walls in a short time frame. Greater efforts were required to make them stronger and therefore safer.

The process of strengthening schools began with a one day workshop with the community. Four or five villages were brought together for the discussions and practical demonstrations. After the materials were received the school building was strengthened by local builders under project supervision. On completion, the strengthened schools were re-opened to the public in an open day event.
This day was an ideal opportunity to highlight how the same techniques can be applied to building safer homes. A demonstration bamboo house was included in the open day to help families to see how their own homes can be strengthened with the application of the same ‘basic ten key principles of cyclone resistant construction’. All of the families received a poster illustrating the key principles.

Partnering with Development Workshop France (DWF) has greatly enhanced the technical ability of Save the Children staff, which has meant this knowledge can go straight to the community. The workshops have been very well received by children and adults. More homes are being strengthened as a result.

The level of community participation in the project has gone beyond expectations. This was evident in the fact that people came from other villages that are not participating in the project, seeking information about making schools and other buildings safe. Some villages offered to make financial and material contributions to the strengthening work.

Children participated by presenting their ideas about an ideal safe school, exploring the small bamboo structure, giving their impressions about how their school after it was made safer and celebrating the opening of their safer school through singing, dancing and drama activities. Throughout the project it was emphasized that children are future adults and will be future home owners and builders, and that they can share their knowledge with their parents and friends.

Community members from Shwe Nan Chaung village in Laputta commented that “Now the school is better and safer than ever and children can happily learn. They can pay more attention to their studies. They become more motivated to go to school. Even when the weather is not good, they can go to school and learn there. There is a significant difference between the old school and the new school. We estimate this new school will last at least thirty years. If there is heavy rain or strong wind or any disaster, we will take refuge at the school.”

Before and after a school was strengthened in Myaungmya
In terms of sustainability when children were asked what they would like to be when they are older many stated that they would like to be engineers to make buildings safer. The children are very aware of the techniques which are needed. This has been helped by the 10 key points being placed around the school and the small model house. Raising awareness throughout the project has been fundamental in getting key safety messages across. A parent from Myang Mya stated that “Thanks to the Safer School Techniques Workshop, I am no longer naive about building a safer school or house. I am equipped with the knowledge to differentiate which way is safe or which is not. Looking at a building, I can decide if it is safe for children or not.”

Source: Save the Children Myanmar info@savethechildren.org.mm. Contact person: Lu Sam, Education Training Coordinator, e-mail lusan00@gmail.com.

### Key Lessons Learned

- Awareness raising of the community on safer school buildings can create newly committed supporters of safer construction methods, at the same time ensuring the ownership within the community and increasing the demands for employment of such techniques.

### 3.7. Rebuilding Livelihoods

In the Ayeyarwaddy Delta, 60% of the over 7 million population is engaged in agricultural production and the rest earn their livings working in fishing industries and salt and shrimp farming. Out of over 7 million people living in the delta, Nargis impacts was felt by 2.4 million. Their livelihoods were devastated and their food security threatened when 63% or 738,000 ha of paddy land in 19 most affected townships were inundated destroying hundreds of thousands of tons of grains and stored paddies, milled rice and seed stocks. Sea water intrusion of the paddy fields and loss of draught animals; as much as 50% of total numbers, impeded the rice growing communities from recovering their livelihoods. In addition, loss of fishing boats and nets, damages sustained by as much as 15,000 ha of fish and shrimp ponds and 9,000 ha of salt flats in the delta impact many more people working in these industries.

Two years after Nargis, the casual labors and landless still encounter problems finding seasonal jobs as economy in the Delta still needs to pick up. Despite the on-going recovery efforts of both international and national agencies, the second Social Impact Monitoring (SIM-II) report identifies three primary concerns:

1. Consistently dropping yields in the agricultural sector: This is caused by lack of working capital to purchase machinery and animals, to hire labors and to acquire more land because of the high rental fees. Another problem is the tillage capacity gap due to low rate of draught animals and farm machinery replacement. Hampering the yield furthermore is the rodent, crab, snail and insect infestations which are experienced to considerable extent in 17 village tracts of Labutta and 22 village tracts of Bogale in 2009. The rice plants were further damaged in 2009 monsoon by heavy silt and sedimentation left on farm land and extensive salinity of the soil.

2. Increasing household debts: Brought about by high interest rates and shrinking credit supply. The credit markets in the delta are dominated by informal financial businesses such as private money lenders, pawnshops and gold shops, that lend based on trust and social collateral. The burden of debts in the rural areas hamper growth of economy in these localities as both local money lenders and their clients suffer from loss of assets. It creates a vicious cycle where farmers and
fisherman continue to have inadequate capital to invest in increased production, resulting in falling yields and an inability to repay debt.

3. Scaling down of small enterprises due to diminishing capital and high running costs: As a result of rising debts and drop in purchasing power of local consumers.

All of this leads to loss of job opportunities and loss of land and other properties to moneylenders.

The rise in economic difficulties set in motion not only a downgrade in overall production but also an increase in the migration pattern, specifically out of villages and into the rural areas. This has accumulating impact on the entire business value chain since the former full-time farmers and fishermen are reduced to making living as casual labourers, competing with the landless labourers, pushing them further into poverty. With unknown number of unregistered residents in villages, difficulties ensue to determine how many families are in urgent need to use land for small-scale farming. The joint UNHCR and UN-HABITAT public awareness campaigns on land rights and land laws in Myanmar address this issue (more information provided in section 3.2: Shelter and Habitat Development of this report). To encourage the involvement of community in the livelihood restoration activities, IFRC-MRCS and UNDP have created community groups: Village Tract Recovery Committee and Early Recovery Committee respectively, to oversee their livelihood support and community based early recovery programs.

Livelihood Support Initiatives in Nargis Affected Areas

For farming community: Provision of agricultural assets and inputs such as draught animals, power tillers, irrigation equipment, seeds, fertilizers and fuel for machinery, provision of services like farmer exchange visits and farmer extension group, provision of storage facilities for seeds and rice and provision of trainings on agriculture and livestock.

For aquaculture and fishing community: Provision of livelihood support materials such as fish nets, boats, fishing gears and provision of trainings on usage of new materials.

For casual labors: Distribution of seed kits for plantation of flowers/ fruits and vegetables for home gardens and small animals and animal rearing kits to enhance household income and food security.

Creation of new job opportunities through cash for work programs in rehabilitation and reconstruction of infrastructure (bridge, school, shelter, road, jetty, monastery, pond cleaning and fencing and digging) and re-forestation or tree planting.

In general: Provision of cash grants and loans for farmers, fishermen, small business owners through micro finance/ micro credit programs. UNDP, PACT, ACTED and World Vision are leading the efforts in micro finance project implementation. Through self-reliance groups (SRG) established prior to Nargis by UNDP and PACT, small soft loans were offered to establish revolving common funds, followed by matching grants from UNDP to the groups in response to micro-project proposals by members.

Provision of vocational and skill enhancement trainings for both men and women on tailoring, engine repair, basic nurse aids and pharmacy and livestock extension.

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31 Micro-finance market and micro-finance institutions are not as developed in Myanmar as in its neighboring countries such as Bangladesh and India.
A practice worth mentioning is the UNDP’s livelihoods recovery strategy in the Delta that focuses on enabling the most vulnerable groups to have organized access to a combination of livelihood capital assets that would lead to increased socio-economic well being, reduced vulnerability and more sustainable use of the natural resource base.

Though many agencies are concentrating on revitalizing the agricultural sector, some such as Solidarités and Department of Fisheries, Ministry of Agriculture, are supporting development in aquaculture sector for poverty alleviation. The Myanmar Fisheries Federation, part of the ASEAN Fisheries Federation, is also supporting aquaculture development in Myanmar, although most of the activities appear to focus on inland areas. On top of that, LIFT funds have opened up new opportunities for livelihood recovery sector and a sizeable number of organizations have submitted proposals for further work in the Delta.

Box 13. Recovery Strategy of Ministry of Agriculture

<table>
<thead>
<tr>
<th>Ministry of Agriculture and Irrigation Recovery Strategy for Agricultural Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Rehabilitation of Crop Land for Timely replanting: Planned activities include provision of seeds, farm machinery, draught animals, fertilizers and pesticides to farmers and provision of extension services such as analysis of soil for salinity in Nargis affected areas, etc.)</td>
</tr>
<tr>
<td>• Compensating for paddy loss by increased production of paddy in other non-storm affected regions in the country</td>
</tr>
<tr>
<td>• Enhancing global food security by increasing paddy output through higher yield and expansion of sown acreage in non-storm affected regions in the country</td>
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</tbody>
</table>

Ministry of Agriculture and Irrigation also supported non-agricultural related activities in reconstruction of storm resistant homes and communal shelters, providing skills trainings for 1,000 young men and women and assisting them in starting small scale businesses through start up capitals, capital assets provided to 3,500 households for small scale enterprises and strengthening the microfinance systems in 1,500 village across the Delta.

Challenges and Lessons Learnt

- Cash for work programs are good entry points into recovery phase as they combine emergency restoration of basic infrastructure and long term development.
- Cash for work programs can undermine essential livelihood activities, particularly if extended too long, however, innovative use of the programs at the same time can create linkages to longer term livelihood needs especially if the program envelop capacity building activities for the chosen participants of local skill and undertake small scale productive activities.
- In cash for work programs, clearly defined guidelines and procedures in the selection of workers should be in place to ensure a gender balanced workforce and to promote fairness: for instance, those most in need have the first priority in getting the employment, etc.
- Considerable numbers of beneficiaries are presently struggling to cope with the new tools and materials provided to them and end up either breaking or completely abandoning the application of such appliances. A good follow-up system to maximize the investment and proper orientation on usage of materials and machinery as well as their maintenance has to, therefore, accompany

the distribution schemes. New jobs can be created through appropriate trainings for maintenance and repair services of these tools.

- Requirements and utilization of machineries differ based on the mode of cropping (one crop or two crops). These are the local conditions that international aid organizations need to understand before any large-scale support program is launched.

- There is a need to balance the use of human workforce (or the need for job opportunities) with the mechanization of farming practices. Mechanization is unavoidable but there has to be a transitional stage, considering the culture and nature of farming practices in the delta.

- It needs to acknowledge that affected community may employ multiple livelihood strategies with even same household having dual or triple income generating activities.

- In many cases, the failure faced by new settlements of cyclone affected communities can be attributed to lack of job opportunities and poor local economy. Thus, the future plans of new settlements have to incorporate proper infrastructure that will boost the local economy.

- One crucial area that needs scaling up is the microfinance. Until now, most of the cash grant and financial support schemes only cover small portions of the affected townships. Adaptation or upscaling of existing “partnership saving” or “self-reliance group” schemes need to be promoted.

- Micro-credit schemes paired off with basic business and financial management trainings can avoid reduction of return or loss of investment.

- In micro finance programs, medium term repayment stretching up to three to five years can be a burden on the organizations with time-bound projects but for the beneficiaries with medium to large scale businesses, that is the right amount of time considering their profit margin.

- There should be more than one option for the borrowers on how the money will be spent as long as there is a system of monitoring that accords flexibility and not focus only on policing of the activities but at the same time provides essential technical advice and supports in accordance with the changing needs of the loan recipients.

- Capacity enhancement on credit management could be mandatory as a pre-requisite for the eligibility of loans.

- Many programs target the most vulnerable (i.e. child or female headed households, the poorest of the poor and elderly and disabled) and see livestock as an appropriate livelihood activity. However, for poor households to be successful in animal rearing a considerable amount of support is required and can place additional burdens on them.

- Too small a number of household benefitting from the support can affect the balance of the community and create conflict. Therefore, it is advisable to provide support to at least 50% of households in each village using clear and transparent selection process.

- Communities should be clearly informed on the repayment system of any micro-credit scheme but allowed some flexibility so that they can develop a model that works best in their community.

- The existence of community level committees such as early recovery committee (ERC) and self reliance group (SRG), etc., can help facilitate project implementations at the ground level. The development community can surely take advantage of such structures: made up of community advocates who understand the culture and norms well and who have already had good relationship with local authorities, at the ground level to promote buy-in of community based activities and to mobilize community participation.
SRGs prove to be at their strongest when they are made up of members from same social strata and have the abilities as well as opportunities to exercise management of their capital and their inputs themselves. Effective and potentially sustainable SRGs are those that are relatively small, have a simple structure and have clear working routines.

Provision of aids that require a change in the local life style such as introduction of new farming/fishing techniques, new crops or new types of animals that the locals are not familiar with, without prior proper trainings or continuous technical assistance, may not be suitable for local environments and exert extra burden on the aid recipients.

Resource bound projects, at times, tend to overlook the human factors and strive only for outcomes cited in the project document. Therefore, community based projects must be flexible so as to accommodate critical recovery needs of the community such as preparation for cropping and harvesting.

All involved stakeholders need to be informed of transparency and accountability issues from the beginning. In a society where communities are not encouraged to make their own decisions, these topics are highly sensitive and need to be handled with care and subtlety. Adopting such processes such as public audits can discourage corruption.

Inclusion of disaster risk reduction features in the infrastructure development should be viewed as an investment for the future. These benefits should also be made aware to the community to encourage greater protection and maintenance.

Targeting to support the group of beneficiaries who are neither too poor nor extremely wealthy (middle class farmers or fishermen, etc.), but that have adequate capacity, can help in creating more job opportunities for the poorest. For instance, incentives either in the form of cash or other support system to medium and big farmers to expand their business can open up more job opportunities for the landless poor earning their livings as casual labors.

Trainings designed for the community members should not be too long, should contain simple informative messages and include discussion sessions for the community to provide feedbacks.

Coupling training with credit can jump-start job creation. A rapid market assessment of local needs will identify high-demand products and skills.

Often proper sequencing of livelihood inputs is not done because of the emergency setting and it is necessary to ensure that the delivery of the various inputs is timed so as to optimize the output. For example, providing credit without the requisite business development and management training at the same time may lead to a reduction of return or loss of investment.

Case Study 12 Livelihood Cash Grants in Myanmar

Livelihood Cash Grants in Myanmar

After Cyclone Nargis ravaged the Ayeyarwaddy Delta in May of 2008, Save the Children in Myanmar (SCiM) initiated a 'cash grant for livelihood recovery' programme.

In line with the priority needs identified by affected communities, the programme aimed to help cyclone-affected households to ‘begin to fulfill their right to livelihoods and to reduce dependence on food assistance through the rapid replacement of essential livelihoods assets’. With £667,000 in funding from the Disasters Emergency Committee (DEC), the programme provided 28,000 households with cash grants of 50,000 kyats. Livelihoods Committees were formed in each village to facilitate the delivery of livelihoods projects. Assets supplied included boats, nets, livestock, items to start small businesses and fertilizer.
The programme used a mixture of cash grants direct to households and facilitated procurement of livelihood assets. The choice between these two methods was based on several factors, including whether the local authorities would accept the use of cash as a means of recovering livelihoods, the applicability of cash to livelihoods activities, market access and the potential for cash to cause conflict between targeted and non-targeted communities. Safety and logistics were also considered.

In light of the tensions caused within some communities as a result of household-level targeting in food aid programming, it was decided that the project would give equal levels of assistance to each household in the targeted villages. Villages were selected according to the following criteria.

1. Food security: so that households would not use the assistance to buy food, it was essential that people enjoyed minimal levels of food security.
2. Degree of mortality and damage.
3. Degree of household poverty and vulnerability.
4. Multi-sectoral approach: other Save the Children sectors should be working in the village, to ensure maximum outreach capacity and pre-existing relationships.
5. Overlap: avoid areas where other agencies were doing similar work.

The project was launched in the last week of July 2008, and was completed by the end of September, a little over two months later. The target of 28,000 households was reached across seven area offices in the eastern and western regions of the Delta. This is notable given that SCiM did not have a livelihoods programme or staff in place prior to Nargis.

An internal evaluation of the project was conducted, involving focus group discussions with 17 Livelihoods Committees and 102 interviews with households from poor and very poor wealth groups, including 54 in an area which only used cash grants and 48 in an area which used a mix of cash grants and facilitated procurement. As most households used the majority of their cash grant to buy livelihoods assets, there was no obvious difference between the two methods in terms of outcome for the households concerned. A market survey was also carried out, including interviews with seven traders.

**Impact on livelihood recovery**

Most people said that the project had had an impact on their livelihood recovery, through investment in essential livelihoods assets. Of the 102 households surveyed, 37 said that they had recovered their livelihoods to a quarter or below of their pre-cyclone levels; 52 reported that livelihoods had recovered to 50% or above their pre-cyclone levels; nine stated that their income levels were 100% or above pre-cyclone levels and four did not respond.

**Usage of cash**

Livelihoods Committees (LCs) from each of the 17 villages visited reported that nearly all the grants had been used for the purchase of assets to support livelihoods, predominantly casual labour, petty trade and fishing. The household surveys also showed that the majority – 66 households – used all of their grants for the purchase of livelihoods assets. Thirty used most of the grant for livelihoods assets, with the balance going on food, education and health expenses; only six households reported not using their grants for livelihoods asset recovery, instead opting to spend all of the money on food, education and health.

Key Lessons Learned

- In cash grant programs with the aim of supplanting livelihood assets, proper monitoring is essential to ensure the money provided is used suitably and the monitoring should be conducted within the community itself (livelihood committees in this case).
- At the same time the periodic monitoring should include a system to capture any change in needs of the community so as to react quickly.

Case Study 13 Livelihood Support Generates Income and Hope for Cyclone Affected Families

Livelihood Support Generates Income and Hope for Cyclone Affected Families

Thaung Lay village, Laputta, 15 March 2010: Ko Naing Lin, 27, prepares his wooden cart for the day’s business. He uses the cart to transport water in big plastic jerry cans. He has assumed the role of a vital water supplier to villagers who are unable to fetch their own water from the far off pond in Thaung Lay village, one of the isolated islands in Pyin Sa Lu sub-township in Laputta. “I am doing well in my drinking water supply business in the village. In the past, odd jobs earned me irregular income and I was not able to support my family. Now, I can support my son and my parents from the water supply business, not my wife though…” Ko Naing Lin’s tone trailed off from the pride of describing the success of his livelihood to sadly reminiscing the loss of his dear wife.

He looks over his shoulder to the house in which his four-year-old son, Pi Ti Aung plays with his grandmother. “Pi Ti Aung lost his mother to the devastating Cyclone Nargis in May 2008. Now I am taking care of him with the help of my parents,” said Ko Naing Lin. Nargis swept away lives and livelihoods in the Myanmar Delta. People of Thaung Lay village also suffered loss of family members and homes, loss of possessions and earning opportunities. “About six times a day, I fill the water jars in the pond and carry them back in my cart back to the village. Each trip takes me about 40 minutes and people pay me 500 Kyat per cart. My average daily income for water supply is now 3000 Kyat a day. This is much more than I earned before and it is a steady income.”

In the immediate aftermath of the devastating Cyclone Nargis in 2008, UNICEF rapidly mounted response operations in the Delta and gradually moved toward recovery interventions. UNICEF’s Child Protection programmes focused on interventions that assisted affected communities in protecting children from the worst affects of the emergency in Bogalay, Laputta, Pyapon, Dadeye, Dala and Kun Gyan Kone townships.

Economically empowering the affected families was recognized as a way of creating an enabling environment for protecting children. As part of a wide range of protection activities for cyclone affected children and families in the Delta, livelihood cash grant support along with business skills development to 4,515 most vulnerable families in Laputta and Bogalay townships was implemented in a partnership between UNICEF and Pact Inc., an international NGO with expertise in livelihood support interventions. The objective of supplementary cash injection to vulnerable families is to better protect children in the family as well as in the community, preventing children from dropping out of school and engaging in hazardous work as a result of financial insecurity.

Participating vulnerable families were selected on the basis of a set of vulnerability criteria facilitated by Community Support Groups and shared through community meetings. Community support Groups were set up by UNICEF and implementing partners as a community-based mechanism to monitor, prevent and respond to abuse and exploitation of children in the community.

The vulnerable families were encouraged to come up with their own business proposal and were offered business skills development training provided by Pact Myanmar. The recipients of livelihood
grant made their business plans based on their current livelihood experience and knowledge, such as in fishing, sewing, farming, livestock raising and setting up small grocery shops. Ko Naing Lin is one of the beneficiaries supported by the project.

"With the help of the grant, I chose the right business, not only one but two! I also bought a pig from the grant from UNICEF. I do not have a lot of experience in animal raising yet but I am trying to learn. With the income from the water transportation and what the pig will hopefully generate in future, I can build a better life. I am confident of sending my son to the primary school when the time comes," Ko Naing Lin concludes in an optimistic note.


Key Lessons Learned

- Livelihood support initiatives have to be accompanied by skill development of the recipients on basic business management skills for sustainable purposes.

Case Study 14 Sustainable Livelihoods through Micro-finance for the Poor

Sustainable Livelihoods through Micro-finance for the Poor

The Sustainable Livelihoods through Microfinance for the Poor project was introduced in 1997 under the UNDP’s Human Development Initiative program to address the lack of access to working capital for the rural poor in Myanmar. Initially working only in Myanmar’s Dry Zone, in March 2008 Pact assumed management of the UNDP’s microfinance projects in the Ayerwaddy River Delta and Shan State. Pact based the design and delivery of the microfinance project on its Capital Plus philosophy, which is based on the belief that long-term poverty alleviation is attained through the combined development of:

- Financial capital in the form of savings and credit for the poor
- Institutions in the form of sustainable microfinance organizations
- Human resources in the form of informed and empowered clients.

The approach encompasses a two-pronged strategy that consists of 1) facilitating access to microfinance services for the poor using a group lending methodology, and 2) stimulating small business ventures through a range of critical small enterprise/business development support services. To implement this strategy Pact helps organize villagers into five-member savings and credit groups that provide financial services to varied micro-business sectors, from marginal farming to small trade activities. The loan processing and paperwork is based on a simplified format designed for use by preliterate managers and clients.

Pact’s microfinance project now includes 245,000 active borrowers across Myanmar’s Dry Zone, Delta Region, and Shan State with a capital and outstanding loan base of nearly $10 million. Across the Nargis affected areas of Ayeyarwaddy Delta, an extended loans of accumulated US $20 million (5 million per year) has been disbursed to almost 80,000 borrowers, mostly women. Over the life of the project in all three regions nearly $50 million has been issued in loans with a 99.98% repayment rate. Pact’s commitment of community participation is actualized in the 6462 villages in which 8907 credit organizations or "centers" are formed. These community organizations constitute the institutional foundation for the long-term viability of Pact’s microfinance project.

Key Lessons Learned

- For very poor community, group lending methodology can help raise the leverage as the burden of repayment is shared among several families. However, without clear directives on such issues as how much each family has to contribute in a specified amount of time, conflicts can occur.

Case Study 15 Emergency Livelihood Project of ILO: Creating Temporary Employment through Infrastructure Restoration in Mawlamyinegyun

Emergency Livelihood Project of ILO: Creating Temporary Employment through Infrastructure Restoration in Mawlamyinegyun

In the Ayerwaddy Delta of Myanmar, the extensive networks of rivers and the channels provide the communities inexpensive ways of transportation for both their personal and trading purposes. The villages within close proximity are interconnected with make-shift footpaths, marked by their characteristics smooth earthen path surrounded on both sides by traditional thatched and bamboo houses, and customary wooden or bamboo footbridges. The improvised wooden or bamboo jetties play host to water vessels of various size and shapes.

All these and more were greatly damaged when Cyclone Nargis made landfall on 2 and 3 May 2008 affecting mainly the Ayerwaddy Delta and the surrounding areas of Yangon. The partially or completely destroyed weak structures, in addition to loss of boats, led to poor connectivity even between areas that were not usually separated by water channels. Furthermore, the impassable paths and bridges hampered the communities with undamaged farms or businesses to get their produce to the market or get access to other basic services.

Emergency Livelihood Project

In response to the immediate needs identified by the joint ASEAN-UN Post Nargis Joint Assessment (PONJA), the International Labour Organization (ILO) Yangon Office undertook tertiary infrastructure restoration project covering 65 villages in Mawlamyinegyun Township. What started out as a self-funding three month pilot project, from October to December 2008, was extended until June 2009 with the financial support from the Department for International Development (DFID), UK.

Implemented under the Employment Intensive Infrastructure Program (EIIP), the project aimed to revitalize local economy through restoration of connectivity between Nargis affected villages in the Mawlamyinegyun Township. Key tertiary infrastructures identified for reconstruction include jetties, foot bridges and foot paths. The project provided the basis for temporary employment and income generation for the affected communities within the project area, fully utilizing the local resources of both human and materials.

Community Engagement

The project used the local resource based approach and ILO worked closely with the village Early Recovery Committees (ERCs) established by UNDP. Prior to the project, the very same villages had been selected and prioritized by UNDP as the most vulnerable. Through ERCs, community driven project planning was adopted with the community identifying and prioritizing their own needs. With the assistance of the two project community liaison officers, the initial site selection for the infrastructure was determined at the community meetings, after which the feasibility study was carried out by the project team consisting of a project manager (being an international engineer) and two local engineers. The findings were presented to the community for their endorsement.

33 Of over 100 villages identified by UNDP as the most vulnerable in Mawlamyinegyun Township.
Both the community and private contractors were engaged to carry out the work but only local workers were hired, nominated by the ERCs. The established private contractors were used as reference points and advisers for community contractors in addition to the project engineering staff. Local materials were also utilized to construct the structures and the boats from the project villages were chartered to transport construction materials. Throughout the project period, regular inspections of the completed works were undertaken by ILO. Upon completion of the project, a public audit was performed in order to promote transparency.

**Project Outputs**

At the end of the project, following major outputs were listed:

- **Rehabilitation of tertiary infrastructure**: 87.6 km of access tracks (footpaths), 25 jetties and 2930 ft of foot bridges built.

- **Employment creation**: altogether 74,436 work days had been created with 7,404 workers employed throughout the project.

- **Skills development and capacity building**: out of 159 contracts, 117 local contractors were trained on employment best practice, contract management and budgeting. A total of 360 individuals were also provided with vocational trainings. In addition, ERCs were trained in a total of 65 villages on management and governance skills as well as on the maintenance of the infrastructure. A maintenance guide and schedule was prepared for the ERCs detailing four types of maintenance: routine, periodic, emergency and preventive. The schedule indicated when each should be undertaken: periodic and routine maintenance before the rainy season, preventive maintenance to be done all year round and emergency maintenance whenever the situation arose.

- **Compliance with international labour standards and their integration into the contractual and management procedures.**

The quality assurance of the structures was guaranteed by regular inspections by the three project engineers and the 3 senior supervisors from ILO-Yangon office. Special features such as 1 ft minimum diameter culverts were installed along the footpath to allow water drainage during monsoon seasons to mitigate excessive flood water, preventing the path from being washed away. The newly built footpaths were made entirely of concrete and the footbridges and the jetties had concrete piers, making them more resistance towards any strong winds, rain or recurring seasonal flood of the Delta. Furthermore, footpaths were connected to the community buildings such as monasteries, cyclone shelters and schools.

**Building Alliances**

As part of the project, a government liaison officer from the Ministry of Labour was assigned to the team who efficiently conveyed the information on labour rights under the law to all parties concerned. The government liaison officer also acted as the conduit to authorities at the township and state levels. Through this arrangement, mutual respect was gained and it also significantly contributed to the effective delivery of services and the achievements of the project final outcomes.

Moreover, the work was undertaken not just as an isolated infrastructure project but also to support other agencies’ interventions in the region by providing connectivity, such as FAO and WFP food distribution and preparation for agricultural activity restoration, thereby complementing their on-going recovery initiatives.

At the monthly coordination meeting at the township level, jointly organized by UNDP, UNOCHA and IFRC, ILO shared technical designs of the infrastructures being built and the project modality with other agencies working in the same township. At the end of the project, ILO was requested by UNDP to provide technical assistance to

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34 A rotational employment scheme had to be adopted at times to provide equal opportunity for all the people who wished to work. Over 30% of the workforce was constituted by women.
its project in Mawlamyeingyun for the construction of social infrastructure, retrofitting of community buildings and provision of trainings to local masons and carpenters. Even though there was some geographical overlap in terms of target villages, both organizations avoided repeating the same activities. UNDP even contracted a few outstanding community contractors from ILO’s project to build bridges under their project.

**Looking Forward**

Having equipped with the responsibility and the skill sets for the maintenance of the finished structures, it is envisaged that the ERCs will be able to take this forward supported by the funds from the “profit” element of the contract that have been put aside. By actively participating in the project implementation, the community accomplished not just monetary benefits but also vocational skills to enable them to pursue alternative livelihoods.

The three months cooperation with UNDP after the project allowed ILO to hand over the project data and information to UNDP, which has a much longer staying power and mandate in the area. The recovery phase sees the ERCs in their new format with the new name Community Development Committee. But their responsibilities remain almost the same; to bring about sustainable development in the community through participatory approach.

**Key Lessons Learned**

- With systematic capacity building programs, existing committees like ERC can be transformed from on-paper arrangements to functioning ones that can represent respective communities and their concerns.
- Clearly defined guidelines and procedures in the selection of workers should be in place to ensure a gender balanced workforce and to promote fairness: for instance, those most in need have the first priority in getting the employment, etc.

**Source:** ILO Myanmar.

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**Case Study 16 Mangroves as Disaster Risk Reduction Shelter**

**Increased Access to Credits through Self-Reliance Groups (SRG)**

Five years prior to the cyclone, UNDP’s Integrated Community Development Project (ICDP) began assisting the establishment of Self-Reliance Groups (SRGs) with representation from landless and near-landless families and the poorest and most vulnerable households. These groups, comprising of women, are galvanized around common affinities and interests with respect to livelihood development and income generation. Following the cyclone, though some of these groups remained intact, many others had to be rehabilitated due to the death of a large number of core members.

In view of the changed scenario in the Delta, UNDP adopted a phased approach that initially focused on providing immediate cash income opportunities through cash-for-work activities and provision of direct grants to households. This was followed by the provision of small soft loans through SRGs and longer term access to loans and savings through the Micro-Finance project.

Once the SRGs are formed through a process of self-selection based on mutual affinity, they begin by saving small sums of money to establish revolving common funds. UNDP then provides matching grants to the groups in response to micro-project proposals by members. These grants are used for livelihoods, health and education activities and the proceeds are repaid into the common fund, with interest. The repayment period and interest rates are determined collectively by the group members, who balance the need to expand the fund with the ability of individual members to repay the loan.

UNDP has not only restored existing groups’ funds of over US$ 1.5 million, that were lost due to the cyclone, but also expanded this initiative to provide additional small grants to the worst-hit groups,
enabling communities to jumpstart income-generating activities.

These loans enabled borrowers to undertake income-generating activities and build up household savings. About 50,000 members of the Micro-Finance project were affected by the cyclone. While some were killed, others lost their family members, homes, savings and productive assets. They had over US $1.25 million savings and US $2.9 million in outstanding loans. These members were no longer in a position to resume their income-generating activities without refinancing after the cyclone.

The revived Micro-Finance project in the Delta has written off the loans of seriously affected households and restored household savings to all members in Labutta, Bogale and Mawlamyinegyun townships. In addition, new loans averaging $100 per home have allowed 20,000 members to invest in boats, livestock, and small business activities such as food processing, as well as family health care and education. With the shortage of funding for the reconstruction of permanent shelter destroyed by Nargis, a new loan product is now being developed by the project to assist borrowers in rebuilding their homes. The project is also expanding to cover another 20,000 households across the Delta that are considered most vulnerable due to the damage and losses they sustained. This will also include provision of higher loan capital for rural entrepreneurs employing the landless poor.

Finally, the Micro-Finance project will begin to extend group loans to SRGs that have developed into viable and “mature” groups. This will provide SRG members with enhanced financial services to expand their small business and increase household income.

**Story of Aye Aye Naing: Turning Dreams into Reality**

8 April 2009, Labutta – Aye Aye Naing, 32, is from Chaung Wa Kone village. She wears a smile on her face as she counts the income she has regenerated from selling water. As the clock strikes 11 am, the morning session of her work is completed.

“I earn at least 10,000 kyats (USD 10) in one day by selling water. During the past three months, I have built a new house with my income.”

Before Nargis, Aye Aye Naing’s family relied primarily on the income of her husband, who is an electrician. But as soon as the cyclone hit, the family had to turn over a new leaf and start from nothing.

“My family received 85,000 kyats provided by UNDP for livelihood activities in December. I used the grant to buy a handcart and ten small buckets, each of which can store ten gallons. I started to collect water from the pond 15 minutes walk from our village to sell,” Aye Aye Naing explained.

Soon, Aye Aye Naing had high demands from clients, even though there were already 15 water vendors in Chaung Wa Kone servicing 1470 villagers.

“I have a strong demand from NGOs and other more wealthy people in my village. Thus, I usually get around 20 orders in one day, earning about 500 kyat for 100 gallons each time,” she said.

“Sometimes I think our life condition after the storm sounds better then before. Now I can build a new house which costs over seven lakhs. My children are able to pursue their studies as well,” she noted.

Being a member of “Tha Zin Hlaing” Self Relianve Group (SRG), Aye Aye Naing mentioned that her knowledge and capacities have improved considerably and she has learnt about other livelihood opportunities.

“I am more and more willing to expand my business. First, I want to buy a motorbike for my husband so he can run a cycle taxi. Then I will consider trading dry prawns to Yangon. To fulfill my desire, I would need to invest over one million kyat at least. Anyway, I firmly believe my dream will become a reality one day,” she said.
Story of Daw San Aye

“As a member of the “Pan Thitsar” SRG, I enjoyed many benefits. When I first joined the group in September 2008, I was able to contribute only 200 kyats per week to savings. I was happy to eventually realize that a small weekly saving could still equal to a big amount. I took my first loan of 2,000 kyats and used this money to buy materials to set up a grocery shop. Since then, I have been able to regularly access loans from the SRG savings fund, and this has allowed me to enhance my business. I slowly added seasonal vegetables like gourds, long beans and dry fish and snacks to my grocery shop as products to buy. Before Nargis, I earned 700 kyats per day as a daily wage for farm labour. At present, I make a profit of 2,000 kyats per day. I now feel I am better experienced in petty trades and am my own master. I do not need to look for jobs and do long, hard work. In the future, I plan to expand my grocery shop and raise pigs. I always pray for the long life and prosperity of my SRG.”

Story of Daw Win Kyi

Prior to Nargis, Daw Win Kyi and her husband operated two shops—one selling religious offertories such as coconuts, bananas and sticky rice, and the other selling local building materials such as bamboo and thatches—that helped them support their living and children’s schooling. After Nargis, Daw Win Kyi started to borrow very small credit when UNDP launched its Micro-Credit Project in her village in 1999. The project provided loans to its clients to support their children education.

“The income generated from my two shops was not enough to support my children at school. So I took three to four loans from the project, and with these loans I could support my children to continue their education. Two of my children graduated from university in engineering one year ago,” she proudly proclaimed.

Daw Win Kyi has two other sons wanting to pursue a university degree, however, they could not continue their studies after Nargis because the cyclone took away Daw Win Kyi’s and her husband’s ability to support them. Five months after Nargis, Daw Win Kyi was able to re-borrow credit from the UNDP Micro-Finance Project and restart her former business of selling religious offertories at the village market.

Today, Daw Win Kyi and her family no longer need to worry about food, as she is making a daily average profit of about 2,500 kyats. Her older children contribute to the family income as well.

“With this regular income, I can look after my family. My next goal is to repair our house. My husband and I intend to reopen a bamboo and thatch shop once we are eligible to borrow again, so that we can earn more and save more.”


Key Lessons Learned

- The revolving funds of self reliance groups (SRG) promote a model of savings within the poor communities and be prepared for any future shock.


Lessons Learned on Cyclone Nargis Livelihoods Recovery

The majority of the population was poor farmers and fisher people. Cyclone Nargis hit 5 states
(Yangon, Bago, Ayeyawaddy, Kayin and Mon) which are predominantly agricultural societies: it is therefore expected that a significant element of livelihood recovery will focus on agricultural rehabilitation.

The Irrawaddy Delta region obliterated in the disaster is the country's most important rice-growing region, and much of the harvest which had just been gathered is feared to have been lost. With paddy fields now in ruins, there are also fears that the next planting season will be affected.

Reviving the agricultural economy will be a crucial aspect of livelihoods recovery especially in the coastal areas of Myanmar. Death of livestock may affect poor women adversely. The restoration of fisheries will also need to be a focus of livelihood recovery interventions as they represent over 55 percent of the country’s fish supply.

**Agricultural Rehabilitation:** Successful interventions to rehabilitate agriculture in post cyclones/post-flooding contexts included the supply of specific varieties of seeds which may differ depending on the relief phase, and the development of key saline embankments.

- Once again good practice points to the need to consult with communities especially regarding the varieties of seeds that are most suitable for the local context, especially local practices, and changes in soil as a result of the floodwaters. This seems to have been overlooked during the cyclone and flood response in Mozambique (Action Aid Mozambique, 2000). In Orissa because of the large amounts of standing water in most areas, particular local varieties of seeds with a longer maturation period of up to 180 days were required. Many communities expressed concern about the damage of saline intrusion in some of the coastal villages and the need to restore key saline embankments to avoid further water intrusion and further damage (INTRAC, 2000).

- It is also important to consider other forms of livelihoods beyond agriculture and fisheries. In the delta region, it is likely that there may be high levels of landless laborers and sharecroppers. Crises responses need to pay sufficient attention to traders, services and small businesses, as well as farmers and fisheries.

- There is also a need to look at community-based assistance rather than simply individual based assistance. This is perhaps becomes more important as recovery progresses. This could include community grants (like the World Bank KDP programme in Aceh) and support to building community capacities to guide recovery.

- In terms of asset protection, the supply of replacement livestock, livestock fodder and health treatment for surviving animals has proved to be an important component of recovery interventions in the aftermath of a cyclone to rehabilitate livelihoods. Restoring fishing activities is also seen as one intervention that quickly helps livelihood recovery and improves food security. In Orissa the replacement of livestock included the provision of cows, poultry, goats and buffalos as well as livestock fodder. The widespread availability of fallen trees after the cyclone helped boat building activities and the rapid replacement of boats to allow the resumption of fishing. However, limited knowledge of the wider social economic profile of the poor led to a poor targeting of people’s particular needs, and some of the most vulnerable people did not appear in the statistic so they were not targeted (IMM, 2001). Agencies should attempt to avoid the same happening in Myanmar, where knowledge of the local context by international agencies may be sketchy.

**Working Together to Make a Difference: Livelihood Restoration of Displaced Communities**

In the Labutta Township, Ayeyarwaddy Division, many of the affected families, instead of returning to their villages, moved from one place to another in search of food, water, shelter and an income after the cyclone. These families do not want to return to their houses and livelihood assets were completely destroyed by Nargis, while others wanted to move so that they were not reminded of their bitter experiences during the storm.

The resettling of these people, which required extensive coordination, was discussed at a cluster meeting of UN agencies, INGOs and local authorities in November 2008. As a first effort, UNHCR facilitated a discussion with a number of village Early Recovery Committees (ERC), which were established with the support of UNDP, or whether these villages would allow the new families to settle in their village. When a village confirmed to welcome all the displaced people, UNOCHA, UNHCR and UNDP worked together to enable the displaced villagers to move to the new village. WFP provided rice, UNICEF provided household utensils and water and sanitation assistance and local NGO, Swe Tha Har, provided some livelihood assistance. UNDP supported grants ranging from USD 70 to 100 to assist families in starting up livelihood activities. USD 120 was also provided to each household to begin construction of their homes in the new location. Altogether 32 households (244 people) were relocated under this collaboration to begin their new lives.

Daw Myint Yee, 57, and her son are the beneficiaries of this coordination effort between various UN agencies and NGOs working in the area. Daw Myint Yee and her 17-year old son, who were relocated to Yae Wai village from Kywan Kwin village seven months after the cyclone, were also set up their new business after buying a boat and fishing net with the support money received from UNDP. With regular income generated from fishing, they are able to meet their basic daily needs till date.

"Nearly all the people in my village, Kywan Kwin, died during the cyclone. I did not want to go back there as I felt really sad whenever I thought of them. So I decided to restart my life in another place," Daw Myint Yeet said.

"The support was a big help for us as it allowed us to start a business and earn a living. Until we moved to the new village and received the grant, we were only able to work as casual labourers for other people. Now we feel safe and happy in our new village community," she added.


**Key Lessons Learned**

- Thorough assessment of local market can assist the recipient community of cash grant programs to chose a suitable livelihood options.

**Assisting Farmers to Assist Poor Families with Job Opportunities**

In April 2009 as the plantation season for paddy is approaching and Daw Htay, 48, was eagerly waiting for the commencement of the monsoon.

"We do not own farmland, so we work for other farmers during the plantation and harvest seasons. I earned 100,000 kyat in the previous harvest," Htay, a native from Yay Za Ngu village in Mawlamyinegyun Township said.

During the off-season, Htay had to rely on her son’s earnings as a daily wager. Htay’s husband, two
daughters and niece died during the cyclone that hit their village on 2 May 2008. Consequently, Htay had to spend her 100,000 kyat income, not only to provide meals for her family, but also to offer alms and offerings to monks in memory of her deceased family members.

“I am glad that I will soon be able to work and earn again, as the next paddy plantation season will begin in two months time,” Htay said.

Farmers in Htay’s village could only restart paddy plantation several months after the cyclone since they had lost their seeds and resources due to the storm’s strong winds and destruction. In the aftermath, UNDP provided in-kind support in the form of power tillers, seeds, diesel and fertilizers to farmers to restart paddy plantation. UNDP facilitated the formation of farmers groups and ensured these groups received financial support. UNDP also provided financial support under the Cash-for-Work Program. With such help, farmers could hire casual laborers like Htay to work for them.

After harvest season, farmers who received financial support are required to repay to their respective farmers group in-kind or in-cash equivalent of the assistance they received. In some villages, Early Recovery Committees (ERCs) of the village take care of collecting repayments from farmers groups in the village. Farmers groups and ERCs save those repayments in a common village bank account. A portion of the amount collected in the village bank account will be used as a capital for farmers when the next plantation season arrives, while another portion of the collected amount will be used to support most vulnerable households and poorest of the poor in the villages.

Source: UNDP. http://www.mm.undp.org/NewsandPressreleases/NarNewsandPressreleases/2June09.html

Key Lessons Learned

- Supporting mid level farmers have far reaching impact of creating job opportunities for the poor who are casual laborers.

3.8. Water Supply, Sanitation & Hygiene

By and large in Myanmar, rural population rely on collected rain water stored in traditional containers such as giant clay pots and village ponds for their drinking water. Nargis caused inundation of roughly 13% of ponds in Yangon Division and 43% in the Ayeyarwady Delta during the storm surge, leaving them salinated and unusable. In the recovery of water, sanitation and hygiene (WASH) sector, present funding covers 75% of needs. In remote areas with limited access, there has been delay in the rehabilitation of community drinking water ponds. As the dry season approaches, water shortage is expected in several areas due to the slow rate with which drinking water storage facilities have been restored, high evaporation rate and high water salinity rate, particularly in Labutta and Bogale townships. However it is imperative to note that the chronic water shortage problem has existed long before Nargis in the Delta and at present the situation is made more complex by insufficient financial backing resulting in some agencies expecting to downsize or close down projects plus the uncharacteristically hot weather preceding the monsoon this year, which has broken temperature records according to government figures.35

With many households facing water shortage problem, the possibilities of these households facing a number of health risks, as well as decreasing time spent on livelihoods in order to fetch water for the family are taken into accounts by the WASH Recovery Working Group which identifies two priorities: short term and long term, to improve access to safe drinking water. Sort term solutions are for NGOs

to continue with the contribution of water transportation, storage and supply and to revitalize the water vendor mechanism which will also help with the creation of jobs. For long term, it is perceived that communal drinking water pond rehabilitation, new pond digging and construction of rain water harvesting facilities need to be undertaken.

Another concern raised by the WASH Recovery Working Group is the practice of human waste disposal. Pit latrines are used by several communities but they are shared between more than one family. In the west Delta area, many still relies on flowing rivers and streams to carry away their waste. Damage to household sanitation facilities was extensive after Nargis when household shelters were destroyed. In PONJA, it was reported that 40% of the affected population was forced to switch to floating latrines and open defecation because of that result. This has far reaching impact since numerous families resort to use of river water for drinking in the aftermath of cyclone.

**Initiatives to Improve Water Supply, Sanitation and Hygiene in Nargis Affected Areas**

The WASH Recovery Working Group members have been working relentlessly in spite of the limited funding and in consequence, following major interventions have been undertaken in the affected areas:

- Construction of communal rain water catchment device of up to 500 gal and roofing structure (as part of rain water harvesting),
- Construction of tube well and water storage facilities: drinking water pond, earthen and cement tanks,
- Rehabilitation of water sources in the villages, mainly drinking water ponds (WASH Cluster has produced guidelines for pond rehabilitation in 2008\(^{36}\)),
- Construction of fly-proof latrines,
- Distribution of water filter, water container, chlorine, IEC materials on importance of consuming safe drinking water, hygiene kit, soap, pumps, mesh cover, latrine accessories,
- Constitution of community based WASH Committees to oversee the regulation and maintenance of newly built or rehabilitated ponds and community water storage facilities, and
- Provision of trainings on hygiene, school health activities and latrine monitoring.

Despite the hard work and the positive results gained in certain areas, there are still gaps remained in ensuring access to quality safe water and to hygiene facilities for many communities. Greater commitments from both donors and implementing agencies are essential to provide the affected population with permanent shelters that come with adequate sanitation and water storage capacities.

**Challenges and Lessons Learnt**

- Behavioral and attitude changes are key pre-requisites to successful implementation of WASH activities. To accomplish that, the communities need to be educated to understand and embrace the changes being suggested.
- In building water storage facilities or provision of storage equipment, traditional practices should be studied and materials provided need to be as close to what the community are used to as

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possible and affordable. This is important since repair and maintenance of newly introduced facilities could cause extra burden for the community.

Case Study 20 Promoting Healthy Living in Phoe Swar Village by Save the Children Myanmar

Within the first few weeks after the cyclone, Save the Children distributed large quantities of bottled water, plastic sheeting, water containers, water purification products, soap and mosquito nets to the affected population while beginning to repair, clean, rehabilitate and reconstruct ponds and wells with the goal of preventing outbreak of diseases through provision of clean drinking water for the communities and promotion of healthy living habits. Water treatments plants were also quickly employed to provide clean water.

In addition to these immediate measures, focus soon shifted to ensuring sustainable water sources and improving sanitation within communities. Wells were rehabilitated, ponds cleaned, rainwater catchment systems built and latrines constructed in communities across the Delta. This was done through the recruitment and training of community health promoters, who regularly visited each household to monitor sanitation practices.

Save the Children also worked to establish over 400 community level water, sanitation and hygiene (WASH) committee in villages. These committees are Save the Children’s point of contact with villages and are involved in discussions regarding work plans for the village, proposed locations of water points and latrines and are the main focus for organizing village cleaning campaigns. The committee members receive hygiene and sanitation training in order to lead by example and promote good practice in their communities.

In Phow Swar Village, Pyapon Township

In Pyapon Township, the villagers from Phoe Swar previously had to go to the next village, Tha Late Gyi, one mile away across the river, to get drinking water as there was no water source in their village. Sometime they faced boat accident in the river. However, in response to the urgent need of save drinking water in the village, the WASH team of Save the Children assisted the villagers in the construction of a new pond and now they can overcome the difficulties. Training on construction of demonstration latrine was also provided and the villagers were mobilized to construct household latrines with the provision of water containers, soaps, latrines pan and pipe sets. The village WASH committee members were also given Hygiene Promotion and Operation & Maintenance Training to sustain the healthy habits.

U Aye Thanug, 55 years old, Patron of WASH committee of Pho Swar village said, “We can get drinking water in our village because of Save the Children. Before, we had to travel one mile away by boat to get drinking water. Sometime we faced boat accident in the wide river. But now we have to walk only 15 minutes for drinking water and we don’t need to take a risk crossing the river.” And he also said that, “Save the Children also provided training for personal hygiene (especially hand washing) and Operation & Maintenance for pond. Now we hope to reduce the diarrhea cases by using latrines and hand washing practice”, he said.

Source: Save the Children. For further information, contact U Than Myint, WASH Programme Manager, Save the Children, e-mail: thanmyintu@gmail.com.

Key Lessons Learned

- Promoting healthy drinking and hygiene habits lead to prevention of outbreak of communicable diseases in the community and additionally the community can concentrate more on the activities
3.9. Infrastructure and Public Services

Rehabilitation of Large Scale Infrastructure

Rehabilitating and upgrading of large-scale public infrastructure in Nargis recovery is mainly overseen by the Government of the Union of Myanmar. The Department of Public Works, under the Ministry of Construction, is the lead agency for construction of hillocks, storm-shelters and renovation of roads and bridges in the affected regions. Five main coastal roads as follows are being constructed linking the coastal regions devastated by the cyclone with their adjoining areas and also to major cities and towns in the delta, aiming to boost its economy:

- Maubin – Yaylelay – Shwetaunghmaw – Kyaikpi - Mawlaminegyun Road (44 miles)
- Mawlaminegyun – Hlinephone – Thitpoke – Kwinpauk – Pyinsalu Road (52 miles)
- Labutta – Thingangyi – Pyinsalu Road (35 miles)
- Bogale – Kyeinchaung – Kadonkani Road (39 miles)
- Labutta – Thongwa – Oktwin – Htaiksoon Road (37 miles).

The road levels have been raised from 15 to 30 feet in order that people would be able to use it as safe haven in times of high floods and also to serve as barriers against floods. On top of that, the special construction project groups from the Public Works have refurbished and reconstructed public buildings such as university buildings around Yangon.

Within days of the cyclone, to solve the problem of the communication facilities destroyed by the cyclone such as collapsed telephone posts, damaged telephone exchange buildings and phone lines, the Ministry of Communication, Posts and Telegraphs issued CDMA 450 and satellite phones to respective authorities in the affected areas to restore temporary communication. The facilities still remain in use while the damaged structures are undergoing repairs. In addition, the Ministry of Communication, Posts and Telegraphs is building telecommunication stations in the Delta that can function as cyclone shelter in case of emergency.

Upgrading of electricity power supply system follows the emergency restoration of broken power lines and electricity generation plants. Workforce of skilled workers from other states and divisions cooperated and assisted the local staffs immediately after the Nargis under the supervision of Ministry of Electricity Power No.2.

Ministry of Agriculture and Irrigation and Ministry of Progress of Border Areas and National Races and Development Affairs are also involved in the reconstruction and upgrading of 1,014 km miles long coastal embankments, raised from 5 feet to 10 feet in two phases.

Rehabilitation of Small Scale Infrastructure at the Community Level

As the Government heads the rehabilitation of large scale public infrastructure, at the community level the combined force of local government and the non-government agencies, with the involvement of the public, undertake the community infrastructure, As described in the livelihood restoration section, many activities are designed to provide temporary jobs to the affected villagers. Many of them are implemented in cash for work formats. As significantly highlighted under the UNDP’s early recovery program “village level infrastructure such as primary schools, religious buildings (monasteries, churches), health centers, wells and ponds, footpaths, rural roads, culverts, small bridges, jetties and irrigation systems can provide critical support to recovery efforts and
reinforce livelihood activities. In general, the re-establishment of damaged or destroyed small-scale infrastructure contributes significantly to increased income, reduction of poverty and food insecurity, and reduction of mortality rates. It also promotes environmental sustainability and enhance community economic and social capital”.

**Challenges and Lessons Learnt**

- It is imperative to engage the community, including the disadvantaged groups such as women, children, disables, elderly and ethnic minority, from the beginning of infrastructure projects, implemented at the grass-root level, which can guarantee the benefits are equitably distributed. At the same time, balance and distinction between the “management” of an intervention by the project or the private sector to ensure quality and efficiency and “ownership” of the initiative by the community to ensure sustainability must be struck through dialogue, and respective responsibilities should be very clear from the planning phase. Transparency is the key in imbuing a sense of ownership within the community.

- The implementing agencies need to ensure appropriate levels of expertise for infrastructure projects exist to avoid waste of time and other resources.

- Any cash for work schemes for post-disaster community infrastructure should maximize the local employment impact and should take note of the different needs of men and women to acquire gender balanced work force.

- Local contracting and local procurement need to be promoted and should always be a first option. This has to be initiated with a quick assessment of local service providers’ capacity and quality of the services and suitable training and other capacity development supports should be provided.

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The aftermath of Cyclone Nargis present both opportunities and challenges for disaster risk reduction planning and implementation. Unprecedented alliances and management arrangements were formed between various institutions that facilitated the humanitarian interventions in the country. The Nargis recovery scenario of Myanmar offers distinctive characteristics that can be summarized as below:

- Coordination and facilitation mechanism is orchestrated by the Tri-partite Core Group (TCG), made up of Government of Myanmar, UN and ASEAN, with ASEAN acting as the go-between of the government and non-government institutions working for Nargis recovery in Myanmar.

- The first time a regional organization is directly involved in the humanitarian operation of one of its member countries. Many gains and achievements of Nargis recovery can be contributed to the unbiased involvement of ASEAN in bringing the government and non-government agencies together.

- TCG formation sets off such rare occasion for ASEAN, the first time since its establishment, to collaborate closely with UN Agencies in a major humanitarian operation.

- Nargis operations also observe the high level political involvement in Myanmar, in the arena of international humanitarian efforts.

- The arrangements also present an opportunity for ASEAN Agreement on Disaster Management and Emergency Response (AADMER) to be put into action. AADMER provides a mechanism of cooperation and collaboration among ASEAN Member States in areas of common concern such as disaster risk reduction.

- This is the first time many international agencies have the chance to work closely with the Government of the Union of Myanmar. The earlier preconceived notions, mistrust and misunderstandings between government and non-government agencies have been reduced and more productive partnerships fostered under the leadership of the Tripartite Core Group (TCG).

- Nargis recovery initiatives lead to enhanced awareness and capacity development of in-country human resources, especially the building of the disaster risk reduction and humanitarian capacities of both government and non-government agencies through engagements at the ground level.

- Key concerns such as lack of disaster risk reduction legal frameworks and other support systems have been addressed through development of comprehensive schemes such as Myanmar Action Plan on Disaster Risk Reduction (MAPDRR).

- Advocacy for community based activities receive front page news as more organizations view this as a long term solution for future disaster risk reduction.
• Previously overlooked sectors such as environment and gender obtain more attention with the realization of their integral nature across all other sectors. Increased recognition leads to increased efforts to seek increased funding, resulting in more sustainable recovery practices.

• Similarly, mainstreaming of disaster risk reduction into development sector gains more prominent due to the improved knowledge on climate change and the need for sustainable development to mitigate future disaster risks.
May 2010 marked the second year anniversary of the Nargis Cyclone in Myanmar. The path from relief and response to current recovery stage has been strenuous but much has been gained. However, the mere numbers of how many shelters have been built, how many people have received assistance, etc., will not determine the success of Nargis recovery programs. In the transitional period of TCG phasing out and handing over the coordination tasks to the Government of Myanmar, it is never more urgent to ensure the significant achievements made are sustained and all the stakeholder continue to work together to creating more disaster resilient communities in Myanmar.

A lot has been learned from the Nargis Recovery in Myanmar and the question is how these lessons learned can be applied in future recovery operations in Myanmar and in the countries in the region to make sure the newly built environment is more sustainable. Followings are the recommendation for future recovery operations based on the lessons learned derived from the unique experiences of Myanmar.

1. **Sustaining the existing coordination between the government and the NGOs**

   The most important achievements TCG has had in the Nargis recovery is the strengthened coordination and increased understanding between the Government of Myanmar and the non-government humanitarian agencies in the country. As the time draws nearer to the end of TCG’s mandate, it is crucial to sustain the already fostered trusts and partnership to help build an enabling environment where national staffs can effectively sustain the on-going recovery operations and lead it towards development.

   The benefits of such engagement are plentiful; one of them undoubtedly the capacity building of government staffs and another is gaining support in the fortification of minimum standards in construction, environmental conservation, disaster risk reduction and all other relevant sectors. Bearing in mind that engagements ensue influence, the growing reception in Myanmar offered, on top of the increased awareness and political will, to the external humanitarian players should be taken advantage of for greater engagement with the Government.

   The current coordination mechanisms of Thematic Working Groups should be maintained at the national level and the townships level coordination between the township authorities and the NGOs should be further enforced. It is crucial that the coordination activities should aim to support national leadership and efforts in disaster risk reduction and recognize the right and responsibility of the state to manage and coordinate the activities. Most imperatively, the local and international non-government agencies need to deploy personnel who already have established position in the affected country with proving track record of effective working relations with the Government.

2. **Enhancing the capacities of the local NGOs**
When the big international agencies move operations out of the Delta, due to various reasons, many of the recovery and continuing development activities will be transitioned to the local NGOs. In the context of Myanmar, with constraints faced in scaling up the international operations, local networks and local NGOs will have to be relied upon. Local Myanmar NGOs and existing networks, particularly the Red Cross volunteer networks all throughout the country, have a great advantage over international NGOs in terms of understanding the local context, and awareness of the systems and structures already in place. They have an intimate understanding of how to maneuver within a complicated system and bureaucracy, and enjoy easy access to areas in need of aid.

Moreover, the local non-government agencies in Myanmar, after two years of active involvement in relief and recovery initiatives in the Nargis affected areas, have gained considerable experiences and capacities. Therefore, in partnership with the relevant government departments, the international organizations can provide technical and organization development inputs to local NGOs and help develop their management skills and expertise in specific fields. It is a dependable mean of ensuring the delivery of quality services in response to disasters in the future.

3. Keeping the recovery emphasis on permanent shelter provision and livelihood restoration

Two years after Nargis, the situation at the ground level is far from being able to term as normal. Many of the poor and affected communities still live in temporary shelter without any proper sanitation facilities. To make the matters worse, the livelihood options available for them are unstable as the Delta economy has not picked up due to slow replacement of productive assets.

Lessons from Nargis and previous flood and cyclones in other regions point to the fact that shelter has always been a sector that faces most problems as it is expensive, the needs are diverse, topped by the complicated land rights and ownership issues. Given that coastal communities are prone to hazard, a coordinated shelter guide incorporating multi-hazard risk reduction features and early warning elements, simultaneously making use of the local skills and locally available materials, is, no doubt, the way to move forward. Accompanied by the involvement of the communities as early as possible in the process can help avoid costly mistakes and can ensure that the cultural and livelihood needs of the community can be met early on.

One common assumption made in any recovery phase of a major disaster is that funding livelihood sector will allow the families to self-re-build their own shelter using their own incomes. In many cases the families earn not more than USD 1 or 2 per day and it is unlikely that these families will ever have sufficient funds to save hundreds of dollars for a new and safer shelter. This assumption needs to be overcome with sufficient funding allocated to shelter sector.

To further warrant safer settlements of affected population, appropriate land use practices need to be applied to reduce the future risks. In Myanmar, the Urban and Regional Planning Division of Ministry of Construction already has basic guidelines for coastal development planning. Combined with the hazard maps being developed by the Myanmar Engineering Society (MES) together with concerned the ministry and technical support from international institution with specific expertise, adoption of land use management schemes can be fast tracked. Furthermore, MES with its technical expertise in safe construction methods can provide independent quality monitoring services to ensure compliance to the safety standards set up.

In terms of livelihood rehabilitation, market assessments need to be undertaken in parallel to food, cash or productive assets provision. While the support activities need to be structured to improve

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38 It is estimated that one-third of local NGOs functioning in Myanmar were founded in the last two years with focus operation in the Delta.

productivity, market survey of local needs can help identify high-demand products and new skill requirements.

A considerable number of the international agencies currently implementing Nargis recovery interventions in Myanmar have started their operations only after Nargis and as a result they have very sketchy comprehension of local contexts. Knowledge improvement of the international agencies is called for in this case. A win-win situation can be created by fostering close partnership with relevant government departments or local NGOs so that the capacities of the local agencies will also be developed concurrently40.

Since the rural economy in Delta principally depends on agricultural and fishery sectors, the support interventions need to focus on improving the productivity and to enable farmers and fishermen to retail some products themselves through creation of secondary markets within the close vicinity. Again community involvement is central to understand the pressing needs and also to prevent social disruption caused by introduction of culturally unsuitable livelihood options. The fact that the incomes of a vast majority of the households in the Delta stem from a combination of both agriculture and non-agriculture based activities make it essential for the livelihood support system to offer more than one options for families in rebuilding their livelihoods.

4. Stronger cross-sector integration

Under the leadership of the sector-wise Technical Working Group, each sector in Nargis recovery process moves forward with effective coordination between various agencies. But it also causes intense focus to be highly intensified within each sector. Combined with the uneven funds for individual sector, gaps certainly exist. An example would be the disconnect between the shelter and the livelihood sectors where cases like Metta Village in Kunegyangone Township prove that resettlement program that afford inadequate consideration towards livelihoods of the relocated families lead to failure 41. Similarly, livelihood support activities without due linkages to environmental conservation and natural resources management will not be sustainable.

Thus in order to ensure more holistic approach it is essential to strengthen more cross cluster integration are required particularly between shelter, livelihoods, health and WASH. Livelihood considerations need to be part of the shelter provision programs and viceversa shelter should be part of the livelihood restoration strategy.

It has to be recognized that information sharing, an activity that is taking place across sector though not extensively, should be viewed not as the solution but as a first step for greater sectoral assimilation. RCC and the Ministry of Social Welfare, that will take over the major coordination tasks after July 2010, are in the ideal position to offer a common platform for leading organizations working in different sector to come together and synchronize their activities. In unison, a more flexible and comprehensive funding strategy from the donor is crucial (see Table 10) and a bottom up push from the implementing agencies can make a big difference.

5. Ensuring greater participation of affected communities

There has been considerable concern brought up in the Nargis recovery phase with regards to the extent of community engagement and consequently the sustainability of recovery initiatives. The efforts, invested to lobby the involvement of affected communities, vary from one organization to another depending on two factors: scope and scale of the interventions. Nevertheless, in order to create greater ownership over the recovery operations, it is a must to include the communities in the

40 Local institutions such as Myanmar Agricultural Service and Myanmar Fisheries Federation are already contributing significantly to livelihood recovery,
41 The new settlement was built with external support but the resettled communities moved back to their original location as the new village was located too far away from their livelihood sources.
design and implementation of assistance programs as it serves dual purpose of improving the capacities of the communities and making them aware of the local situations, equipping them with vital knowledge of how to prepare and cope with crisis events.

At present, a considerable number of NGOs have set up community level recovery committees. With systematic capacity building programs and plans, these existing committees can be transformed from on-paper arrangements to the functioning ones that provide legitimate voices to the affected communities and their concern.

In addition, it is a proving factor that participating communities achieve greater citizen satisfaction through personal involvement in meaningful roles. By helping them to solve their own problems with collective solutions suitable to local culture and social settings with potential value for the entire community, this ultimately leads to creation of more proactive and more disaster resilience communities where preparedness prevails.

6. Addressing the needs of most vulnerable groups in the community

In our society, there are certain groups that are considered more vulnerable than the others based on their ability to cope or recover from a crisis situation. They include but not limited to the poor, elderly, children, women, people with physical and mental disabilities, migrants and ethnic minorities. They are likely to be affected the most in case of disasters due to their limited access to social and economical resources constrained by lack of skills and social holdings. Identifying and addressing the needs of these vulnerable groups in the recovery operations can contribute to the poverty reduction strategy of the country and elevate the status of these groups. Depending on the available resources, the implementing agencies might have to determine and prioritize who in the vulnerable groups need special care and attention.

7. Continual assessment of emerging needs

Throughout the recovery and rehabilitation period, new community needs will arise with the passing time either due to lack of services or because of the services rendered. Under the circumstances, a systematic and continual monitoring of the situation has to be in place for better understanding of the emerging needs.

The interventions being implemented, at the same time, require to be flexible enough to accommodate or adjust to the changing needs of affected communities. The assessments allow the concerns and priorities of the vulnerable communities to affect the decisions of implementing agencies. Additionally, varied needs of different groups of the community, i.e. women, children, elderly, physically and mentally impaired, etc., can be taken into consideration for future programming and planning processes.

Care has to be taken to ensure that these processes also look deeper into factors that could influence greatly the community requirements such as whether the provided shelters meet the social, economic and religious needs of local population, economic situation in the region that could change the impact the livelihood needs, etc.

8. Strengthening the involvement of private sector in the coordination mechanism

Petitioning for more involvement of private sector firms in the disaster risk reduction can bring two distinct advantages. Firstly, it can mobilize additional resources. Secondly it can sustain human and economic development with more investments in the disaster preparedness measures. Immediately after Nargis, a lot of local private donations and contributions, from individual as well as organization, enabled a steady stream of food and non-food items to reach the affected communities before any international aids arrived. Therefore, the seeds of charity and generosity have already been sown. It
can be built up to create a sound and continuous front to support mitigation activities in the country as well such as backing the public awareness raising initiatives.

In a parallel aspect, involving in disaster risk reduction activities can be viewed as another business opportunity for the private sector. The financial sector in particular has a strong business case for its engagement in risk mitigation such as sales of disaster risk insurance and, when linked up with micro-finance institutions at the grass-root level, could promote its image as a benevolence agency through affordable loans to the disaster affected communities. The involvement of commercial construction firms in policy dialogue can offer opportunity to influence them to adopt more hazard resilient construction methods. Finally, the idea of disaster risk reduction can be marketed as a profitable opportunity and competitive advantage to businesses and various incentives (tax incentives, etc.) should be explored to encourage private sector to embrace the DRR-oriented sustainable business practices and means.

9. Integrating DRR into sectoral plans

In order to sustain the disaster risk reduction headways made since May 2008, it is essential that the disaster risk reduction considerations get mainstreamed into sectoral plans of both the government and non-government institutions. This will also tackle the delicate question of how to carry on the development needs of the country without compromising the disaster vulnerability or vice versa. Simple measures such as establishing linkages to meteorological monitoring and forecasting to agricultural planning can boost the higher yield crops when backed with a strong market research. Promoting disaster risk reduction in sectoral plans needs to come hand in hand with other cross cutting sectors like environment and gender. For instance, in urban planning sector, encouraging proper land use planning practices can lead to development that is in harmony with the natural environment, reducing the unnecessary risks.

Mainstreaming disaster risk reduction into sectoral plans has also been highlighted in the existing national level disaster risk reduction plans: namely “Myanmar Government’s Programme for Reconstruction of Cyclone Nargis Affected Areas and Implementation Plans for Preparedness and Protection from Future Natural Disasters” and “Myanmar Action Plan on Disaster Risk Reduction”. In addition, a more focused sectoral approach can help utilize the limited resources effectively especially when the disaster risk reduction interventions are streamlined into routine sectoral activities, eliminating any additional spending for stand-alone disaster risk reduction measures. The biggest advantage is that through the preventive measures, the loss incurred from future disasters will be reduced, thereby saving resources required for disaster relief work and invest it in the development process of the country.

10. Greater incorporation of the cross cutting issues

In continuing to deliver quality recovery initiatives, it is imperative to incorporate essential cross cutting issues in addition to DRR, namely gender, climate change adaptation and environmental concerns in all aspects of recovery.

To promote greater incorporation of gender issues in all risk reduction interventions, women should be looked at not as the weaker sex who constantly require assistance but as a leading member of society who can contribute greatly to community risk reduction. For instance, addressing the specific needs of women might trigger positive consequential effects on other vulnerable members of the community as women are usually the key care takers of children, elderly and physically or mentally impaired. Therefore, by improving participation of women in decision-making processes or improving their awareness on risks reduction measures or enhancing the understanding of decision makers on plights of women in emergency, the disaster resilience of the community can be increased.
At the same time, rising concerns on climate change has to be taken into consideration and certain adaptations might be necessary which include educating the community and local authorities on the long term benefits of such contemplations. As one of the main focuses of Nargis recovery is the livelihood restoration, in rehabilitating agricultural livelihoods, support could be given to sustainable agriculture that takes into consideration global climate change and its impact. Organic farming can be championed with the reduced application of fertilizers.

The integration of environment in other recovery sectors require intensive efforts of both government and non-government institutions. In the sector of shelter and infrastructure, with an emphasis on sustainable reconstruction, environmental impact assessments need to be undertaken before the approval of any development or infrastructure project. In livelihood restoration, environmentally sound technologies and practices (agriculture, aquaculture, salt farming) have to be promoted while in energy sector, more investments are required to explore and adopt the utilization of renewable energy sources.

Most importantly in restoring and preserving the natural environment of the Delta, the local population, as the key caretakers of their surroundings, should be made aware of the advantages of mangrove and other forests in the area: the protection of such forests from future disasters and the inter-dependency between the forests and the sustainable livelihoods of the communities.

Box 14 Recommendations to cement the roles of donors

Role of Donors

In relief and response phase of Nargis witnessed the unprecedented account of support and aids pouring in from international donors and well wishers. However, as the relief phase transited into recovery and rehabilitation, the international funding has shrunk significantly as the political concerns of the donors become tangled with their humanitarian objectives. The consequences are devastating as the lack of finance cause projects in the Nargis affected areas to close down, denying consolidation of the actions taken over the past two years. The vital livelihood and shelter sectors need much more funding than are currently receiving as only 40% of the requirements have been covered. In this section, very specific recommendations are provided targeting at donors and international agencies that used to, are currently supporting or are interested in future support for the long term recovery of cyclone affected communities.

- The support from International community should be a package that covers a range of sectors, taking into account the linkages between livelihood, shelter, WASH and education sectors.

- Less emphasis to be placed on the July 2010 of the end of TCG’s mandate for funding and to practice flexible funding schemes that could meet the changing needs of the affected population. The funding strategy should take into consideration the perspective of ultimate beneficiaries as part of establishing a stronger evidence base for humanitarian action.

- More focus on the longer term financial commitment as such sectors like shelter require funding for minimum 2 years after a major disaster to ensure best practices are followed and value for money is achieved.

- Enforcement of minimum standards required to be followed (in both physical construction as well as other practices such as provision of technical services need to be part of the funding programs as donors have influence over their implementing partners).

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42 Only USD 63.5 million has been received out of the projected USD 158 million for the two sectors.
• Launching funding programs that would directly or indirectly support the local NGOs that includes financing activities that would require international NGOs to partner with local NGOs and community based organizations in Myanmar in order to further build local capacities and also to harness the local experience. Donors should explore local capacities and where necessary seek references from reliable sources.

• The funding schemes need to have stronger emphasis on good humanitarian donorship rather than on the political dimension. Sanction driven funding limitations hurt disaster affected population and hamper their recovery. A key points captured at one of the sectoral lessons learned workshops was the widely acknowledged and documented fact that Myanmar only received a fraction of the development funding that flows into other similar countries in the region. For this policy trend to continue in the post disaster situation is contradictory to the accepted humanitarian approaches44.

Annex 1: References


Natural Disaster Preparedness Central Committee of Myanmar (2009) Record of Activities during the Emergency Relief, Assistance and Rehabilitation Period in the Cyclone Nargis-Affected Areas.


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Women’s Protection Sub-cluster (2009) Strategic Plan of Women’s Protection Sub-cluster.

International Federation of Red Cross and Red Crescent Societies (2009) Myanmar Cyclone Nargis Operation Update of IFRC.


Annex 2: List of People Met

**Government Agencies**

1. Mr. Nyunt Maung San, Department of Public Works, Ministry of Construction
2. Mr. Soe Aung, Director General, Relief and Resettlement Department, Ministry of Social Welfare, Relief and Resettlement
3. Mr. Chum Hre, Deputy Director, Relief and Resettlement Department, Ministry of Social Welfare, Relief and Resettlement
4. Daw Nwet Yin Aye, Staff Officer, Relief and Resettlement Department, Ministry of Social Welfare, Relief and Resettlement
5. Mr. Htein Lin, General Manager, Seed Division, Myanmar Agriculture Service, Ministry of Agriculture and Irrigation
6. Daw Yi Yi Nyein, Deputy Director, Department of Hydrology and Meteorology, Ministry of Transport
7. Mr. Kyaw Win, Chairman of Township Peace and Development Council, Kunegyangone Township, Ayeyarwaddy Division

**ASEAN and TCG**

8. Mr. Htun Aung Khaing, Deputy Chairman, Tripartite Core Group (TCG)
9. Dr. Joern Kristensen, Manager, Recovery Coordination Centre (RCC)
10. Dr. Melgabal Capistrano, Coordinator, Recovery Coordination Centre (RCC)
11. Dr. Balathandan. T.P, Aid Coordination and Reporting Officer, Recovery Coordination Center (RCC)
12. Mr. Said Faisal, Donor Coordination, Coordinating Office for the ASEAN Humanitarian Task Force
13. Mr. Zin Aung Swe, Program Officer, Delivery Unit, ASEAN Humanitarian Task Force

**Donor Agencies**

14. Ms. Silvia Facchinello, Programme Officer for Myanmar, Delegation of the European Union in Myanmar

**UN Agencies**

15. Mr. Steve Marshall, Liaison Officer, International Labour Organization (ILO) Myanmar Office
16. Mr. Thierry Delbreuve, Head of Office, UNOCHA Myanmar
17. Mr. Edmore Tondhlan, Humanitarian Affairs Officer, United Nations Office for the Coordination of Humanitarian Affairs (UN - OCHA)
18. Mr. Sanaka Samarasinha, Deputy Resident Representative, UNDP Myanmar
19. Mr. Noel Puno, Advisor, Disaster Risk Reduction, UNDP-Myanmar
20. Mr. Htun Paw Oo, Forest and Environment Specialist, Post-Nargs Community Recovery Project, UNDP
22. Mr. Tay Zar Moe Myint, Programme Analyst, Early Recovery Programme, UNDP
23. Mr. Sonish Vaidya, Engineer, UNDP
24. Mr. Srinivasa Popuri, Country Programme Manager, UN-HABITAT
25. Ms. Nadine Waheed, Programme Officer, UN-HABITAT
26. Mr. Dilip Kumar Bhanja, Advisor, Disaster Risk Reduction, UN-HABITAT
27. Mr. Zay Nyi Han, Officer in Charge, UN-HABITAT Khunyangone Township
28. Mrs. Pansy Tun Thein, Deputy Resident Coordinator, UFPA-Myanmar
29. Dr. Tesfai Ghermazien, Senior Emergency & Rehabilitation Coordinator in Myanmar, Food and Agriculture Organization of the United Nations (FAO)
30. Dr. Bernard Cartella, International Consultant Agronomist, FAO
31. Dr. Nor Shirin Md. Mokhtar, Education Specialist, UNICEF
32. Mr. Joseph Oenarto, School Construction Specialist, UNICEF
33. Dr. San Shway Wynn, National Consultant, World Health Organization (WHO)
34. Ms. Eva Vognild, Information Management Officer, Myanmar Information Management Unit, The Office of the UN RC/HC

Non-Government Agencies

35. Mr. Maung Maung Khin, Head of Disaster Management Division, Myanmar Red Cross Society (MRCS)
36. Dr. Mya Mya Than, Psychosocial Support Program, Myanmar Red Cross Society (MRCS)
37. Mr. Partick Elliot, Shelter Delegate, International Federation of Red Cross and Red Crescent Societies (IFRC)
38. Mr. Gurudatta Shidodkar, Livelihoods Delegate, International Federation of Red Cross and Red Crescent Societies (IFRC)
39. Mr. Ohn, Vice Chairman, Forest Resource Environment Development and Conservation Association (FREDA)
40. Mr. Than Nwet, Executive Committee Member, Forest Resource Environment Development and Conservation Association (FREDA)
41. Mr. Sudhir Kumar, Project Manager, Asian Disaster Preparedness Center (ADPC) Yangon Office
42. Dr. Sital Kumar, Manager – Field Operations, Action Aid Myanmar
43. Mr. Dan Collison, Director, Emergency Unit, Save the Children
44. Mr. Roz Keating, Information Officer, Save the Children
45. Mr. Than Myint, WASH Division, Save the Children
46. Mr. Colin Fernandes, Action Aid
47. Mr. Aung Naing, Cyclone Nargis Transition Program Manager, World Vision
48. Mr. Sein Lin, Cyclone Nargis Program Support Manager, World Vision
Annex 3: Strength, Weakness, Opportunities and Threat (SWOT) Analysis of Nargis Immediate Aftermath

<table>
<thead>
<tr>
<th>Strength</th>
<th>Weakness</th>
<th>Opportunity</th>
<th>Threat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presence of an official government body to deal with disasters: MSWRR</td>
<td>Not so sturdy economic conditions in the Ayeyarwaddy prior to Nargis</td>
<td>Greater access for national agencies to international resources (better learning opportunities and access to more financial resources) that can be further stretched to recovery and development phases</td>
<td>Political agenda of international agencies and donors combined with economic sanctions hamper inflow of aids and impede the humanitarian operations</td>
</tr>
<tr>
<td>Pre-existing knowledge on disaster risk reduction and related subjects by both government (MSWRR, DMH, MoE, MoH, etc.) and non-government agencies (UNICEF, UNDP, Save the Children, IFRC &amp; MRCS, Malteser, etc.)</td>
<td>Weak transportation and communication facilities posing obstruction to data collection for need, damage and loss assessments</td>
<td>Greater engagement with international humanitarian community enhancing mutual understanding and partnerships</td>
<td>Unclear national rules and regulations on international operation created confusion and delay</td>
</tr>
<tr>
<td>Instant formation of TCG that helped facilitate the relief efforts</td>
<td>Poor disaster management planning resulting in inability to respond quickly to disaster situation</td>
<td>Lack of practical experience on disaster response, relief and rehabilitation of agencies in the country (both government and non-government nature)</td>
<td>Biased views of the international players (with regards to the capacity of local institutions) and extreme caution from the side of local organizations lead to communication gap</td>
</tr>
<tr>
<td>Existence of civil society organizations that were willing to learn and work</td>
<td>More practical experience on disaster response, relief and rehabilitation of agencies in the country (both government and non-government nature)</td>
<td>Too many organizations entering the relief phase created difficulty for effective coordination, causing overlaps</td>
<td></td>
</tr>
<tr>
<td>Immediate deployment of IASC clusters mechanism that kicked start the international response and relief operations</td>
<td>Greater access for national agencies to international resources (better learning opportunities and access to more financial resources) that can be further stretched to recovery and development phases</td>
<td>Greater engagement with international humanitarian community enhancing mutual understanding and partnerships</td>
<td></td>
</tr>
</tbody>
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Annex 4: Specific Recommendations for Housing Shelter Sector

- More activities devoted to building the capacity of the local communities on safer shelter construction need to be implemented since it can impart life skills for greater job scopes, increase the resilience of the communities at the same time and raise the awareness of the communities to demand more accountability from the donors and implementing agencies and vice versa.

- Cross sector integration, thus, need to be pursued to ensure more holistic approach as permanent shelter is linked to other basic necessities of self-maintained communities. Lack of permanent shelter means lack of safe water resources, access to health facilities, livelihood opportunities and land. Permanent shelters act as assets and collateral for families to be eligible for loans and other financial support schemes.

- Design standards developed by different agencies need to be consolidated with endorsement from Ministry of Construction of Myanmar Government. This requires lobbying for increased engagement with the government ministry to provide legitimate ground for enforcement of such standards and further prevent sub-standards or low-standard constructions susceptible to future disaster risks. At the lessons learned workshop held in June 2009, the shelter cluster members proposed chairing of the Shelter Cluster by the government and co-chaired by a UN Agency and a NGO. However it is vital to realize that one size does not fit all and different types of designs may be needed depending on the level of damage and destruction, location of the shelter and for different cultural and livelihood mix.

- Support from donors to enforce the adoption of safer design standards would complement the official government’s support and can cover broader reconstruction initiatives. Therefore, the donors should be sensitized of the needs for adhering to minimum safety standards in shelter construction and the economic benefits associated with them as well as the need for long term funding scheme for shelters.

- Private sector involvement in the shelter coordination mechanisms (clusters, working group, etc.) would bring about mutual understanding and greater efforts in coordinating the design standards in addition to enhancing their capacities in safer construction techniques and their advantages.

- Unambiguous shelter standards need to be clearly defined between emergency standards and early recovery shelter standards.

- Public information campaigns have to be organized to make known to wider audience the eligibility of shelter related aids to avoid frustration, jealousy and negative rumors that can result in equity related social conflict.

- Gender concerns and participation of women are to be brought to the forefront through promotion of owner driven shelter provision process.

- Stronger partnership has to be forged between the relevant departments, for instance between the Ministry of Construction, Ministry of Home Affairs, Ministry of Agriculture and international agencies to enhance the understanding on the crucial land and related issues. Recent successful interventions by shelter partners in negotiating the settlement of displaced families in the Delta through the issue of collective ‘right of use’ papers by the local authority show the results of such partnerships.

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• Retrofitting of community buildings such as schools or monasteries with storm resilience features require to be encouraged to serve as community shelters in addition to the big cyclone shelters. This would ease the tasks of maintenance and would reduce the resources necessary for sustaining large scale shelters.

• Periodic assessments, brought about by TCG Periodic Review Processes, has to take into account such factors as whether the provided shelters meet the specific needs of local population (proximity to their source of livelihoods, availability of basic service facilities such as health and education, suitable for their religious practices, etc.).

• Shelter provision need to be undertaken in conjunction with the community early warning system development and periodic drills/ exercises to keep up the community vigilance and to test the credibility of the early warning system in case improvements need to be made.
Annex 5: Specific Recommendations for Environment Sector

- A thorough assessment of natural resources, existing ecosystems and their status are urgently required to determine the conservation potential. The regular updates of the information will no doubt support decision making and planning on sustainable development in the region.

- Capacity building and awareness raising on environmental conservation should be taken up as a priority. At the community level, natural resources management and living in harmony with the environment need to be promoted to prevent exploitation of natural reserves. At the institutional level, government agencies, local authorities and the civil society organizations are be made aware of the consequences of environmental degradation and prevention measures. At the same time, local experts, researchers and scientist need to be trained to strengthen the local resource base. Recently, the Universities of Yangon and Maw-la-myaiing (Moulmein), that provide teaching and research in coastal aquaculture, have redrawn their curriculum in line with needs for the country's development precedences. This can be the first step in building up the critical human resource gaps and basic facilities for further education and research.

- For effective implementation of the government policies and strategies to regulate and guarantee the productive usage of the forests, their produces and other natural resources, both horizontal and vertical collaboration across between the different level of governments, from national level down to village level has to be strengthened.

- There is a need to explore and introduce effective coastal planning to support balanced development in coastal areas. As integrated coastal planning and management is a new concept in Myanmar, it is recommended by UNEP that the focus at present be given to developing one or two pilot areas for testing and development of a suitable approach, for subsequent wider adoption.
Annex 6: Specific Recommendations for Donors

- The support from international community should be a package that covers a range of sectors, taking into account the linkages between livelihood, shelter, WASH and education sectors.

- Less emphasis to be placed on the July 2010 of the end of TCG’s mandate for funding and to practice flexible funding schemes that could meet the changing needs of the affected population. The funding strategy should take into consideration the perspective of ultimate beneficiaries as part of establishing a stronger evidence base for humanitarian action.

- More focus on the longer term financial commitment as such sectors like shelter require funding for minimum 2 years after a major disaster to ensure best practices are followed and value for money is achieved.

- Enforcement of minimum standards required to be followed (in both physical construction as well as other practices such as provision of technical services need to be part of the funding programs as donors have influence over their implementing partners).

- Launching funding programs that would directly or indirectly support the local NGOs that includes financing activities that would require international NGOs to partner with local NGOs and community based organizations in Myanmar in order to further build local capacities and also to harness the local experience. Donors should explore local capacities and where necessary seek references from reliable sources.

- The funding schemes need to have stronger emphasis on good humanitarian donorship rather than on the political dimension. Sanction driven funding limitations hurt disaster affected population and hamper their recovery. A key points captured at one of the sectoral lessons learned workshops was the widely acknowledged and documented fact that Myanmar only received a fraction of the development funding that flows into other similar countries in the region. For this policy trend to continue in the post disaster situation is contradictory to the accepted humanitarian approaches.

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Annex 7: Research Methodology

In preparation of this report, predominantly qualitative research methodology is applied in gathering information. The techniques utilized are described briefly below.

Data Collection

Two key methods were employed in data collection as follows:

1. Desk Research

Even before a trip to Myanmar was undertaken, a desk research was conducted to gather information from secondary information sources available online. Although a vast majority of secondary reference materials were obtained online, a number of them were presented during bi-lateral meetings and were offered to support the development of the report; that is especially true with the government agencies, many of the existing reports capturing Nargis recovery operations were in Myanmar language and only hard copies were available.

2. Face to face meetings

A list of agencies and key personnel from each agency actively involved in the Nargis recovery operation was made and bi-lateral meetings were requested for information gathering. A set of questions were prepared beforehand and sent to the agency representatives. The questions requested information on the recovery related activities of each individual agency, what has been done in the view of long term recovery, problems/ challenges and how they were overcome and the lessons learned and good practices. General topics on overall coordination of the recovery efforts in Myanmar and suggestions for improvement of recovery process were also sought.

Meetings were held in both Yangon and Naypyidaw at the offices of the interviewees. In case the interviewees could not provide the needed information, further references were given to the interviewer. Face to face meeting served as a device to verify the data drawn together from desk research.

Additional data and insight into the recovery process were gained while attending a workshop organized by the RCC (Recovery Coordination Centre of TCG) to consolidate the lessons learned from agriculture and fishery sectors under the Livelihood Recovery Working Group.

Field Trip

A field trip made to Kunegyangone Township to the UNHABITAT project site enabled collection of views and photos from the ground level.

Verification of Data

When each section was drafted, relevant agencies were consulted for the verification of the data and for comments. Feedbacks were incorporated into the report and final consultation would also be carried out to obtain absolute endorsement.