POST-NARGIS NEEDS ASSESSMENT AND MONITORING
ASEAN'S PIONEERING RESPONSE
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ASEAN’s Pioneering Response
The Association of Southeast Asian Nations (ASEAN) was established on 8 August 1967. The Member States of the Association are Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand and Viet Nam. The ASEAN Secretariat is based in Jakarta, Indonesia.

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The ASEAN Humanitarian Task Force for Victims of Cyclone Nargis (AHTF) expresses its deep gratitude and sincere appreciation to all those who collaborated with us in the coordinated effort to alleviate the suffering of survivors of Cyclone Nargis.

We thank the Government of the Union of Myanmar for its guidance and leadership in assisting the people of Myanmar during the relief and recovery response. We are also grateful to the United Nations agencies, international and national organisations and all others who contributed to post-Nargis relief and recovery activities.

We thank the ASEAN Member States for their unwavering support during such a critical juncture. Our experiences over the course of the Task Force’s two-year mandate are certain to shape ASEAN’s approach to disaster management and humanitarian relief for generations to come.

It is due to our collective efforts that two years after Cyclone Nargis we now see signs of recovery in Myanmar’s Ayeyarwady Delta. Rice farmers plant seeds where rice fields once stood fallow, brand new school–cum–cyclone shelters dot the landscape and bamboo plants and mangrove bushes are sprouting up around the once devastated areas.

This book is dedicated to the survivors of Cyclone Nargis, whose strength, courage and resilience in the face of unimaginable adversity is at once humbling and inspiring and, no doubt, will spur the ongoing recovery effort in the months ahead.
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Death, destruction and despair followed in the path of Cyclone Nargis. As news spread that the Cyclone had flattened entire villages, killing or injuring hundreds of thousands of people, the Association of Southeast Asian Nations (ASEAN) felt compelled, out of a sense of compassion, urgency and fraternity, to support one of our Member States. The ASEAN community immediately reached out to help Myanmar recover from the worst natural disaster in the country’s recorded history.

The complexity of the emerging tragedy called for a cohesive and coordinated plan. ASEAN was urged to take the lead. Never before had we undertaken such an ambitious and large-scale undertaking. But buttressed by the Government of Myanmar and the international community, ASEAN’s confidence grew and our association was “baptised” by the Cyclone that wreaked havoc on one of our Member States.

Cyclone Nargis occurred at a pivotal time, when ASEAN Member States were embracing the ASEAN Charter and the association was striving to become a more collective, dynamic and inclusive entity. The disaster provided ASEAN with a window of opportunity to make meaningful progress on the goals of the Charter to bring ASEAN closer to the people, enhance the well-being and livelihood of ASEAN peoples, and alleviate poverty and narrow development gaps through close cooperation with the Government of Myanmar.

Experience from Nargis demonstrates that ASEAN, with support from partners, can strengthen disaster risk reduction among Member States and provide an effective coordinating mechanism to facilitate the delivery of international assistance in a Member State during the post-disaster relief and recovery process. Our collective response in the aftermath of Cyclone Nargis is an example of the benefits that broader integration and closer partnerships can yield.

ASEAN’s response to Nargis, in cooperation and collaboration with the United Nations, the international humanitarian community and civil society, helped ease the pain and suffering that the Cyclone inflicted on people living in Ayeyarwady and Yangon Divisions of Myanmar. Since the region as a whole is prone to disasters, it is imperative, particularly as we reach the end of the mandate of the ASEAN–led coordination mechanism in Myanmar, to document and disseminate the lessons ASEAN has learned in the wake of Nargis.

This publication describes the unprecedented and groundbreaking assortment of monitoring and assessment activities that were carried out in response to the Cyclone, many of which have already had an impact on disaster response efforts in other parts of the world.

Through this publication, we wish to share within and across the region what we have gained from our experience carrying out ASEAN’s first-ever large-scale humanitarian operation in a Member State. It is our sincere hope that our lessons will be of service to others and our best practices replicated in the event of future disasters.

SURIN PITSUWAN
Just after Cyclone Nargis struck the coast of Myanmar on 2 and 3 May 2008, the Secretary-General of the Association of Southeast Asian Nations (ASEAN), Dr Surin Pitsuwan, called on all Member States to provide urgent relief assistance through the framework of the ASEAN Agreement on Disaster Management and Emergency Response (AADMER). A few days later, the Government of the Union of Myanmar agreed to work in coordination with the ASEAN Secretariat to assemble and deploy an ASEAN–Emergency Rapid Assessment Team (ERAT), made up of Government officials and disaster management experts from ASEAN Member States.

In the first ever such mission for ASEAN, the ASEAN–ERAT was deployed to Myanmar from 9 to 18 May 2008. Its report was submitted to the Special ASEAN Foreign Ministers’ Meeting on 19 May 2008 in Singapore. At the meeting, the Foreign Ministers agreed to establish an ASEAN–led coordinating mechanism to “facilitate the effective distribution and utilisation of assistance from the international community, including the expeditious and effective deployment of relief workers, especially health and medical personnel.”

The result was a two-tiered structure, consisting of the ASEAN Humanitarian Task Force for the Victims of Cyclone Nargis (AHTF), and a Yangon–based Tripartite Core Group (TCG), consisting of ASEAN, the Government and the United Nations (UN), to facilitate day-to-day operations and oversee coordination.

The constructive solution that was worked out, that of a tripartite structure involving ASEAN, the UN and the Government, turned out to be not only a successful formula for ensuring access, but also an effective forum for achieving a close and productive relationship with the authorities. This did not exist to the same degree before Nargis.

As a result, there was significantly more humanitarian space in the Delta than in any other
part of the country, and the TCG played a key role in securing this. This is relevant for Myanmar, as it paved the way for access for information collection in a country where otherwise little was known. All assessments and monitoring exercises were conducted with full access permitted by the Government. This was almost unprecedented for Myanmar.

This book documents the types of assessments and monitoring exercises that were carried out under the auspices of the AHTF and TCG, including the deployment of the ASEAN–ERAT; the Post–Nargis Joint Assessment (PONJA) consisting of the Village Tract Assessment (VTA) and the Damage and Loss Assessment (DALA); the Periodic Review (PR) monitoring assessments that followed the PONJA; and the Social Impact Monitoring (SIM) studies. It also includes a section on the Recovery Information Accountability System (RIAS), which tracks funding streams from pledges to outputs received during the Post–Nargis and Regional Partnership Conference (PONAC) on 25 November 2009.

**Figure 1: The Four Phases of Post-Disaster Assessment**

Phase of data collection and analysis activities and methods following a major, sudden-onset crisis.

- **Phase 1: Preliminary scenario definition**
  - Expert interpretation of initial reports and remote data
  - Few site visits

- **Phase 2: Joint multi-sectoral expanded assessment**
  - Rapid appraisal methods only
  - Key Informant and Focus Group Discussion
  - Purposive sampling

- **Phase 3: Initial sector/sub-sector assessments**
  - Joint multi-sectoral expanded assessment
  - Initial joint situation monitoring/surveillance
  - Household level survey and Rapid appraisal methods
  - Representative sampling

- **Phase 4: In-depth sector/sub-sector assessments**
  - Expanded joint situation monitoring/surveillance
  - Joint multi-sectoral expanded assessment if/when needed
  - Household level survey and Rapid appraisal methods
  - Representative sampling

**Days from onset**

0 13 10 15 30 45

Increasing detail and representativeness (i.e. complexity)
As shown in Figure 1, there are four distinct phases that are generally accepted for data collection and analysis, with different foci and methods, following a sudden-onset crisis. Using this internationally accepted standard as the guide, the TCG needs and monitoring assessments closely correlated with these recommended assessments (see Figure 2).

Each assessment either built on a previous one (for example, the PR built on the VTA), or they complemented each other (such as the PR and SIM assessments that were conducted in parallel). The ASEAN-ERAT focused on life saving and/or life-sustaining needs. Thus, this rapid assessment generated the basic information needed for decisions to be made on initial
post-Nargis needs assessment and monitoring

ASEAN’s pioneering response

Life-saving responses in all critical sectors, notably food, health, nutrition, shelter and water, sanitation and hygiene (WASH). Other sectors that were not immediately life saving were not prioritised at this stage.

The PONJA provided more detailed, basic data relevant for all sectors, based on larger and more representative samples. It established a baseline for future monitoring and complemented the more in-depth sector-specific assessments that followed. Continual monitoring assessments, such as the PRs and the SIMs, served to monitor and measure progress or lack thereof.

As all these products were conducted on behalf of the entire humanitarian community in Myanmar, it was essential for the assessment process to take into consideration the audience. The PONJA and the PR assessments were good examples of involving the wider community in order to achieve a sense of ownership with the final products and to ensure the reports were appropriate and technically accurate. This consultative process was facilitated by the fact that the humanitarian community was organised in Clusters that, during the recovery period, became Working Groups. The Cluster approach is an established UN coordination system that was formed after a weak operational response to the crisis in Darfur in 2004 and 2005, and is now a standard system worldwide. Whereas, the Working Groups were a Myanmar-specific coordinating mechanism for recovery phase activities, which were formed out of the Clusters (see Figure 3) as recommended by the PONREPP.

Figure 3: Humanitarian Community’s Coordination Structure in Myanmar during the Emergency and Recovery Periods

Source: TCG, Recovery Coordination Centre
Chapter One.
Introduction
Emergency Rapid Assessment Team

Through the framework of the AADMER, ASEAN Member States could help a disaster-affected country like Myanmar to conduct assessments and to decide on the type and scope of assistance required. ASEAN decided to activate the AADMER when Cyclone Nargis struck Myanmar.

Following the recommendation made by the ASEAN Secretariat in its daily situation reports, the Myanmar Government agreed to the deployment of the ASEAN-ERAT. The team that was made up of Government officials and disaster management experts from ASEAN Member States who were tasked with determining the type and scope of assistance required. Specifically, the key objective of the ASEAN-ERAT mission was to gather and analyse assessment findings through consultations with senior Government officials and field assessments in order to provide recommendations on the way forward in addressing the support for the Government.

In the first such mission for ASEAN, the ASEAN-ERAT was rapidly deployed to Myanmar from 9 to 18 May. It was the first official assessment team outside the country that came to Myanmar post-Cyclone Nargis. Its report was submitted to the Special ASEAN Foreign Ministers’ Meeting on 19 May and became a reference for the Foreign Ministries to define the approach that ASEAN should take to facilitate the humanitarian assistance.

ASEAN organised, constituted and deployed for the first time the ASEAN-ERAT with representatives from Brunei Darussalam, Malaysia, Philippines, Singapore and the ASEAN Secretariat. In addition, members of the United Nations Office for the Coordination of Humanitarian Affairs and UN Disaster Assessment and Coordination (UNDAC) team served as resource persons. Many of the ASEAN-ERAT members were
The team jointly developed the final report for the Special ASEAN Foreign Ministers’ Meeting on 19 May, in which it proposed the establishment of a “Humanitarian Coalition for the Victims of Cyclone Nargis” to coordinate and facilitate the ongoing relief, recovery and future reconstruction efforts. This was later known as the ASEAN-led coordinating mechanism.

Summary

The findings of the ASEAN-ERAT led to a recommendation to establish a mechanism for post-Nargis response in Myanmar in which ASEAN would be at the forefront of bridging the humanitarian gap between the affected community and the international humanitarian community. The ASEAN Foreign Ministers, who established the ASEAN-led coordinating mechanism and set up the AHTF, endorsed the team’s recommendations. The AHTF later established the TCG.
The team’s findings successfully advocated for the Government to allow the international humanitarian community access to the Delta to provide immediate, medium- and long-term activities in response to Cyclone Nargis, with needs ranging from agriculture, early recovery, education, food, health, logistics, nutrition, protection, shelter, and water sanitation and hygiene.

The first deployment of the ASEAN-ERAT demonstrated the value of using the AADMER as the guide for ASEAN’s role in future humanitarian crisis in the region. Based on the AADMER, the affected Member State will continue to take the lead, and ASEAN’s response will be mobilised based on the request and consent of the affected Member State and will vary depending on the capacity of the country and severity and complexity of the disaster. ASEAN’s regional mechanisms should work hand-in-hand with the affected Government, supporting it in responding to the disaster. This principle was consistently followed throughout the two-year humanitarian operation.

**Challenge:** The decision to establish the ASEAN-ERAT was made in March 2008 before Cyclone Nargis. Therefore, at the time of Nargis, the ASEAN-ERAT essentially was not yet established. However, in view of the pressure and the need for a better description of the situation in the field, ASEAN activated the ASEAN-ERAT by calling on government officials and disaster management experts from ASEAN Member States to gather in 48 hours. The team successfully completed its mission with solid recommendations that subsequently proved to be the turning point for the establishment of an ASEAN-led coordinating mechanism. But this first-ever joint assessment mission encountered many operational challenges, which could have been sorted out easier if the ASEAN-ERAT had been properly set up, equipped and trained before the deployment. Another challenge was the necessity for the ASEAN-ERAT to interface with other systems, such as the UNDAC and other humanitarian actors. An absence of guidelines and procedures necessitated improvisation and maneuvering by the ASEAN-ERAT team during the mission.

**Recommendation:** Procedures for activation and mobilisation, deployment, rapid assessment, on-site coordination, reporting and demobilisation must be properly developed and provided to the ASEAN-ERAT. Training and appropriate refresher courses ought to be carried out by any ASEAN-ERAT members. The team should also be self-sufficient and possess the skills necessary to support and produce solid recommendations to the affected country. Interface with UNDAC, UNIASC and other humanitarian actors will also have to be figured out. All of the above ought to be in place prior to any future deployment.

**Lesson Learned:** Based on the experience of working together, ASEAN and UN have already begun to develop standard operating procedures on how the two organisations can better cooperate with each other and complement one another in terms of assessment as well as preparedness and response. ASEAN has also begun to develop the required procedures, training modules and exercises to equip ASEAN-ERAT for future deployments. ASEAN-ERAT members have also been participating in UNDAC training opportunities.

**Conducting an ERAT Assessment: A Practical Reference**

The ASEAN-ERAT assessment should be conducted approximately within 1 to 10 days of a disaster. However, in line with the AADMER, the deployment should take place, ideally, within 24 hours of activation, in view of the proximity of the countries from which team members are coming. It should gather first-hand information for ASEAN to make informed decisions to help the affected country towards the road to recovery and should aim to support the affected country in facilitating the coordination of initial assessments of both the emergency situation and the international relief requirements stemming from it. Specifically, it should focus on ensuring the consistency of any preliminary information regarding the nature and scale of the emergency, the preliminary needs assessed and the relief interventions required.
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The team should aim to understand the impact of the event and identify immediate needs with a limited range of indicators and core questions. Data collection methods should be adapted to the short timeframe, such as performing key informant interviews and community-level discussions. Members of an ASEAN–ERAT mission typically take about two weeks to gather preliminary information. The team should aim to ensure that field visits start as soon as possible after arrival.

The team is selected in order to ensure balanced experience within the team for the three broad areas of disaster response framework, emergency services, and early warning and public education.

As far as possible, members should be from the geographical region in which the requesting country is located. There should be at least three people with good writing and editing skills, one administrative staff person and a team member with legal knowledge on each team. If the team decides to have sub–teams, a Terms of Reference (ToR) should be prepared for each sub–team, along with a list of questions each team would like to ask within the country.

An appropriate schedule for the team’s activities should be drawn up before the team arrives in country. This should cover meetings with the National Focal Point, who is the entity designed and authorised by the affected country to receive and transmit information pursuant to the provision of AADMER. The National Focal Point should coordinate with the competent authorities and serves as the single point of contact for the country it represents.

The ASEAN–ERAT should conduct the assessment, prepare and submit an interim assessment report within 24 hours upon arrival at the disaster site based on the data collected, made available or from on–site assessments and interviews. After it is approved by the National Focal Point, the full assessment report should be sent to the ASEAN Coordinating Centre for Humanitarian Assistance on disaster management (AHA Centre) within 72 hours of arrival.

The principle objective of the ASEAN–ERAT rapid assessment is to quickly provide a “snapshot” assessment of the immediate disaster situation, and to identify how and where immediate assistance should be prioritised in order to have the greatest impact.

Collection of information should include both primary and secondary sources. The team should first meet with the government focal points for disaster management in order to understand their perspective. It is important to review the government’s strategy to mobilise external resources to assist in strengthening its capacity and to review the country’s capability to put these strategies into place.

The team should also endeavour to meet concerned government departments and institutions that have a part to play in national disaster management and with all UN agencies in–country, perhaps by organising a meeting with IASC member agencies and donors, especially those with projects concerned with disaster management.

The team must undertake field visits, as appropriate. It is best to commence field visits as quickly as possible as they are time consuming. Following each interview and/or field visit, a report should be immediately produced. The report should strive to be direct and to–the–point.

The rapid assessment should cover multiple areas including the need for international search and rescue teams, medical needs, drinking water, sanitation, food, shelter and any other identified areas related to survival. Other sectors that were not immediately life saving do not need to be prioritised at this stage.

The team must meet daily, both in the morning before starting its work and in the evening when everyone has returned. This enables the team to collectively keep abreast of developments on all issues, to jointly analyse new findings, and to ensure all members are aligned as to their day–to–day understanding of the evolving situation. The team should try to establish contact with the UNDAC team and discuss the possibility of integrating or distributing, as appropriate, various roles and functions during assessment and coordination.
The ASEAN–ERAT should focus on the emergency phase, which normally lasts two to four weeks from the start of the disaster.

There should be an exit strategy, which should be included in the initial Plan of Action. Arrangements should be made with the National Focal Point and competent authorities to hand over the team’s functions, assets and processes before ending the mission.

**Post-Nargis Joint Assessment**

At the ASEAN–UN International Pledging Conference on 25 May 2008 in Yangon, donors made it clear that an assessment would be vital to secure important funding, as the whole picture of the Cyclone’s damage was still unclear at the time. Furthermore, it would ensure that everyone was clear about the impact of Cyclone Nargis and what needed to be done.

During the first TCG meeting on 31 May 2008, it was agreed that a needs assessment would be conducted to determine the immediate and long-term effects of Cyclone Nargis on affected communities, and the requirements for humanitarian assistance and for medium- to long-term recovery. This assessment became known as the Post-Nargis Joint Assessment (PONJA).

As the PONJA was such an important and major undertaking, the TCG formed a three-person Assessment Oversight Committee (AOC), led by a UN specialist in multi-sectoral inter-agency assessments who was seconded to ASEAN. The Committee included a representative from the Government and the UN. The AOC was given the responsibility of integrating the needs assessment conducted at the micro, household level, known as the Village Tract Assessment (VTA), with the sector and macro-level Damage and Loss Assessment (DALA).

The VTA uses various tools including questionnaires where the respondents were heads of households and community
Figure 4: Timeline of Events for the ASEAN-ERAT to PONJA

- 2-3 May
- 9
- 11
- 12
- 19
- 25
- 31 May
- 10 June
- 20
- 30 June
- 10 July
- 20

Source: ERAT and PONJA reports
key informants, as well as focus group discussions (using groups of men, women, and fishermen or farmers) and observation checklists. The DALA methodology, on the other hand, provides a framework to identify and quantify the socio-economic and environmental impact of natural disasters. It is based on the utilisation of the system of national accounts of the affected country as a means for valuation of the damage and the losses caused by the disaster.

Therefore, the PONJA’s aims were to assess: (i) the current vulnerabilities and needs of the population living; (ii) the damage done to major assets; and (iii) the losses of income.

Figure 4 shows the progression of key events that led up to the completion of the PONJA.

The PONJA was an extraordinary and pioneering opportunity for different parties to work together towards achieving a collaborative approach to needs assessment.

The Government was a key participant of the assessment process, and the Chair of the TCG was afforded a great deal of autonomy to manage matters, which worked very well as this helped to speed up decision-making and increased the credibility of the TCG.

The Government was involved throughout all stages of the PONJA exercise. For example, more than 50 officials from 18 ministries supported the assessments and report writing processes. Furthermore, the Government eased access to the affected areas and provided some transport and vital communications equipment.

The UN coordinated the participation of its agencies and other NGO members of the IASC, including in the formation of field teams and through consultations with the technical Clusters. The UN coordinated all aspects of the VTA, with additional guidance from ASEAN, including data gathering, analysis, and report writing. It played a key role in ensuring that the VTA’s findings fed into the revised Flash Appeal that was launched less than two weeks.
before the launch of the PONJA report. Finally, it coordinated with the MIMU to support the VTA, particularly in the mapping and spatial analysis work.

ASEAN coordinated the Damage and Loss Assessment (DALA) with support from the World Bank and the Asian Development Bank (ADB). The World Bank deployed approximately 30 staff and ADB deployed a further 9 staff. ASEAN also deployed for the second time ASEAN-ERAT members from Malaysia, Myanmar, Philippines, Singapore and Thailand to join the PONJA teams.

All the above parties met daily to discuss progress in the relief and recovery efforts, and to get daily up-dates on the assessments taking place. Under the TCG umbrella, the PONJA was truly a multi-party exercise.

VTA: Methods

As shown by Figure 5, the VTA took four weeks to complete and be combined in the PONJA Report, which was launched two weeks later.

With oversight from the three-member AOC formed by the TCG, a core team of eight managed the operational work of the VTA. This team included a Programme Manager, a Technical Coordinator/Operational Manager (an epidemiologist), two Statisticians, two Geographic Information Systems (GIS) Specialists, a Database Manager and a Logistician.

Teams were deployed on 3 June 2008 for 11 consecutive days. To monitor the movement of the teams and ensure their safety, the TCG set up a 24-hour “Control Room” manned by ASEAN volunteers, officials from ASEAN embassies in Yangon, experts from the UN and Government officials from key line ministries. TCG members held daily meetings every morning in the Control Room to ensure that the assessment was on track. The Control Room also responded to reports from the assessment teams in the field who found some areas that were not yet reached by aid workers/assistance, and relayed the reports to the TCG.

Before the deployment, an advance team was sent to the ground to assess the logistic and security conditions for the upcoming teams. Field teams consisted of 31 four-member teams who surveyed 2500 respondents in 291 villages across 30 townships. Each team had one team leader. There was a rapid training session for the field personnel and some rapid planning to establish the basic logistical capacity to support the survey.
The analysis team, composed of Statisticians, GIS Specialists and a Technical Coordinator (epidemiologist), worked closely with focal point persons from each of the Clusters in order to ensure correct and appropriate analysis and interpretation. The VTA, like the DALA, worked with the structured Cluster system to conduct consultations, as all active agencies under the IASC working in the Delta, including the partner Government line ministries, participated in this coordination mechanism.

In the final report writing stage, the AOC consulted with a group proclaimed the “Eminent Persons,” who were four senior Myanmar persons who played a very critical role in assisting with interpreting the results, without changing the substance of the findings of the assessment.

Sub-national centres, referred to as Hubs, were created in the affected areas by the UN to assist in operational activities responding to the devastation left by Cyclone Nargis. The Enumerator teams used the Hubs, located in Bogale, Labutta, Pathein, Pyapon, Wakema, and Yangon Townships, as a base. International staff members that were seconded from the UN and international NGOs (INGOs) were relocated to the Hubs for the assessment period. They were required to liaise with the local Government, and prepare for the incoming PONJA teams.

The PONJA demonstrated the value of having a stronger field coordination mechanism and after the initial assessment period was complete in August 2008, the TCG approved the establishment of joint coordination hubs consisting of staff from both ASEAN and the UN. This arrangement of cost-sharing facilitated ASEAN to quickly establish an operational presence in the affected area that were later used successfully for the implementation of the Periodic Reviews.
The existence of the Hubs greatly facilitated the complex logistics of covering a large area with many Enumerators and assessment officers. To prepare for the challenges of moving the teams around efficiently and to schedule, logistical plans were made in advance. Agreements for logistical support from locally active agencies and Government authorities were clarified and agreed on prior to the fieldwork. Tough terrain and conditions during the monsoon period meant that a wide variety of transport was used (helicopter, boat, motorbike, trishaws and car). The teams were trained to use appropriate telecommunication tools and Geographical Positioning Systems (GIS).

The chosen assessment sampling method was based on the following rationale:

- The aims of the assessment were to cover all 30 affected townships;
- The assessment needed to address the nature of the disaster, by the fact that it was unlikely there would be homogeneity within townships.

For this reason, a spatial sampling frame was used with a Panel Study design that justified periodic assessments looking at the trends over time, rather than changes at the household level.

The VTA selected 30 affected townships from the Government’s list of affected townships according to an appropriate definition for the assessment. The 30 townships assessed by the VTA were included in the 57 townships surveyed in the DALA.

The VTA used a centric systematic area sample method to identify Probability Sampling Units. The method involved dividing the assessment area into non-overlapping squares (quadrats) of equal area (15km by 15km) and assessing the community or communities located closest to the centre of each quadrat. GIS was used in combination with sketch maps to locate communities that met the selection criteria. Figure 6 shows the artificial grid that was used for sampling. It marks the location of each community that was assessed.

The assessment tool combined key questions from 10 Clusters and sub-Clusters: Agriculture, Early Recovery, Education, Emergency Shelter, Food, Health, Nutrition, Protection of Women and Children, Temporary Settlements, and WASH. The questionnaires underwent translation and back translation by independent translators twice and were evaluated in the pilot survey.

The data collection methods used in each village visit comprised of 10 household survey interviews, six key informant interviews interviewing up to six different informants, three focus group discussions (women, men and fishermen or farmers) and one observation checklist. Key informants included school teachers, monks or other religious leaders, village leaders, Government officials, the heads of women’s groups where they existed, and health professionals.

All responses were recorded on paper. Double data-entry took 12 days and 25 personnel running simultaneously with the data collection. Confidentiality standard operating procedures were followed to ensure the data was not interfered with in transit from the village to the Hub and onwards to data headquarters, and during the photocopying of original documents.

The analysis took around 12 days, being conducted concurrently with the data collection and the data-entry. The analysis stage involved the Statisticians, GIS Specialist and the Epidemiologist consulting with the technical Cluster specialists and later, with the DALA team.

**DALA: Methods**

The assessment of damage and losses after disasters is essential for the estimation of financial needs for recovery. Priorities are defined in terms of the most affected sectors of the economy, geographical areas of the country and population groups to be attended during recovery. Furthermore, the assessment of damage and losses provides a quantitative basis to monitor progress in the execution of post-disaster programmes.
The DALA methodology provides for the estimation of the destruction of assets caused by the disaster, changes in the flows of the economy caused by the temporary absence of the destroyed assets, and modifications in the performance of the affected economy. In addition, it also provides the basis for assessing the negative impact on personal or household income and overall well-being.

**Damage** is defined as the monetary value of fully or partially destroyed assets. It is initially assumed that assets will be replaced to the same condition – in quantity and quality – that they had prior to the disaster. **Losses** are defined as the changes in the flows of goods and services that will not be forthcoming until the destroyed assets are rebuilt, over the span of time that elapses from the occurrence of the disaster and the end of the recovery period. Losses include production of goods and services that will not be obtained; higher costs of operation and production, and the cost of the humanitarian assistance activities. Total disaster effects are the sum of damage and losses.

**Macro-economic effects** are defined as the manner in which the disaster modifies the performance of the main macro-economic aggregates in the affected country or region. These effects arise from the damage and losses caused by the disaster. Macro-economic effects represent a different view of disaster impact – as they describe the effects of the disaster on the functioning of the economy and the resulting macro-economic imbalances – and are therefore not added to the sum of damage and losses to avoid double accounting.

Main macro-economic effects include the impact on the level and growth of the gross domestic product of the country or region affected by the disaster; the modification of the normal pattern and structure of the balance of trade due to increased imports and lower exports of goods and services arising from the disaster; and the corresponding impact on the fiscal sector that may occur due to lower revenues and higher expenditures of the government. The post-disaster macro-economic analysis also includes an examination of the impact on gross investment to take into consideration the investments to be made during the recovery, the examination of possible inflation stemming from the effects of the disaster, and negative impacts on employment and income at the personal and household or family level.

The DALA followed the timeline displayed in Figure 7.

The DALA team consisted of around 80 personnel in total, including over 35 Government officials, ASEAN–ERAT members, and technical specialists from the World Bank, UN organisations and the ADB. There were two team leaders (from the World Bank and ADB). One Government representative was designated to facilitate information and data collection. Each DALA sector team worked with a focal point from each Cluster and consulted widely with national stakeholders and international partners.
Figure 6: Map of the Cyclone Nargis-Affected Area with Quadrats Overlaid

Source: PONJA report
Six DALA field teams of about 65 persons in total were deployed to the most disaster-affected townships of the southern Delta on 11 June for a period of five to six days. For the purpose of the field visit, which served to collect primary data and validate secondary data, the teams were grouped to cover the following sectors: education, health, housing; agriculture, livestock, fisheries and irrigation; industry and commerce; transport and communications; electricity and water and sanitation; and social and environmental issues and coastal zone management. As with the VTA, a wide variety of transport was used, including helicopters, boats, and cars.

The procedure used in the Myanmar assessment involved many steps and activities, beginning with the collection of baseline information and of data on damages provided by the Government through its different technical and service delivery ministries and offices. Immediately after, the DALA team carried out plausibility reviews of the data, including triangulation and independent verification of the data.

Baseline data was time-normalised across various sectors of the economy to provide the best possible reference for the analysis. This included desk reviews of information and the identification of information gaps and the possible sources for filling them, as well as detailed field surveys of the affected areas where extensive consultations were held with inter alia township officials, community leaders and representatives, NGOs, villagers, business owners and other stakeholders.
The assessment analysed information on disaster effects in a total of 79 townships located in Ayeyarwady, Yangon and other affected Divisions, and the macro-economic analysis covered the entire country with special reference to the Ayeyarwady and Yangon Divisions for which the system of national accounts provides adequate coverage. The team analysed data sector by sector with the team leaders and an economist, in consultation with a Government counterpart.

The PONJA did not constitute a recovery plan, which would have required further work to refine sectoral needs and priorities, elaborate recovery approaches and implementation arrangements and complete and refine estimates of costs. However, as part of the assessment, an initial identification of recovery costs was completed for some of the principal recovery activities across sectors. Around 90 percent of all recovery costs estimated — all those except transport and communications — were for activities delivered directly to the local community level.

The storyline for the PONJA was led by the DALA, which was drafted before the VTA was fully analysed. However, there was no contradiction in sectoral data between the VTA and DALA, except in housing.

As part of the DALA, innovative qualitative research was undertaken to assess the impacts of Cyclone Nargis on aid delivery, the village economy and livelihoods, and social relations and local institutions. This research formed the basis for the subsequent Post-Nargis Social Impacts Monitoring (see below).

**Summary**

Donors at the pledging conference in Yangon identified access and a thorough assessment of needs on 25 May 2008 as the key prerequisites for increased funding. The PONJA went beyond fulfilling these two needs.

The PONJA successfully integrated humanitarian relief assessments with a longer-term recovery assessment, along with integrating micro and macro information. The VTA worked and, when combined with the DALA, provided a powerful tool for humanitarian and recovery practitioners, policy-makers, national governments and donors. One of the benefits of the information being endorsed by all parties was that findings became an agreed baseline that all agencies could work from, making them easy to use and quote.

### Figure 7: Timeline of Events for the DALA

<table>
<thead>
<tr>
<th>Event</th>
<th>June</th>
<th>July</th>
</tr>
</thead>
<tbody>
<tr>
<td>Damage And Loss Assessment Training</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Initial Data Collection</td>
<td>8</td>
<td>15</td>
</tr>
<tr>
<td>Field Survey of Affected Areas</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Continued Data Collection and Analysis</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Presentation and Validation of Assessment Results</td>
<td>16—25</td>
<td>25</td>
</tr>
<tr>
<td>Completion of First Draft</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>Presentation of Final Ponja Report</td>
<td>22—25</td>
<td>7</td>
</tr>
</tbody>
</table>

*Source: PONJA report*
Secondly, the credibility of the findings mobilised much-needed funding. On 21 July 2008, on the occasion of the 41st ASEAN Ministerial Meeting in Singapore, ASEAN and the UN jointly launched the final PONJA report. The results fed into a revised Flash Appeal, launched in New York on 10 July, which requested US$482 million for the first year of the response.

Thirdly, the PONJA findings were accepted by the Government, which then provided the international community with greater access to the Government and opened up communication lines.

**Challenge:** At the beginning of PONJA there was a debate about how to capture the results from the two types of assessments in the report in order to present a balance of immediate humanitarian assistance with early to longer-term recovery activities since this was the first time that two methodologies were employed in a post-disaster needs assessment (PDNA). It was eventually agreed that the findings from both would be integrated sector by sector and presented along a timeline of needs covering the spectrum from relief to recovery, and representing both micro- and macro-perspectives.

**Lessons Learned:** Based on, among others, the experience of the PONJA, the UN and the World Bank, together with the European Commission, signed a Joint Declaration on Post-Crisis Assessments and Recovery Planning on 25 September 2008. Combining the two approaches used under PONJA, the assessment process mentioned therein seeks to identify and capture the needs of the people, the damages to physical assets and infrastructure arising from a disaster, and the subsequent economic losses caused by the event, as well as identifying the social and community level dimensions and sectoral aspects of recovery needs.

**Challenge:** One of the greatest challenges was the large coverage area and the basic nature of technology available.

**Lesson Learned:** It was through the strong cooperation of multiple parties that the logistical challenges were overcome. Under the auspices of the TCG, and in cooperation with the Logistics Cluster, the PONJA used a total of 24 helicopter flights, 214 car trips, 158 boat trips, 52 motorcycle trips, 40 CDMA phones, 35 Global Positioning System (GPS), and 32 computers. The core assessment teams managed and organised the logistics and movements of all the teams. However, the assessments would not have been completed to schedule without the use of the helicopters, which were primarily used for relief efforts.

**Challenge:** As the database was a work in progress and field staff had not received extensive training, there were many errors in the VTA data-entry process.

**Lesson Learned:** A pre-programmed data entry system that matches a pre-designed questionnaire requiring basic skills would have prevented so many mistakes from being made. Alternatively, and perhaps more realistically, referring to a roster of surge staff with database management skills would have resulted in a good quality and specific database.

**Challenge:** Developing the VTA multi-sector questionnaire required a lot of negotiation as each Cluster wanted their indicators to be included in the report, often requiring data collection methods that were not conducive to a rapid assessment.

**Recommendation:** While indicators may vary by disaster or from one country to the next, many indicators can be standardised and popularised to facilitate comparisons. Furthermore, guidance for the country Cluster Lead is needed from the Global Cluster Leads on:

- The criteria for defining and selecting indicators;
- What an “indicator” is, what is a question, and what is “information”;
- A set of sample indicators for each Cluster as a basis for local selection and adaptation, with a range of potentially useful questions linked to each set to be used directly in a questionnaire;
- Where to turn for further guidance for each sector, such as websites and contact details for available expert technical advice.
**Challenge:** Initially, there was a concern that the Government might not have available up-to-date data appropriate for the DALA team. This required the DALA team to invest more in the triangulation of data as compared to other countries where disaster-related data are more readily available and institutionalised.

**Lesson Learned:** The DALA exercise gave the Government an opportunity to learn about and apply the damage and loss assessment methodology. The DALA helped develop a solid working relationship between Government officials and their counterparts on the international assessment team. As a result, the DALA team was able to access the store of data that ministries had collected on a range of sectors. Once triangulated with other sources, this data was very useful for the DALA exercise.

**Conducting the PONJA: A Practical Reference**

The PONJA has shown that methodology is critical to the success of any needs assessment. It ought to fit with the phase of the emergency as well as the funds and the time available. Some of the important lessons from a Cluster perspective include:

- Balance the need for timeliness and the need for a technically robust assessment. Ensure that the best possible information is provided in a timely fashion to decision-makers, taking account of the requirements of all;
- Ensure that all questions and data collected are relevant and useful;
- Remember that information that is “good enough” is adequate and do not seek more detail or precision than necessary;
- Analyse and use pre-existing data before undertaking a needs assessment;
- Do not reinvent the wheel in every country. The content of questions and indicators used should be based on core areas of inquiry and comparability;
- Make sure the assessment provides a baseline for monitoring.

In the same vein, the design of any assessment should be based on a confluence of decisions and considerations such as the precise purpose of the assessment; what will be done with the information and who will do it; the sources of the data (who has the information); the geographic and topical areas to be covered; the skill level of the individuals who are going to collect the data; the reporting format for quantitative and qualitative data; and the timeframe for when the results will be required.

**Conducting the Village Tract Assessment: A Practical Reference**

As a follow-on multi-sectoral assessment, a VTA-type assessment should provide more detailed information relevant for many sectors, based on larger and more representative samples than the initial rapid assessments conducted in the immediate days following an emergency. It should establish baselines for monitoring progress and may complement additional in-depth sectoral assessments that are needed to plan responses beyond the initial, acute, life saving phase.

The number of field teams should be determined by workload and time allotted for data collection. Teams should be created to reflect:

- A variety of language capacity (English, Myanmar and local regional dialects);
- Knowledge of local area;
- A mix of genders;
- A mix of ethnicities.

Field teams should ideally be given sufficient training by technical experts in the respective fields. This will allow the Clusters to be more involved with the process of not only tool development, but also to ensure that the data collection is more in line with what their respective Clusters require. Field teams should pilot the data collection tools before they use them in the field.
In addition, a detailed field guide should be written for Enumerators, who then can use it as a handy reference to guide them through steps such as what to say when entering a community, standard operating procedures for handling the completed questionnaires in a secure and confidential way and definitions used in the questionnaire.

As much planning for logistics should be done prior to sending teams to the field, as teams have little time to plan and respond once in the field. For example, any agreements for logistics support from other agencies and government authorities can be clarified and agreed on in advance and detailed maps can help to identify and plan pick-up and drop-off locations. The team should be trained to use and be equipped with detailed maps, particularly those from township authorities, and appropriate telecommunications and GPS tools to facilitate their navigation.

Depending on the size of the coverage areas, it may be necessary to establish field-based hubs in which teams can work while in the field.

Spatial sampling has many advantages. It allows sampling of villages without having their population figures and guarantees equal opportunity for both small and large communities to be included in the sample. Spatial sampling methodology ideally requires reliable, yet not necessarily detailed, maps in order to help identify the specific locations to be sampled. Often times, these types of maps may not be available, in which
case, the best estimation based on consultation with trusted regional authorities may suffice or, barring that, equally spaced coordinates may be selected to find the village nearest to the coordinate using a GPS.

Data collection should be done using multiple tools; household-level questionnaires, key informant interviews, focus group discussions and observation checklists, or a combination of these, depending on the type of disaster and the context. Different information may be gathered when the same question is put to groups and to individuals in order to triangulate the results. It is important to understand the social context, for example, how the society works at the smaller community level. While it may not be possible to obtain a truly ‘representative’ view, consultation with women as well as with men, and with the relatively powerless as well as with leaders, should be minimum requirements of a focus group discussion assessment.

A multiple sector questionnaire requires consultation to ideally achieve buy-in from the Clusters, who, along with donors and the government of the affected country, should use the results. The questionnaires need to undergo translation and back translation by independent translators twice and evaluated in the pilot survey.

As the volume of data is often large for surveys at this post-disaster stage, procedures must be followed to limit human error at every stage that the data is handled, starting from when the Enumerators leave the Hub to travel to the selected village right through to the data-entry and analysis stages. For instance, papers ought to be checked to ensure they are in order, and at the household, checks should be made to ensure all questions were addressed. Data should be entered twice and merged to limit the data-entry errors if paper questionnaires are used, or regularly backed up if electronic handheld devices are used.

Devising an analysis plan, when the data collection instrument is being designed, is essential to ensure cost-effective data collection. A statistician for each Cluster should assist with the analysis and interpretation of their Cluster information. In the analysis stage, weights should be used to adjust potential over-sampling in smaller townships when the township findings are included in the larger sample analysis.

Those who collect the data should be part of the analysis and additional technical experts should be called in to help interpret the data to ensure that evidence is provided for all conclusions and that data is interpreted taking into consideration its context.
When making recommendations, the following issues need to be considered:
- What kinds of estimates are needed and when: by village, province, overall, for specific sub-groups? Should absolute numbers or proportions of the affected population be used?
- What benchmarks should be used, and which baseline?
- How should sectors be prioritised?

**Conducting a Damage and Loss Assessment: A Practical Reference**

The United Nations Economic Commission for Latin America and the Caribbean (ECLAC) originally developed the DALA methodology in the early 1970s. This methodology has been continuously expanded upon and updated over the past three decades, and in recent years was simplified and customised for application in different regions of the world. It has been applied by the World Bank and other international organisations in numerous cases of recent disasters, and provides a satisfactory framework to identify and quantify the socio-economic and environmental impact of disasters.

Guidelines and tools for the DALA can be found in the ECLAC Handbook. The general steps include the following:
1. Collection of baseline information from appropriate government agencies and ministries, as well as other sources, and of preliminary assessment reports;
2. Training of government personnel, and other interested parties, on the damage and loss assessment methodology developed by ECLAC;
3. Field survey of affected areas to gather information and/or verify data already collected;
4. Assessment of social and economic impact of disaster;
5. Formulation of recovery and reconstruction programmes.

In the context of the international partnerships on post-disaster assessments mentioned above, the UN and the World Bank are currently finalising the PDNA thematic guidance for sectoral assessments and recovery planning, which will provide the basis for the more effective implementation of and cooperation in such important exercises.
Periodic Review

After the successes of the initial VTA and DALA assessments that presented the initial needs after Cyclone Nargis, the PONJA made the recommendation that the situation should be monitored. From this recommendation, the TCG, jointly overseen by ASEAN and the UN, launched two monitoring projects, namely the Periodic Review (PR) and the Social Impacts Monitoring (SIM) study, with different objectives.

Using the VTA as the baseline study and building on, while improving its methods, the PR set out to describe the progress or lack of progress in the affected area over the recovery period. Four PR assessments were conducted and written up in reports. The second one, PR II and subsequent PRs set their results in the context of the Post-Nargis Recovery and Preparedness Plan (PONREPP).

According to the Terms of Reference (ToR) for the PR, the objectives were to:

1. Monitor indicators at regular intervals in order to contribute to the stated goal;
2. Gather information to provide a snapshot of the progress of the recovery of households and communities;
3. Provide information that would guide the strategic decision making amongst all relevant stakeholders.

The ToR was a reflection of one of the priority functions of the TCG, adopted at the second TCG Meeting on 2 June 2008, to ensure monitoring and reporting coordination:

1. Ensure smooth flow of information related to international and national relief efforts among all parties involved;
2. Establish mutually-acceptable mechanisms for monitoring the delivery and accountability of international assistance to the Cyclone-affected areas;
3. Conduct further detailed assessment and analyses of the current situation in the entire affected areas;
4. Facilitate the coordination of periodic assessments and analysis of the recovery efforts for those living in affected areas (added at the 33rd TCG meeting on 7 April 2009).

Four PR assessments were carried out over a two-year period in Myanmar:
• PR I: November 2008 (6 months after Nargis);
• PR II: May 2009 (12 months after Nargis);
• PR III: November 2010 (18 months after Nargis).
• PR IV: May 2010 (24 months after Nargis).

Methods
The overall management of the PR was supported by the TCG: ASEAN, the Government, and the UN, which also represented the IASC community. The PR team endeavoured to include all three components of the TCG at every stage and in all processes.

Outside of the formal coordination structure of the Clusters and Working Groups, the PR involved the three components of the TCG in other ways. Stakeholders, in particular, were involved in a number of ways including:
1. Sector Consultations: Through the system of the Clusters and then Working Groups, the PR had extensive consultations with the various programme sectors, including Health, Education, Food Security and Livelihoods, Protection, Shelter, and WASH. The PR had a strong philosophy of following a consultative and transparent process that gave all three TCG components ample opportunity to provide input into the process.
2. Operational and Logistic resources: ASEAN, the Government, UN organisations and NGOs all generously provided logistical resources such as boats, cars, staff and office space.
3. Resource Mobilisation: In addition to the in-kind inputs provided for these assessments, a range of donors financially supported the PR.
4. Open Forum discussions: Weekly (PRI) and bi-weekly (PRII) open forum meetings were held in which the wider humanitarian community discussed the progress of the PR and gave suggestions.
5. Advisory Groups: ASEAN, the Government and the UN were equally represented in the Strategic Advisory Group and the Technical Advisory Group. These Groups provided guidance to the Programme Manager and the Technical Advisor within the PR team.
6. Mentoring positions were created for appropriate technical Government staff to fill in the interest of building capacity.

The initial guidelines from the TCG for a monitoring assessment such as the PR were based on the PONJA’s VTA design. Specifically, the TCG requested that the new survey should use the VTA as a baseline, thus continuing data collection on some of the indicators used in the VTA and on multiple sectors using spatial sampling over the same area.

The PRs were conducted every six months and followed a similar schedule each time. The consultation process was just as thorough at each stage, especially since there is usually a high turnover of staff after an emergency. Thus the PR endeavoured to gain a sense of ownership by the community for each assessment. Clusters and Working Groups were made aware of schedules ahead of time as much as possible, in order to maximise their input. While there were some variations, each PR consisted of the steps shown in Figure 8.

With variations between the four PRs, there was a core team consisting of a Programme Manager, who managed an Operations Coordinator, a Technical Team Coordinator, Finance and Administration Coordinator and a Communications Officer. Technical experts were hired on a surge-basis as additional skills were required and may have included a Writer,
Figure 8: Schedule Followed by Each PR

- Planning
- Tools Development (Consultative Process)
- Recruitment and Training of Field Teams
- Pilot Testing and Refining Tools
- Data Collection/Fieldwork
- Data-Entry
- Data Analysis
- Report Writing
- Editing, Proofing, Printing, Dissemination

Source: PR I – IV

PR enumerators sample and map households. Photo by AHTF Coordinating Office
Statisticians, Database Manager/Programmer, GIS Specialists, a Chief Analyst, Proofreaders, Graphic Designer and an Editor (Version Controller).

From the onset, area Hub offices facilitated the assessments. There were four main Hubs in Bogale, Laputta, Pyapon, and Yangon that were initially managed jointly by UN and ASEAN. Labutta Hub covered 4 townships, Bogale Hub and Pyapon Hub each covered three townships and Yangon Hub covered 19 townships.

In addition to an international Hub Coordinator, the Hubs were usually staffed with national Hub Officers, Administrative, Logistical and Data Assistants. PR II put in place data checkers and assessment officers to ensure more consistent quality of data between Hubs. The Data Checkers improved the quality of the data immeasurably, as they addressed issues related to the completion of the questionnaire, such as illegible handwriting, omissions in the questions and pages of questionnaires, multiple answers when only one was permitted and ranking of responses. They addressed broached issues in daily briefings with the Enumerator teams through the Team Leaders/Supervisors.

The spatial sampling methodology used in the VTA was repeated in the PR. As demonstrated by Figure 9, it selected communities that were equally distributed over the entire Cyclone-affected area, thus accounting for the heterogeneous nature of the disaster that swept up the coastline from the rural Delta to urban areas. The sampling method guaranteed even spatial coverage of the sample with small and large communities equally likely to be included in the sample. The results were then visually displayed for severity of impact by darker and lighter areas, which allowed for strategic planning, as well as prioritising the allocation of limited funds.

The number of communities sampled was reduced from more than 100 hexagons in PR I and PR II, to 56 hexagons in PR III and PR IV by doubling the size of the hexagons. The sampling area remained the same as the VTA (30 townships) and the number
Figure 9: Spatial Sampling Frame for the PR over the Nargis-Affected Area

Legend
- State capital
- Main town
- Other town

VEGETATION COVER
- Cropland
- Scrubland
- Deciduous forest
- Evergreen forest
- Mangrove

Source: PR IV
of households sampled in each community totaled 20 to 25. The number of questions increased steadily in each PR, starting with 94 questions in PR I to 111 questions in PR II, 133 questions in PR III and 155 questions in PR IV.

Despite the halving of sample size between PR II to PR III, a closer comparison of population averages showed considerable stability. Over 80 per cent of 33 indicators remained comparable across PR II and PR III, with a variation of the mean within 6 percentage points, suggesting that the values were closely fluctuating around a population mean.

The multi-sectoral questionnaires (see WEBSITE) were developed in consultation with the sectors (through the Cluster system and Working Groups) and were piloted before the assessment began. Questionnaires covered the following areas:

- Agriculture and Livelihoods;
- Cross-cutting sectors including the Protection of Women and Children, migration, vulnerable populations, and Disaster Risk Reduction;
- Education;
- Food Security;
- Health;
- Housing/Emergency Shelter;
- Nutrition, and;
- Water, Sanitation and Hygiene.
After each phase of data collection, workshops were held to derive lessons learned by the field teams on operations as well as the implementation of the questionnaire. These workshops provided useful inputs to the improvement of subsequent PR processes, as well as the design of the questionnaire itself including the cultural relevance of the questions, the quality of translations, the flow of the interview, and its ability to access information about the most vulnerable groups.

As a result of consultations with the Clusters and Working Groups, questions and indicators were changed to respond to new issues that arose after each PR. For example, the wealth index was dropped, indicators were added to assess the water crisis in PR II, and Disaster Risk Reduction questions were increased and improved in PR IV. In addition, indicators and questions were refined from one PR to the next. Overall, indicators and questions gradually improved from PR I to PR IV and the sectors benefitted from close participation in the PR processes.

In summary, all the indicators that worked and were relevant were retained, and those that did not exist yet were deemed relevant by the sectors were created. Adjusting indicators over the four PRs was necessary for two reasons: firstly, some of the questions did not work in practice despite being piloted; and, secondly, new indicators were needed to reflect changing priorities from the emergency to recovery phase.
Given the different needs of the end-users such as the Government, donor agencies and implementing agencies, the PR continuously sought feedback on its process and its data presentation in order to improve its usage. As a result, the PR team added on new dimensions of analysis to the later PRs and presented data in new ways. For example, visuals such as tables, maps, graphs, were added with more explanations, comparisons of data were included between reviews thus illustrating direction, and data for the more vulnerable sub-groups was analysed.

**Summary**

The TCG was very successful in using the PR for strategic decision-making amongst all relevant stakeholders. The PR contributed to the legitimisation and standardisation of information on needs in the Delta, while initially increasing access to rural populations. The PR helped to build trust and increase collaboration with the Government, giving all parties of the TCG shared goals and channeled support from the highest levels of all stakeholders.

For donors, the PR series was very effective as a strategy document, allowing high-level decision-makers to see where the sectoral needs were. Even when PR results indicated that
need did not change very much between PR II and PR III, many donors regarded that not as a failure of humanitarian actors as much as a need for continued funding to the Delta recovery efforts.

Implementing agencies used the PR findings to substantiate the basis for programmatic decisions, to direct or redirect their programmes in accordance with the needs reported, and it assisted sectors in deciding where additional in-depth assessments were required. From the Government’s perspective, the PRs served as reliable and credible documents providing a comprehensive overview of the situation, which they could reference.

The PR demonstrated some best practices that should be replicated in future needs assessments and monitoring missions. They can be described as:
1. Consultative – by including stakeholders at all levels at all stages of the PR, it permitted the TCG and the larger humanitarian community to own the product;
2. Comprehensive – data included multiple sectors and covered a large geographical area;
3. Household-focused – needs were assessed from a household point of view;
4. Confidential – strict protocols were in place for handling sensitive data from households;
5. Informative – for high-level strategic decision-making;
6. Reflective – every effort was made to integrate lessons learned from each exercise in the subsequent PR and;
7. Consistent – tracking of baseline indicators over a two-year period.
**Challenge:** The PR’s mandate from the TCG was to report on changing perceptions of needs among households, not to document the attribution of changes over time as a result of aid inputs or to track the provision of services over time. This objective was not always understood by implementing agencies that wanted to know the impact and extent of aid delivery in the Delta.

**Recommendation:** In addition to the PR, a parallel study could have been conducted under the TCG to identify the gaps in aid delivery.

**Challenge:** Many implementing agencies wanted to use the PR data before it was released in the final report. This was easier in PR I and PR II, as the PR reported to the TCG and the Clusters regularly, but as the TCG eventually began to meet less frequently, alternative means to share information was needed.

**Recommendation:** Sharing of real-time information could have been done by establishing a mechanism for information sharing between the PR teams and the Hub teams, who were responsible for tracking routine information on the Delta and reporting it up through the Recovery Coordination Centre, which was established during the time of PR III and PR IV.
**Challenge:** The consultative nature of the PR made it vulnerable to a great deal of requests and criticism. The sheer volume of demands made it difficult for the PR team to provide sufficient and timely rationale for why input was not included, causing frustration among some sectors.

**Recommendation:** The PR could manage expectations better by communicating more strongly and more frequently that it may not be able to provide feedback for all inputs provided and it should share more widely and routinely what the PR is not meant to do. The PR for example, was not meant to:

- Be a Financial Tracking System;
- Replace sector-specific surveys, but rather aimed complement them;
- Replace the Who What Where product provided by the MIMU;
- Provide impact and gaps analysis on aid provided;
- Assess the performance of agencies.

**Challenge:** “Shadow positions”, created as a capacity building exercise for the Government, were activated for all PR assessments for a Statistician, a Social Scientist, a GIS Specialist and a Writer, but not all these positions were filled or filled appropriately. This was mainly due to financial incentives that were not sufficient to attract the highest quality of staff.

**Lesson Learned:** To attract staff who have the appropriate level of qualifications for shadow position, a more generous financial package should be provided.

**Challenge:** The PR recruited surge capacity staff only on short-term contracts, thereby increasing administrative burdens, and reducing staff incentive to remain, resulting in the loss of institutional memory and skill-sets.

**Lesson Learned:** The PR team could have recruited their surge capacity staff continuously from PR I to PRIV using a single fixed contract, thus retaining PR-specific acquired skills, knowledge and experience.

**Challenge:** The PR tried to remain neutral and meet its objective of collecting information impartially without aiming to influence donors to fund one sector more than another by, for example, prioritising. As a result, the assessment reports presented the results in a descriptive style, rather than being prescriptive in its recommendations or analytical in its interpretations. However, many implementing agencies and especially donors asked for more prescriptive conclusions with firmer recommendations.

**Lesson Learned:** The PR should consistently convey its objective that, while it will seek to make data more user friendly for end-users and particularly implementing agencies by adjusting and refining its methods of data analysis and presentation, it will adhere to a neutral stance in terms of advocating donors to fund any one sector. A recommendation would be for the humanitarian community to conduct workshops around the results presented in the Reports with an aim to take the results forward.

**Conducting a Periodic Review: A Practical Reference**

A PR is a continuous monitoring tool based on quantitative household surveys that provides a complete overview of evolving needs from a household perspective across a range of sectors.

See for an illustration of the time needed to complete a single PR exercise.

A management unit should be set up and operating autonomously of any one agency, with support from multiple stakeholders, to carry out a complex range of tasks. This requires good planning and management of implementation, including mobilising funds and human resources, training field research teams, managing and coordinating logistics and field operations, and assuring rapid, reliable reporting and data processing and analysis.
A core team should include the following positions: a Programme Manager, who manages a Technical Task Manager, an Operations Coordinator, a Logistics Coordinator and a Communications Officer. The technical teams are hired on a surge-basis to complete a PR exercise and include: a Writer, Statistician, Database Manager/Programmer, GIS Specialist, a Chief Analyst, Proofreader and Editors.

The appropriately skilled people from the Clusters should train enumerator teams, and the questionnaire should be piloted. As with the VTA, a comprehensive field guide should be available for Enumerators to use as a reference to guide them through their enumeration steps, such as what to say when entering a community, how to look after the questionnaires in a confidential and secure way, and describe clear definitions for terms used in the questionnaire (see www.aseanhtf.org/periodicreview.html). The training should include logistics, finance and administration, and map navigation using a GPS.

All appropriate documents should be secured from the government in advance and, while maintaining the confidentiality of the survey location, permission should be sought for full access to the survey area. Teams should be informed of their next survey destination only on the day prior to departing, with a minimal number of the logistics staff aware of the exact survey location.

Household sample sizes should ideally stay uniform throughout the reviews conducted, so as to ensure higher levels of comparability between them.

It is important to be realistic and select indicators that can feasibly be collected in a valid manner by generalists with little training. Indicators should be specific, relevant, useful, reliable, accurate, cost-efficient, and able to be communicated effectively to decision-makers. Proxy indicators may be used, where appropriate.

Given the lack of familiarity many local communities have with questionnaires, questions need be culturally relevant and sensitive. Field staff ought to be well trained in the art of probing when answers are not forthcoming. The PR results were based on quantitative household surveys. While these resulted in rich information, quantitative data should be analysed against qualitative information derived from sources such as key informant interviews in order to triangulate the results.

Multiple dimensions of analysis are needed to make sense of such a large amount of data gathered. This can include: a) the use of visuals such as tables, maps, graphs with more explanation of them; b) comparison of data between reviews; c) comparison of data by townships; and, d) analysis of data for more vulnerable sub-groups. Analysis should be comparable over the monitoring periods, while showing cumulative progress against the original baseline measured.

**Social Impacts Monitoring**

The Social Impacts Monitoring (SIM) initiative built on the social impacts assessment undertaken during the PONJA, and was included as part of the monitoring infrastructure approved by the TCG. The SIM was carried out on the premise that a dynamic understanding of how natural disasters affect local patterns of life, social structures and institutions is important in order to holistically understand their impacts. Such understanding is vital for developing effective plans for delivering post-disaster assistance.

The social impacts of natural disasters and subsequent recovery efforts are dynamic, changing in response to a range of factors, including levels and types of aid provided, government policies and actions, and the choices of affected communities and individuals. As such, in order to ensure recovery programmes are effective and to avoid negative impacts, social impacts are tracked over time. There are few other examples where the social impacts of a natural disaster have been studied to the extent they have been in Myanmar post-Cyclone Nargis.
Out of the PONJA, a set of hypotheses around social impacts was formulated in July 2008 to identify the potential long-term impacts of the disaster. They included the following:

1. Nargis would have regressive impacts with those in supporting occupations likely suffering more than those with land in the short-term, possibly balanced by increasing labour demand once recovery was underway;

2. A redistribution of land away from small-scale farmers to those with larger holdings posed a risk, but likely on a small scale;

3. The relief response ran a real risk of further indebting affected villagers and increasing poverty in the medium to long run;

4. Inter-village relations – Relationships between villages would improve after Nargis likely in the short-term, but the impact would vary over time depending on the place;

5. Religion and ethnicity – Relationships between ethnic and religious groups potentially would worsen due to inequities in aid provision depending on the nature of the relief and recovery effort;

6. Nargis would not likely weaken social capital, making it more difficult for communities to recover; rather, the potential would be greater for social capital to be strengthened.
Based on the hypotheses, the TCG recommended that social impacts be monitored over time, as many of the impacts of Cyclone Nargis on the social fabric could not be seen in the immediate aftermath. Thus, three qualitative surveys were undertaken in a sample of 40 villages across eight most affected Delta townships over a two-year period following the Cyclone.

Under the umbrella of TCG, the World Bank’s Global Facility for Disaster Reduction and Recovery funded SIM I and SIM II with financing from Australia, Norway and Sweden. SIM III was funded through another World Bank administered trust fund.

**Methods**

A local NGO, a think tank and research organisation, conducted the fieldwork with technical support from the World Bank. The methodology for the SIM was developed by the World Bank in conjunction with the local NGO, based on discussions that took place with a range of local and international partners during PONJA as well as during the preparation of each of the three rounds of assessment.

The TCG provided strategic direction, and each round of SIM was presented to the TCG from concept stage to final product. The TCG reviewed each final draft before it was published in English and Myanmar languages. An informal team of peer reviewers, including members of local and international NGOs, UN team members and academia reviewed the SIM findings.

Three SIM studies were carried out over the last two years in Myanmar:
- SIM I: November 2008 (6 months after Nargis);
- SIM II: June 2009 (approximately 13 months after Nargis);
- SIM III: April 2010 (approximately 23 months after Nargis).
The methodology proved robust and was only slightly adjusted from SIM I to SIM II and SIM III. SIM II included a dedicated credit market analysis in the eight townships while SIM III placed an additional focus on community institutions; both these areas were covered in less depth in the previous rounds.

All rounds of SIM were carried out in 40 villages. They were selected according to the following criteria:

1. Distribution across the eight most severely affected townships;
2. Variation in predominant village livelihood types (farming or fishing, peri-urban); farming villages were over-sampled due to the larger number of farming villages affected by Nargis;
3. Variation in the degree of initial affectedness by Cyclone Nargis.

Each SIM round took an average of about four months to prepare and carry out, as demonstrated by Figure 10.

The SIM, focusing as it did on a limited number of villages, had a lean team structure. It relied on one lead researcher, who oversaw four field teams, each of which consisted of one team leader and two or three researchers.

The field researchers were all experienced in conducting social analysis in Myanmar. They represented a mix of ethnic and religious groups, and there was an equal ratio of women to men on the teams. Many of the researchers worked on more than one round of SIM, which allowed them to establish a relationship of trust with the villagers and further their own skills, leading to increasingly high-quality research.

The SIM employed social analysis tools: focus group discussions, key informant interviews, case studies and participant observation. The method was first tested on a few villages, then reviewed and adjusted before being expanded to the remaining the villages. The teams of local researchers spent two or three days in each village, with additional time allocated for travel.

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**Figure 10: Detailed Schedule Followed by a SIM Study**

<table>
<thead>
<tr>
<th>Stage</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation 1</td>
<td>Revision of Field Guide, Orientation of Field Team</td>
</tr>
<tr>
<td>Pre-testing</td>
<td>Pilot of Field Guide in Circa 4 Villages</td>
</tr>
<tr>
<td>Preparation 2</td>
<td>Revision to Field Guide and Intensive Training in Analysis and Reporting</td>
</tr>
<tr>
<td>Phase 1 Field Work</td>
<td>Field Work in Circa 18 Villages</td>
</tr>
<tr>
<td>Debrief 1</td>
<td>Debrief and Preparation of Village Reports</td>
</tr>
<tr>
<td>Phase 2 Field Work</td>
<td>Field Work in Circa 18 Villages</td>
</tr>
<tr>
<td>Debrief 2</td>
<td>Debrief and Preparation of Village Reports</td>
</tr>
<tr>
<td>Initial Data Analysis</td>
<td>Coding, Inputting Data into Spread Sheet, Preliminary Trend Analysis</td>
</tr>
<tr>
<td>In-depth Analysis and Report Drafting</td>
<td>Report Finalisation for Submission</td>
</tr>
</tbody>
</table>

Source: SIM
Villages in the sample were selected such that around half of them were assessed in the PRI. In terms of affectedness by Cyclone Nargis, approximated by the number of people who died per village, the 40 sample villages were close to the Delta average. While findings from SIM are representative only for the villages where fieldwork was conducted, triangulation with other data sources suggests that the findings were representative across Nargis-affected areas.

The researchers selected respondents to include a wide cross-section of villagers, including: the village head and other official village leaders; village elders and religious leaders; others who were involved in aid decisions; farmers, fishermen, labourers and those in other occupations; (potentially) vulnerable groups, including female-headed households, disabled or injured people and the elderly; and young men and women. To the extent possible, the researchers attempted to solicit perspectives from each group on the same topics in order to triangulate the information received.

The three SIMs focused on the same topic areas in order to allow for an assessment of the evolution of conditions over time. The SIM looked at three focus areas:

1. **Aid effectiveness**: This analysed the recovery effort at the village level as experienced by affected villagers. It looked at how much and what types of aid people were getting, needs and shortfalls, how assistance was being targeted and delivered, how aid decisions were made and how complaints were resolved.

2. **Socio-economic impacts**: This examined the ongoing impacts of Cyclone Nargis on key occupational groups such as farmers, fishermen and casual labourers. It looked at issues such as livelihoods, debt and credit and coping mechanisms.

3. **Social relations and institutions**: This explored how Cyclone Nargis and the subsequent aid effort had affected social capital, the capacity for collective action, group relations within villages, inter-village relations, relations among villagers and their leaders.
Understanding such social impacts and dynamics is vital for developing effective plans for delivering post-disaster assistance. Well-designed programmes that draw on local capacities and are built on an understanding of local realities can not only address key needs, but also strengthen local institutions and practices in ways that enhance development and social cohesion.

The interview guide was slightly adjusted over time: questions that no longer provided useful information were dropped, while others were added to improve understanding of issues that evolved over the previous rounds. Additional analysis of the credit market was carried out at the township level in SIM II, while a more in-depth analysis of community institutions was carried out in SIM III.

The analysis framework used by the SIM started from an understanding that disasters have an impact on the social fabric of affected communities. Analysing how Cyclone Nargis affected local patterns of life, social structures and institutions was important to holistically understand its impacts. For example, social cohesion may be strengthened as community bonds tighten to face the challenges of survival and rehabilitation; or it may be strained, as groups or individuals use the disaster to try to strengthen their position or wealth at the exclusion of others.

Understanding such social impacts and dynamics is vital for developing effective plans for delivering post-disaster assistance. Well-designed programmes that draw on local capacities and are built on an understanding of local realities can not only address key needs, but also strengthen local institutions and practices in ways that enhance development and social cohesion.

The analysis, demonstrated by the framework in Figure 11, examines the social impacts of Cyclone Nargis at the community level pre- and post-Cyclone Nargis for the relief and recovery phases:

- The direct social impacts of the Cyclone, early relief efforts, and community responses;
- The longer-run social impacts of external longer-term recovery responses.
Summary

For donors and implementing agencies, the SIM provided a more in-depth understanding of the impacts of Cyclone Nargis and the ensuing aid on the social dynamics within communities. Its findings on the credit market and the increasing debt of rural households were particularly well-received by agencies, many of which have already been alarmed at the worsening situation and wanting to address it through informed programming.

The post-Cyclone Nargis economic and social dynamics that played out included increasing debt burden of poorer villagers, the increasingly prominence of local leaders in the recovery effort, and the budding empowerment of women in village life. Consequently, there is a need to continue to track the longer-term effects of Cyclone Nargis on the village society and economy, identify emerging good practices across communities and aid providers, and share lessons.

Through the SIM, a standard post-disaster toolkit was developed that incorporates social impacts analysis into the early stages of a post-disaster needs assessment and response. Indeed, the SIM method was refined and applied in the Post-Disaster Needs Assessment after typhoons Ondoy and Pepeng in the Philippines in November 2009.

Challenge: Both the PR and the SIM were outcomes of the PONJA, and meant to complement each other as monitoring exercises in the two years following the Cyclone. For instance, about half of the villages selected in SIM overlapped with those selected in PRI, and joint discussions carried out as the research methodologies were developed. There was regular interaction between PR and SIM teams during the first two rounds of SIM, when the World Bank had a person on the ground liaising with TCG members. The two teams shared draft reports of each round. However, there was room for greater harmonisation of messages.
**Recommendation:** More effort could have been put into coordinating the two exercises, especially with respect to the consolidation and dissemination of the PR and SIM findings for each overlapping round.

**Challenge:** The SIM provided important analysis, especially about the aid sector’s impact on communities, and identified areas in which the aid sector could be improved. A significant number of publications were distributed in Yangon, to ministries and through the Hubs. The reports were posted on the ASEAN website. Furthermore, the project team participated in several workshops to present the results and used the reports to brief aid agencies working on livelihoods as well as donors that were involved in Myanmar or considering getting involved. And yet, there was a sense that the SIM findings were not as widely shared with end users through, for instance, discussion workshops. The SIM findings possibly could have had more impact.

**Lesson Learned:** Over time, the SIM disseminated its findings more systematically to aid providers and agencies. Given the widely accepted usefulness of the analysis, these efforts merit strengthening in the future.

**Conducting a Social Impacts Monitoring Exercise: A Practical Reference**

The SIM is typically conducted to meet two objectives:

1. To assess the effects of a natural disaster on village social and economic life and local institutions as well as determine immediate needs.
2. To monitor the response of communities to the disaster over time in terms of socioeconomic recovery, social relations and institutions and aid effectiveness, with a view to identifying emerging challenges and prioritising aid interventions.
Chapter Three  Review and Monitoring

Social research is location-specific, therefore it is essential that the guidelines be reviewed and adjusted to a specific post-disaster context.

A SIM can be broken down into the steps shown in Figure 12. Researchers should spend two to three days in each village to allow for in-depth data collection, with additional time allocated for travel. Each field team ideally should comprise three to four members.

Given the need to probe for nuanced understanding of social dynamics, the research team should be experienced in conducting social research. The composition of the team should reflect the various identities in the area to be studied, such as ethnic and religious groups, and there should be a balanced ratio of women to men on the team.

The SIM employs social analysis tools: focus group discussions, key informant interviews, case studies, and participant observation.

The tools ought to be tested first on a few villages, then reviewed and adjusted before being expanded to the remaining villages.

In conducting a SIM, the sampling should be representative of a number of dimensions, including:

1. Distribution across the areas the most severely affected by the disaster;
2. In proportion to the prevalence of livelihood groups across the affected areas; and,
3. Diversity in the degree of affectedness by the disaster.

Subsequent rounds of SIM ought to use the same sample of locations because it allows for the comparison of data over time, and thus provides a more detailed picture of the effects of the disaster on village society and its economy.

In order for researchers to be able to triangulate information received, a wide range of informants should be interviewed. These include formal and informal village leaders, vulnerable households, women, livelihood groups and youth.

A SIM can cover various focus areas. The following areas (and key questions) proved to be effective for the post-Cyclone Nargis social impacts monitoring:

![Figure 12: General Schedule Followed by a SIM Study](chart.png)

**Training of Research Teams, Pre-test and Finalisation of Field Guide: 3 Weeks**
**First Round of Field Work And Write-up of Notes: 3 Weeks;**
**Second Round of Field Work and Write-up of Notes: 3 Weeks;**
**Data Analysis and Report Writing: 6 Weeks.**

*Source: SIM*
**Aid effectiveness** examines the aid response to identify weaknesses in how aid is delivered against international good practices for effectiveness, transparency and accountability. It gauges independence, self-sufficiency and capacity-building, the impact on the most vulnerable and efforts to strengthen communities.

Key questions include:
- What humanitarian and recovery assistance has reached the village since the last round, and how?
- What are the key needs in the village?
- Who are the poorest groups, and are they receiving aid?
- Is information about aid and benefits shared, are decisions made openly?
- Who in the village plays a major role in decision-making and delivering development assistance?

**Socio-economic changes and challenges** examine the ongoing impacts of the disaster on key occupational groups such as farmers, fishermen and casual labourers and researches issues such as livelihoods, debt and credit, land tenure, occupational changes, and coping mechanisms.

Key questions include:
- Have there been any changes in livelihoods in the village?
- Have the different livelihoods in the village been restored?
- How does debt affect people’s livelihoods?
- What are people’s livelihood coping strategies?
- What are the key institutions that support different economic groups?

**Social relations and institutions** explores how the disaster and the subsequent aid effort have affected social capital, the capacity in villages for collective action, group relations within villages (among gender, age, religious and ethnic groups), inter-village relations and relations among villagers and their leaders. It also reviews how local level institutions have changed and their role in shaping recovery.

Key questions include:
- Is the village unified in all aspects of development and social life?
- Have there been any conflicts in the village since the last round of fieldwork, and how have these been resolved?
- Which are the important village level development institutions, and how is their role changing?
- What are the key social challenges facing the village?

Field teams should prepare the following reports as part of their data analysis process:
- Village data sheets;
- Village summary reports to include a summary of key issues arising from the data collection process;
- Institutional reports and case studies such as narratives on village institutions and their relationships to each other, including case studies from the villages; and
- Interview reports with detailed information from the focus group discussions and key informant interviews.

The Lead Social Researcher, in consultation with the field teams, should then consolidate this information.
Chapter Four

Information System

Recovery Information Accountability System


The Post-Nargis and Regional Partnership Conference (PONAC) was hosted by ASEAN on 25 November 2009. It gained great support from the donor community for post-Nargis recovery and mobilised an approximate US$88 million, which is over 85 per cent of the US$103 million appeal. Pledges came from Australia, the European Commission, Denmark, Germany, Japan, New Zealand, Norway, the Netherlands, Singapore, Sweden, Switzerland, Thailand, the United Kingdom, and the United States, amongst others. At the conference, promise was made that all donations would be tracked from funding to the physical outputs using one system. Following the Conference, ASEAN made efforts to follow up with donors in order to turn pledges into commitments and to track the transfer and use of those funds.

This system, called the Recovery Information Accountability System (The RIAS), tracked donor funding that was pledged at the PONAC, as part of an overall feedback loop that tracked sources of funding to the outputs. The concept of RIAS was developed from the recovery information system created by the Indonesian Agency for the Post-Tsunami Recovery of Aceh and Nias (BRR). It was called the Recovery Aceh and Nias Database and aimed to monitor the flow of the funds from donors to the beneficiaries during the post-tsunami recovery of Aceh and Nias.
(1) Nursery project in Myar Thar Wa village funded by Denmark, implemented by GRET. (2) Rain water collection tank in Boe Kone village funded by Australia and implemented by Save the Children. (3) Selected project site for shelter reconstruction in Pyi Taw Tar village. UN Habitat planned to replace these shelters with newly constructed shelters funded by New Zealand. (4) School–cum–cyclone shelter in Aung Hlaing village funded by Switzerland Government, implemented by SDC. (5) Hospital–cum–shelter at Pyin Sa Lu town funded by the Government of Indonesia through the Government of Myanmar. (6) School construction in Kyait Latt town funded and implemented by the Government of Japan. (7) Hospital construction in Daw Nyein village funded by the Royal Thai Government implemented by Thai Red Cross. (8) New shelter at Chaung Twin village funded by the Government of Singapore, implemented by IOM.
The RIAS was a database containing detailed, up-to-date information about everything from funding status to project delivery based on information that was received from donors, trust funds, implementing partners and the project tracking system. RIAS was designed to provide information about funds pledged and released by sectors, the status of funds released by donors, the status of funds released to implementing partners, the status of funds released to trust funds, a summary of achievements, donor profiles, trust fund profiles, implementing partner profiles and other information as deemed necessary. RIAS also linked GPS coordinates of each project with the Google Earth mapping system.

The Delivery Unit of AHTF Coordinating Office was equipped with GPS training and captured progress on the ground through regular field visits to each of the registered projects. The Delivery Unit established regular communication with donors to update the status of aid delivery. A complete list of project tracking activities was stored in the PONAC database called Protrack (from Project Tracking) and was updated monthly.

To share this information to all stakeholders, a PONAC newsletter was launched to provide information to stakeholders on the delivery of the PONAC funds that had reached 300 organisations by July 2010, including donors, the Government and implementing agencies.

**Summary**

The RIAS actively sought information from implementing agencies and donors. All information released was based on documented facts and figures, none of which was based on assumptions. All information was included with the prior consent of the respected parties.

Donors could access time-bound information that linked their funding to actual projects on the ground. For the Government, this was the most comprehensive tracking system for funding set against the PONREPP allowing it to follow the flow of funds as well as identify weaknesses in the funding system. Additionally, the system subsequently helped to confirm ASEAN as a credible facilitator in the larger humanitarian response.

The Relief and Resettlement Department of the Ministry of Social Welfare, Relief and Resettlement was trained on how to manage this system prior to AHTF’s departure. While the tracking system was for post-Nargis recovery, it had the potential for adaptation to meet other Government financial management needs. The Relief and Resettlement Department later used the system to monitor the progress on relief and recovery in other parts of the country following a subsequent major disaster that hit the country.

**Challenge:** Because this type of tracking can be quite resource intensive, and reporting agencies do not always provide information on time, RIAS staff faced delays in getting timely information. Furthermore, delays were exacerbated by the start of the monsoon season. In addition, details regarding project activities, project locations and delivery outputs from individual implementing partners were often delayed, as information had to be verified with the community and approved by the implementing partner before being uploaded into RIAS. Given the resource-intensive nature of this system, the Government may face difficulties in managing this system now that it has been handed over.

**Recommendation:** In order to support the Government in managing this system, there is a need to ensure that the Government has sufficient and well-trained human resources to continue to operate such as system. ASEAN may continue providing support to ensure that the capacity is in place to manage the system, and this can be done under the umbrella of AADMER implementation. The Government may also benefit from closer coordination and cooperation with the MIMU, which manages the Financial Tracking System under the UN.
### Status of Funds Released by Donors

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<tr>
<th>Country</th>
<th>Pledged USD Million</th>
<th>Released USD Million</th>
<th>Remaining Balance USD Million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>13.89</td>
<td>10.70</td>
<td>3.19</td>
</tr>
<tr>
<td>Denmark</td>
<td>3.60</td>
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<td>3.40</td>
</tr>
<tr>
<td>EC</td>
<td>21.00</td>
<td>14.00</td>
<td>7.00</td>
</tr>
<tr>
<td>Indonesia</td>
<td>1.00</td>
<td>1.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Japan</td>
<td>6.70</td>
<td>6.70</td>
<td>0.00</td>
</tr>
<tr>
<td>Netherlands</td>
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<td>Norway</td>
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<td><strong>Estimated Total</strong></td>
<td><strong>97.50</strong></td>
<td><strong>76.06</strong></td>
<td><strong>21.44</strong></td>
</tr>
</tbody>
</table>

### Progress of Funds Pledged and Released over Periods (in US$ million)

The RIAS provides details about the status of projects and their respective locations, which is delineated according to donors.

*Source: PONAC Delivery Update July 2010 (data as of 30 June 2010)*
Assessments and monitoring activities are essential after a natural disaster and Cyclone Nargis provided the opportunity for the humanitarian and development community, including ASEAN, to exercise a wide range of assessment and monitoring tools. The experience was pioneering on many fronts. Under the auspices of the TCG, unprecedented activities were made possible, which would not have happened otherwise, and credible data was collected that helped to target limited funds to activities in order to alleviate the suffering of the people in the Cyclone-affected areas.

Importantly, the support of donors to TCG assessment and monitoring activities was integral and the resulting reports allowed the humanitarian and development community to reference the same documents rather than relying on multiple agencies or Government figures, both of which may lack transparency in their methods.

In order to create credible reports that had multiple stakeholder buy-in, to which the international community could refer with the confidence, a supporting body like the TCG was necessary. If the series of assessments summarised in this publication were to be replicated elsewhere, the relief and recovery coordinating body should include the host government as well as the UN and the regional body, if possible. The early period immediately after a disaster, when agencies are all eager to complete their own assessments, is the most challenging point at which to coordinate a collaborate assessment. To replicate the success of post-Cyclone Nargis relief and recovery assessments, the respective government, with the support of the regional body, should take the lead in combining resources to create credible data to inform strategic decisions.

What made the exercises in Myanmar so unique was a full circle of needs assessments — from monitoring to evaluation—which were completed...
and concluded with a workshop reviewing the progress and remaining needs (Post-Nargis Recovery Needs Review Workshop held at the end of July 2010 in Yangon). The consistency and stability of methods, indicators, sampling area and coordinating environment that persisted throughout the two years following the Cyclone is unprecedented. Since, other disaster contexts have attempted to use or partly replicate these needs and monitoring assessments with varying success. It is important for the international humanitarian community to build on the good examples and subsequent lessons learned in Myanmar post-Cyclone Nargis.

The assessments and monitoring work conducted during the post-Cyclone Nargis response were comprehensive in terms of the timeframe, providing assessment information starting from the early days after the disaster through to the handover and exit at the end of the mandate in July 2010. The assessments were also comprehensive in the geographical area they encompassed, the sectors that were examined and evaluating the progress made.

The assessment and monitoring activities were seen as credible for multiple reasons. The Government permitted unprecedented levels of access to the assessment teams. The assessment and monitoring activities, although varied in methods and processes, were transparent and consultative with all components of the TCG, namely the ASEAN, the Government and the UN system participating.

The lessons learned for post-disaster assessments and monitoring activities in Myanmar are lessons that could be applied regionally as well as globally. Pioneering and unprecedented activities were facilitated within the framework of the high-level partnership of the TCG, which permitted a full cycle of post-disaster assessments and monitoring exercises from initial rapid assessments to monitoring assessments and right through to the handing over of activities to the Government to continue coordinating recovery.
Examples of pioneering exercises carried out in Myanmar after Cyclone Nargis include:

- ASEAN’s first-ever deployment of the ASEAN–ERAT on mission;
- A joint post-disaster needs assessment (the PONJA), which combined for the first time ever two assessment methodologies that cover macro and micro needs in a PDNA;
- A multiple sector household needs assessment for the Clusters (VTA);
- A monitoring assessment at the household level, showing progress using the post-disaster assessment as the baseline (PR);
- Analysis of the situation presented spatially in a needs and monitoring assessment showing the heterogeneity of the disaster’s affects (VTA and PR);
- Assessing social impacts of a natural disaster in novel ways in Myanmar post–Cyclone Nargis (SIM);
- A monitoring system that tracks from the promise of funding to the output (RIAS).

Furthermore, social impacts analysis was systematically incorporated into a PDNA for the first time in the aftermath of Cyclone Nargis. The initial social impacts assessment and subsequent monitoring relied on qualitative research methods to assess aid effectiveness and the impacts of the disaster on livelihoods and coping strategies, social relations and cohesion, and local governance and accountability. The methodology was subsequently incorporated into the PDNA conducted in the aftermath of Tropical Storm Ondoy and Typhoon Pepeng in the Philippines in 2009, and a guide for its systematic application in future PDNAs is currently under preparation.

The success of these assessments and monitoring activities are timely, as the international humanitarian community, including ASEAN, are seeking to improve the standards of post–disaster information. Significant efforts were made internationally with the commitment of Multilateral Development Banks on 20 October 2007 to adopt, with the UN and other partners, a shared platform for post–conflict and post–disaster recovery planning and joint monitoring and results frameworks for post–crisis transitions.

Based on, among others, the experience of PONJA, the UN and the World Bank, together with the European Commission, signed a Joint Declaration on Post–Crisis Assessments and Recovery Planning on 25 September 2008. Combining the two approaches used under PONJA, the report sought to identify and capture the needs of the people, the damage to physical assets and infrastructure arising from a disaster, and the subsequent economic losses caused by the event, as well as identifying the social and community level dimensions and sectoral aspects of recovery needs. Formalising this, the PDNA is the established approach for developing a recovery framework that describes the economic and human impact of a disaster, identifies the needs for short and long–term recovery and incorporates as a core principle the longer–term mainstreaming of disaster risk reduction and the restoration of human development.

As a result of its experience from the whole cycle of post–Nargis assessments and monitoring, ASEAN agreed as part of its AADMER Work Programme for 2010–2015 to develop a needs assessment strategy, including necessary tools, training package and partnership mechanism. ASEAN also intends to develop tools and training programmes to help ASEAN Member States to conduct an effective damage and loss assessment and develop an effective recovery coordination and monitoring system. Following lessons from the first deployment of ERAT, ASEAN is now putting in place the procedures to facilitate the deployment of ERAT and the necessary training programme to equip ERAT for future deployments.
Notes

2. A “village tract” is the second lowest rural administrative unit in Myanmar, between the village and the township.
# List of Abbreviations and Acronyms

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AADMER</td>
<td>ASEAN Agreement on Disaster Management and Emergency Response</td>
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<tr>
<td>ADB</td>
<td>Asian Development Bank</td>
<td></td>
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<tr>
<td>AHTF</td>
<td>ASEAN Humanitarian Task Force for the Victims of Cyclone Nargis</td>
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<tr>
<td>AOC</td>
<td>Assessment Oversight Committee</td>
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</tr>
<tr>
<td>ASEAN</td>
<td>Association of Southeast Asian Nations</td>
<td></td>
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<tr>
<td>DALA</td>
<td>Damage and Loss Assessment</td>
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<tr>
<td>ECLAC</td>
<td>United Nations Economic Commission for Latin America and the Caribbean</td>
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</tr>
<tr>
<td>ERAT</td>
<td>Emergency Rapid Assessment Team</td>
<td></td>
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<tr>
<td>FTS</td>
<td>Financial Tracking System</td>
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Government refers to the Government of the Union of Myanmar