

# **Emergency Shelter Cluster Review**

Cyclone Nargis, Myanmar

**Jessica Alexander**

April 2009



International Federation  
of Red Cross and Red Crescent Societies

## Contents

<b>List of Abbreviations or Acronyms .....</b>	<b>3</b>
<b>Executive Summary .....</b>	<b>4</b>
<b>I. Introduction .....</b>	<b>8</b>
1.1 Cyclone Nargis and the Impact on Shelter.....	8
1.2 Purpose and scope of review.....	9
1.3 Methodology.....	9
1.4 Limitations .....	10
<b>II. Emergency Shelter Cluster: Main Findings.....</b>	<b>10</b>
2.1 Cluster Activation .....	10
2.2 Bangkok/Yangon Clusters .....	11
2.3 Emergency Shelter Cluster Leadership.....	12
2.4 Strategic Advisory Group (SAG) and Technical Working Group (TWIG).....	13
2.5 Emergency Shelter Cluster Strategy .....	14
2.6 Coverage.....	17
2.7 Information Management.....	18
2.8 Post-Nargis Joint Assessment (PONJA).....	19
2.9 Inter-cluster Coordination .....	20
2.10 Local Agency Involvement.....	20
2.11 Beneficiary Involvement .....	22
2.12 Cross-cutting Themes .....	22
2.13 Transition to Early Recovery .....	23
<b>III. Conclusions.....</b>	<b>23</b>
<b>Appendix A - Terms of Reference</b>	
<b>Appendix B - Timeline for Major ESC Activities</b>	
<b>Appendix C - Community Recovery Toolkit</b>	
<b>Appendix D - Maps of Coverage</b>	
<b>Appendix E - Persons Consulted</b>	
<b>Appendix F - Documents Consulted</b>	

## List of Abbreviations/Acronyms

ASEAN	Associate of Southeast Asian Nations
EMMA	Emergency Market Mapping and Analysis
ESC	Emergency Shelter Cluster
DFID	Department for International Development
IDP	Internally Displaced Person
IM	Information Management
JPI	Joint Procurement Initiative
MIMU	Myanmar Information Management Unit
MRCS	Myanmar Red Cross Society
OCHA	United Nations Office for the Coordination of Humanitarian Affairs
PONJA	Post Nargis Joint Assessment
SAG	Strategic Advisory Group
TCG	Tripartite Core Group
TWIG	Technical Working Group
UNDP	United Nations Development Program
UNHCR	United Nations High Commissioner for Refugees
VTA	Village Tract Assessment
WASH	Water, Sanitation and Hygiene

## **Executive Summary**

A review of the Emergency Shelter Cluster response to Cyclone Nargis in Myanmar was conducted on behalf of the International Federation of Red Cross/Red Crescent Societies nearly one year after the disaster. The review, consisting of a desk study, interviews with stakeholders involved and a country visit, is intended as a lessons learned exercise to highlight achievements and challenges during the emergency shelter response, and provide recommendations for future implementation.

Myanmar was a particularly difficult context in which to operate due to international staff restrictions on travel both to and within the country, and a deficit in communications. Agencies working post-Nargis were thin staffed and faced significant logistical hurdles. As one respondent noted, “everything about the operating environment in Myanmar tested organizations’ capacities.” Despite these obstacles, the emergency shelter response has been recognized as one of the strongest clusters. A professional and committed coordination team, large buy-in from cluster members and rapid scale-up all contributed to a robust and timely response.

Respondents noted some opportunities for improvement and areas where the cluster could have been improved. Recommendations, summarized below:

### **Cluster Activation**

---

- The Emergency Shelter Cluster co-chairs should adopt a clearer and faster decision-making process for determining cluster lead. The origin of the emergency should be considered (e.g., conflict- or disaster) but so should the availability of resources and on-the-ground capacity.
- The cooperation between IFRC and UNHCR demonstrated in Myanmar was excellent. In the future these agencies should continue pooling resources (e.g. sharing office space and administrative resources) when appropriate to strengthen the cluster response.

### **Bangkok/Yangon Clusters**

---

- In future similar contexts, the Bangkok-Yangon decision-making model should be replicated where actors outside the operation provide transportation, procurement and logistical support to the field site and all operational decisions are made at the field level.
- A Joint Procurement Initiative (JPI) is a potentially useful scheme, but it must be established at the outset of the emergency in order to be effective. The Global Cluster should look into replicating this model and advocating for it with donors.

### **Emergency Shelter Cluster Leadership**

---

- Cluster leadership should continue drawing personnel from non-lead agencies. In this case, including CARE ensured viewpoints outside of IFRC were incorporated into the leadership, and promoted buy-in from cluster members.
- Cluster activities should continue being separate from IFRC operations to ensure unambiguous roles between the two structures.

### **Technical Working Group (TWIG) and Strategic Advisory Group (SAG)**

---

- Ensure an IM presence in SAG meetings as much of the discussion in these meetings directly affects the activities of the cluster. Also the IM focal point can ensure messages that from the field and other members get communicated to the SAG/TWIG and that these are adequately addressed.

### **Emergency Shelter Cluster Strategy**

---

- The cluster should consider establishing regional preparedness hubs in disaster prone areas that can focus on procuring, pre-arranging and defining regionally appropriate kit contents, developing shelter designs and standards, building capacity of national staff capacity (especially around on assessment and coordination) to minimize time for these activities after a disaster. This kind of arrangement can also help to ensure consistency in procurement and delivery to beneficiaries.
- As soon as possible, a basic local market assessment should be done and information disseminated to cluster members.
- Although some agencies deviated from this policy, the decision to supply two plastic sheets per family ensured consistency in the operation and was useful for information management. Consensus and consistency in delivery and amounts of items should be replicated in other operations.
- A regularly updated list of suppliers of core kit contents with prices and frame agreements should be made and distributed. If this is already available, ensure that it is available to cluster members and that it is useful to them.

### **Coverage**

---

- Quality control is important to ensure that distributed materials are safe and useful in the medium and long term.

### **Information Management**

---

- 
- The strength of the information management network underscored the predictability of the cluster role. Agencies noted that they could count on reliable information to provide an important starting point to their work. The approach to information management in Yangon should offer a useful model for future emergencies.
  - Establishing reporting templates with clear guidelines will add value to agencies' own data collection and analysis and also facilitate consistent information disseminated to the cluster. The templates used in the Myanmar context proved useful and could be replicated in future operations.

### **Post-Nargis Joint Assessment (PONJA)**

---

- An assessment as comprehensive and involved as PONJA can yield findings critical for multi-sector operations and funding. The cluster should work to educate authors who may be more focused on longer term development than on emergency operations, and encourage closer links between them and the cluster's strategy.

### **Inter-Cluster Coordination**

---

- Links between relevant clusters such as shelter, logistics and WASH and Early Recovery should be further formalized and strengthened so that there are consistent associations in all future operations.
- Joint reporting formats with information managers from other clusters can help provide an accurate overall picture of distributions. This is an area that should be continued and strengthened in future emergencies.

### **Local Agency Involvement**

---

- The cluster should hire, as early as possible, local counterparts for each position – IM, Technical and coordinator to ensure local voices are integrated into the response and help develop capacity.
- Resources at local Red Cross Red Crescent Societies should be used more often and with greater involvement. In addition, the role of the cluster and the rationale for separation from operations should be made clear to local Red Cross Red Crescent Societies.
- Although attempts were made to include local actors, improvements should be made earlier. At a minimum, translation at cluster meetings and of relevant documents and guidelines should be standard so that local actors feel welcome and can participate.
- As part of preparedness activities in disaster prone areas, local actors should be identified and

trained so that they can carry out some activities that internationals may not be able to due to geographic or governmental restrictions.

### **Beneficiary Involvement**

---

- The cluster should build accountability mechanisms into all of its response areas to ensure appropriate local participation in the design and implementation of projects. Although field visits were challenging initially, soliciting feedback from beneficiaries is crucial for a responsible operation.

### **Cross-Cutting Themes**

---

- Encourage cluster members to consider environmental impacts in both emergency distributions and longer-term recovery planning

### **Transition to Early Recovery**

---

- Ensure that UNHabitat and UNDP are incorporated into cluster leadership within the first weeks of the disaster.
- Consider the IFRC taking on an extended coordination role into recovery phase.
- At the global level, ensure that UNHabitat is adequately funded to take on cluster lead role in advance of the early recovery phase.
- Educate donors on transition to early recovery and advocate for lifting of funding restrictions by donors.

## I. Introduction

### 1.1 Cyclone Nargis and the Impact on Shelter

On May 2 -3, 2008 Cyclone Nargis struck the Ayeyarwady and Yangon Divisions of Myanmar. The damage was the most severe in the Ayeyarwady Delta region, where extreme winds generated storm surges that reportedly exceeded five metres in some areas.<sup>1</sup> The cyclone severely affected 2.4 million people, roughly half of the total 4.7 million people living in the affected Townships. The official death toll was an estimated 138,000 persons killed and 19,359 injured. Cyclone Nargis was the worst natural disaster in the recorded history of Myanmar, and the third deadliest storm ever recorded at a global level.<sup>2</sup>

According to EMMA findings, over 450,000 houses were completely destroyed and 350,000 damaged. In rural areas, the housing damage was especially severe where most houses were made of thatch with leaves for walls. See Map 1 below for the assessed damage in the region.

Immediately after the disaster, an estimated 239 temporary formal and informal settlements arose. Of these, 70% were in monasteries, 28% in public buildings and 2% in tented camps. The highest numbers of homeless people in temporary settlements were in Labutta (34,000), Bogale (15,500), Myaungmya (12,000) and Pyapon (9,700), and townships in Ayeyarwady, and Kungyangon (20,000) in Yangon Division.<sup>3</sup> The UN estimated that 91,000 people were sheltered in settlements in their townships of origin, while 25,000 were displaced to settlements in other townships.<sup>4</sup>

---

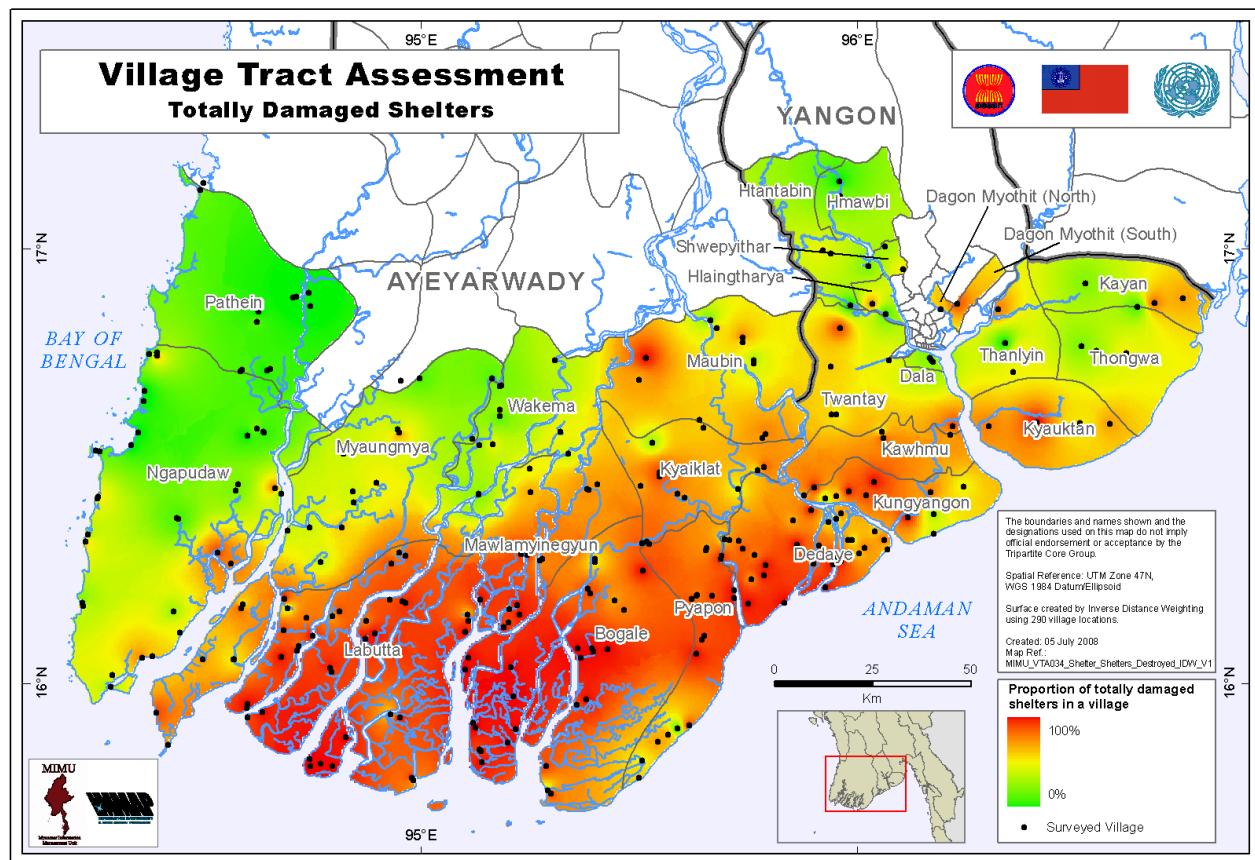
<sup>1</sup> Turner, Robert. Baker, Jock. Myo Oo, Zaw. Soe Aye, Naing. *Inter-Agency Real Time Evaluation to Cyclone Nargis*. 17 December 2008.

<sup>2</sup> EM-DAT Emergency Events Database. Available <http://www.emdat.be/Database/DisasterProfile/profiles.php>.

<sup>3</sup> OCHA Situation Report No. 18 22 May 2008

<sup>4</sup> OCHA Situation Report No. 16 20 May 2008





## 1.2 Purpose and scope of review

In accordance with the International Federation of the Red Cross/Red Crescent's (IFRC's) commitment to continually review and improve its role as cluster lead for emergency shelter, the Secretariat commissioned the following review of the Emergency Shelter Cluster (ESC) response to Cyclone Nargis. This assessment covers the first three months of the response when IFRC was the emergency shelter cluster lead. This exercise is intended to gauge achievements and challenges during the emergency shelter response, and provide recommendations for future implementation.

## 1.3 Methodology

The assessment methodology involved a desk review (see Appendix F for documents consulted) and interviews with stakeholders that participated in the emergency shelter response (see Appendix E for persons consulted). The review also included a field visit to Yangon to meet with local stakeholders and other actors still in country after the emergency. The

information gathered and documented here is based on previous reports and on stakeholder interviews. For more detail, see Appendix B for the Terms of Reference.

## 1.4 Limitations

This study suffers from several limitations. First, the review was undertaken close to a year after the emergency phase was initiated, and many of the stakeholders involved in the initial response are now involved in other work. As a result, an inherit recall bias was present as interview subjects often had difficulty remembering specific dates and details.

Second, few respondents were involved in the cluster activities through the entire three months of the emergency phase. Many came towards the end or left before the completion of this period and could not comment on the entirety of the operation. Finally, due to travel restrictions in Myanmar, the country visit was limited to the capital city, Yangon. Therefore, beneficiary views at field sites were not collected.

## **II. Emergency Shelter Cluster: Main Findings**

The following section outlines the findings from the review and offers recommendations for future shelter cluster implementation. Appendix A provides a timeline of major shelter response activities during the emergency phase.

### 2.1 Cluster Activation

By May 7, the UN initiated the cluster system and issued a Flash Appeal for US\$ 187 million for emergency relief in Myanmar with \$20,300,000 for shelter, making it the third largest funded cluster. Initially, international staff members were hard-pressed to secure entry visas and ended up waiting in Bangkok until they received authorization. Once in Myanmar, they faced an additional hurdle of accessing the most affected areas as travel authorizations to the delta were limited. As a result, many of the decisions shaping the early response were made in Bangkok and Yangon without reliable information about what was happening in the most affected areas.

At the global level, the ESC is co-chaired by UNHCR and IFRC. UNHCR leads the Emergency Shelter Cluster (ESC) in conflict-generated IDP situations while IFRC is convener of the Emergency Shelter Cluster in disaster situations.<sup>5</sup> According to these guidelines, the cluster lead role should have been IFRC's responsibility from the outset of the Nargis disaster. Initially, however, IFRC determined it did not have the on-the-ground capacity to assume cluster

---

<sup>5</sup> Fact Sheet: Emergency Shelter Cluster: Key Things to Know

leadership. Since UNHCR was already operational pre-Nargis, and had the staff, resources and willingness, it took the lead. A few days later, however, the decision was reversed by IFRC headquarters and IFRC became the convener.

The repercussions of this initial confusion were not severe as UNHCR already had a strong presence, and the two agencies worked closely to manage the lead. Cluster members from other agencies noted that operations were stalled briefly but that the cooperation between IFRC and UNHCR minimized delays, and the shelter cluster was able to quickly mobilize. IFRC even asked UNHCR to co-lead for the first few days until the turnover was finalized. UNHCR continued to provide administrative support when IFRC took over and shared office space with the IFRC cluster team.

Some stakeholders in IFRC, however, questioned the decision to revert the lead back to their agency. They felt that IFRC was not prepared and that the decision reflected the preferences of the Secretariat at headquarters rather than a comprehensive understanding of the situation on the ground. However, once headquarters decided that IFRC would take the lead, adequate staffing and resources were supplied. Indeed, respondents applauded the rapid build-up of capacity at IFRC and were pleased that they could count on predictable systems and processes to ensure a speedy dispatch of a qualified team to accelerate the response.

### *Recommendations*

---

- The Emergency Shelter Cluster co-chairs should adopt a clearer and faster decision-making process for determining cluster lead. The origin of the emergency should be considered (e.g., conflict- or disaster) but so should the availability of resources and on-the-ground capacity.
- The cooperation between IFRC and UNHCR demonstrated in Myanmar was excellent. In the future these agencies should continue pooling resources (e.g. sharing office space and administrative resources) when appropriate to strengthen the cluster response.

### 2.2 Bangkok/Yangon Clusters

While staff were stalled in Bangkok waiting for visas, two clusters, one in Bangkok and the other in Yangon, operated in parallel. Roles for each office were delineated early, with the Yangon office responsible for major decisions and Bangkok acting in a supporting role. Eventually the Bangkok office focused on logistical issues related to the delivery of supplies while providing technical assistance to staff in Yangon. The Bangkok office also helped determine the first shelter kit contents and assisted in formulating the early recovery strategy.

While some thought that this division of labor was useful, others were skeptical of the value of the Bangkok office. Some felt that the need to brief the Bangkok office took time away from essential work on-the-ground, and that the information demanded from the Bangkok office was unnecessarily burdensome. Some further felt that the activities in Bangkok were irrelevant to the operations in Yangon.

Overall, however, it was clear that given the Myanmar context, there were few other options for how the cluster could have been organized. Given its distance from the field, many respondents felt that the Bangkok office made the best of the circumstances by providing support and focusing on tasks that the Yangon office lacked time or resources to perform.

### *3.2a Joint Procurement Initiative*

Due to the challenges entering Myanmar, supplies and resources tended to accumulate in Bangkok. To take advantage of this situation, A Joint Procurement Initiative (JPI) was established through World Concern (funded by DFID) where agencies with resources in Bangkok could find common suppliers, pool their resources in Bangkok and get supplies into Yangon. Some analogized it to the service clusters such as logistics and emergency telecommunications where operational agencies have a one-stop-shop which can meet their needs. While this was a useful and potentially viable arrangement, it took too long to get started, and many agencies had already moved on to their own procurement channels by the time it was finalized. Agencies may need to alter their internal procurement procedures, but it is a concept that if accepted by donors and the global cluster, could streamline the cluster-wide procurement process.

### *Recommendations*

---

- In future similar contexts, the Bangkok-Yangon decision-making model should be replicated where actors outside the operation provide transportation, procurement and logistical support to the field site and all operational decisions are made closer to the ground.
- A Joint Procurement Initiative (JPI) is a potentially useful scheme, but it must be established at the outset of the emergency in order to be effective. The Global Cluster should look into replicating this model and advocating for it with donors.

## 2.3 Emergency Shelter Cluster Leadership

The early success of the Emergency Shelter cluster can be attributed to strong leadership and genuine commitment from all participating members. All respondents complimented the cluster coordination team for its professionalism and dedication. The team – a cluster coordinator, information manager and technical advisor – were regarded as well coordinated,

experienced and highly committed. The unique challenges in Myanmar encouraged agencies to work together and share resources, also contributing to a strong and cohesive response.

Cluster members appreciated that the composition of the team came not only from IFRC, but had NGO representation as well, from CARE. This, coupled with the fact that the team did not work out of the IFRC office, helped to demonstrate its independence and transparency. The arrangement strengthened the cluster mechanism, ensuring high levels of buy-in from participants. Unlike other clusters, such as WASH, which was perceived as very agency-driven, the shelter cluster was noted for its nonalignment with IFRC interests.

Respondents also praised the team for prioritizing and addressing issues quickly by engaging a number of members. For example, once the need for instructions on the use of plastic sheeting was recognized, participants quickly tackled the issue, reaching an agreement within 3-4 days. The active participation and coordination of agencies within the cluster helped galvanize support from the government and donors by increasing the credibility of the cluster's proposed strategies. The "cluster seal" made shelter strategies more neutral and influential when advocating with agencies own headquarters and with donors for resources. Some agency members noted that there was more power working within the group than alone, especially in the politically restrictive environment like Myanmar. They also highlighted the unintended positive impact of limiting the number of agencies in country so that the "circus after the tsunami" was not repeated.

### *Recommendations*

---

- Cluster leadership should continue drawing personnel from non-lead agencies. In this case, including CARE ensured viewpoints outside of IFRC were incorporated into the leadership, and promoted buy-in from cluster members.
- Cluster activities should continue being separate from IFRC operations to ensure unambiguous roles between the two structures.

### 2.4 Strategic Advisory Group (SAG) and Technical Working Group (TWIG)

The cluster established a Technical Working Group (TWIG) and a Strategic Working Group (SAG). These groups were smaller forums where pressing issues were discussed and decisions made. Most cluster members found this division helpful as the cluster meetings were very crowded and often became 'talking shops'. This model accelerated key decisions on the strategic direction of the cluster, which would have taken much longer in the larger forum.

Some cluster members suggested improvements to the SAG and TWIG. First, some felt that member agencies were largely influencing the direction of the TWIG's and that the group could

have better served operations by responding to requests from the hubs. Also, some members mentioned confusion about the SAG's role. They felt that there should have been more focus on the macro direction of the cluster as this was lacking from the meetings and information management.

### *Recommendations*

---

- Ensure an IM presence in SAG meetings as much of the discussion in these meetings directly affects the activities of the cluster. Also the IM focal point can ensure messages that from the field and other members get communicated to the SAG/TWIG and that these are adequately addressed.

## 2.5 Emergency Shelter Cluster Strategy

The initial shelter strategy was to transport as many supplies to affected areas as quickly as possible. As data from the field was scarce, the strategy relied on estimates that were prepared based on discussions at the cluster meeting. The cluster initially estimated 300,000 households in need which shaped planning in the first two weeks until additional information could be gathered from the field. At that stage the Cluster did not foresee duplication as an issue given the scale of the needs. However, the cluster recognized that this assumption would be regularly reviewed and updated as the situation changed. The strategy for the first two weeks of the response was therefore to<sup>6</sup>:

- Maximize the distributions of tarpaulins to the affected areas.
- Ensure operational coordination and information-sharing between organizations with tarpaulins and organizations wishing to distribute.
- Identify and address logistical bottlenecks.
- Conduct assessment of needs.
- Strengthen information management systems with respect to planning and distribution.
- Agree on standards for shelter kits.
- Look into local procurement of plastic sheeting (bearing in mind the potential impact on the local market).
- Liaise with other clusters to ensure inter-cluster coordination.
- Monitor bamboo availability for initial structure needs

In addition, within these first few weeks the cluster developed a shelter database which could be readily populated with assessment data.

Five hub offices were established in the field by OCHA. This allowed the clusters to have closer access to the field and ensure program monitoring. The five hubs were overseen by UNHCR

---

<sup>6</sup> OCHA Situation Report No. 10, 14 May.

(Labutta and Bogale), IOM (Mawlamyinegyun), Save the Children (Patheingyi) and World Vision (Pyawbwe). While access to the field was an unavoidable problem in the early days, some cluster members thought that these hubs could have been established faster. Also, since not all of the lead agencies understood the role of the cluster, the effectiveness of coordination varied from hub to hub. And in cases where hubs were managed by local counterparts, the outputs and delivery were good, but coordination skills were reported to be weak. Some respondents reported that decisions made at the Yangon level contradicted those made at the hubs and that it was difficult to communicate and maintain a focused strategy. “Many staff in the hubs were only partially aware of the planning processes going on at Yangon level.”<sup>7</sup>

The cluster developed kit standards and guidelines as follows:<sup>8</sup>

<b>Household Tarp Kit: (1 per household)</b>	<b>Household Relief Kit: (1 per household)</b>
<ul style="list-style-type: none"> <li>• 2 Tarpaulins 6m x 4m</li> <li>• 30m rope, 5-14 mm nylon (dark colours, preferably black, to withstand UV radiation)</li> </ul>	<ul style="list-style-type: none"> <li>• 2 Pcs Blankets</li> <li>• 2 Pcs mosquito nets, double size, impregnated</li> <li>• 1 set Cooking set</li> <li>• 1 Pcs jerry-can 10 ltr. foldable</li> </ul>

A community recovery toolkit was also developed for five families. See Appendix C for those contents.

Some respondents reported that the TWIG’s decisions regarding the contents of the various kits took a long time. Part of the problem was that there were very few people able to do technical assessments in the first few weeks. Since agencies could not access the field, they had limited data to inform their decisions on kit contents. The Bangkok office was involved in determining the contents, but they were even more removed from the field. By the time the kit was approved, most agencies had already placed their orders with items that diverged from the agreed standard. Those agencies that waited to procure their materials until a consensus was met by the cluster, lost time and were frustrated that other agencies did not follow the standard. Efforts to provide uniform distributions are undermined if some agencies work outside of the system. A more rapid decision from the cluster on contents could have mitigated this outcome. Some cluster members suggested that the kit contents should be pre-arranged and defined as part of preparedness activities so that the decisions and discussions can be swifter.

Another problem in defining the toolkits was that the kit contents were initially very IFRC-focused. Some members felt that the IFRC’s existing inventory was dictating kit contents rather than the needs of the disaster victims. The accessible kits are generic kits prepositioned by IFRC to be quickly deployed to any emergency, and some of the contents – such as iron and tools to

<sup>7</sup> OCHA Real Time Evaluation

<sup>8</sup> Briefing note prepared by the Emergency Shelter Technical Working Group in Bangkok, 2<sup>nd</sup> June 2008.

cut iron – had very little relevance for the region. There was a misconception among some members that these kits were meant specifically for Pakistan. It may be useful for the ESC to better explain its strategies to avoid this kind of misunderstanding in the future. The TWIG resolved this by working with UNHCR field hubs to develop an alternative bamboo/timber toolkit which was accepted by the cluster and formed the basis for the recovery toolkit.

The decision to distribute at a minimum two plastic sheets per family ensured consistency in delivery. However, Save the Children deviated from this agreed approach and delivered one sheet per family; their rationale was that it was more important to ensure greater coverage and then go back to families if there was more plastic sheeting available. The cluster could not force Save the Children to change its policy so that it complied with the cluster standard and this discrepancy caused problems in reporting and monitoring numbers of distributed items.

Members discussed purchasing materials locally but felt that the local market could not supply the needs. However, this decision was not backed up by a concrete assessment but by ad hoc visits to the market. Cluster members mentioned that collecting information about local availability of materials would have been very helpful. Some agencies were able to purchase soap and sarongs in the local market, but a survey of items, availability and price could have facilitated more extensive local sourcing of materials. UNDP did carry out a Local Commodity and pricing index but few members interviewed were aware of this.

In addition, many cluster members struggled to find suppliers of quality plastic sheeting. They mentioned that a list of suppliers of sheeting with prices and with frame agreements should be made and distributed. This would alleviate the stress during an operation as people wanted to know what supplies were available and from where.

### *Recommendations*

---

- The cluster should consider establishing regional preparedness hubs in disaster prone areas that can focus on procurement, pre-arranging and defining regionally appropriate kit contents, developing shelter designs and standards, building capacity of national staff capacity (especially around on assessment and coordination) to minimize time for these activities after a disaster. This kind of arrangement can also help to ensure consistency in procurement and delivery to beneficiaries.
- As soon as possible, a basic local market assessment should be done and information disseminated to cluster members.
- Although some agencies deviated from this policy, the decision to supply two plastic sheets per family ensured consistency in the operation and was useful for information management. Consensus and consistency in delivery and amounts of items should be replicated in other



operations.

- A regularly updated list of suppliers of core kit contents with prices and frame agreements should be made and distributed. If this is already available, ensure that it is available to cluster members and that it is useful to them.

## 2.6 Coverage

According to interviews with respondents and maps provided by the cluster, coverage was well achieved. (See Appendix D for MIMU maps displaying coverage of supplies). Although distribution was logistically difficult as agencies had to rely on riding canoes through the waterways of the delta to distribute, it was nonetheless generally widespread. By the end of July, when the emergency phase was considered almost over, 522,000 plastic sheets had been distributed, covering 53% of the estimate affected households. In addition, 37,000 tool kits, 346,000 blankets, 775,000 mosquito nets, 369,000 jerry cans and 121,000 kitchen were also distributed.<sup>9</sup>

Although distribution was widespread, respondents described haphazard distribution strategies. Some agencies used monasteries, some went through local NGOs while others depended on their own distribution channels. It was also difficult for agencies to track the distribution of the supplies to the end users. In addition, because of the unplanned or spontaneous nature of some of the early distributions, and because of the uncertainty of the number of affected people, there were significant numbers of beneficiaries who reported receiving only part of the relief package.<sup>10</sup> This finding correlates with the IOM survey which noted that while most houses received some form of assistance, the majority considered significant unmet needs for shelter materials and non-food items.<sup>11</sup> Teams did not monitor distributions regularly, so there was no follow up to these areas to supply families where they did not receive the full package.<sup>12</sup> The shelter kit was meant to be shared - one kit between 5 families – which may be why beneficiaries perceived the distribution as incomplete.<sup>13</sup>

While there may have been widespread coverage, the quality of the items distributed was in some cases so poor that there was still a large demand for items because the initial ones deteriorated.<sup>14</sup> According to an IOM report, two thirds of households did not consider their

---

<sup>9</sup> OCHA Situation Report No. 43 - 31 July 2008

<sup>10</sup> *Review of the RCRC Movement Response to Cyclone Nargis* (Jan 2009)

<sup>11</sup> *Shelter Needs Assessment Post-Cyclone Nargis, Myanmar*. International Organization of Migration. October 2008.

<sup>12</sup> *ibid.*

<sup>13</sup> *ibid.*

<sup>14</sup> July 29 ESC Situation Report

shelter to be safe and secure.<sup>15</sup> Most of these families reported that they could not afford to upgrade their shelters before the next monsoon season. Other needs such as food water and health and education were listed as more pressing priorities that families would spend money on over shelter reconstruction.

### *Recommendations*

---

- Quality control is important to ensure that distributed materials are safe and useful in the medium and long term.

## 2.7 Information Management

Obtaining reliable information was the main challenge for all agencies. Two months after the start of operations, some agencies reported that they still had to courier information from the field to Yangon each week. Communication was difficult not only between Yangon and the field, but within Yangon. An OCHA sitrep in mid-May acknowledged this limitation: “Restrictions on the importation and use of communications equipment in Myanmar are impacting communications between relief agencies<sup>16</sup>.”

Despite these challenges, the information management role was seen as a key success of the cluster. Agencies noted that even within this information-scarce environment, agencies could depend on the cluster providing reliable and up-to-date information. The cluster produced summary tables for distribution for weekly meetings and regularly updated the database to ensure that agencies were aware of the ongoing developments in the field. Basic efforts – such as establishing a Google Groups network, sharing calendars and other information through flash disks – were noted as making a significant difference for agencies trying to determine where and how to respond. The weekly information updates identified the gaps in delivery and where coverage was sufficient. In addition, the strength of the information management mechanism facilitated access to the field as the government could clearly see where there were gaps and thereby allowed agencies to enter those areas.

Some respondents recommended that in future situations where information is scarce, agencies should attempt to enlist locals who are able to access affected areas. Although the Myanmar Red Cross Society (MRCS) was working in the Delta region and its network of volunteers was able to deliver assistance, the cluster did not fully take advantage of the opportunity. MRCS staff were not at meetings to share their insights and observations. The cluster should in the future use all resources available to gather information.

---

<sup>15</sup> *Shelter Needs Assessment Post-Cyclone Nargis, Myanmar*. International Organization of Migration. October 2008.

<sup>16</sup> OCHA Situation Report May 17.

### *Recommendations*

---

- The strength of the information management network underscored the predictability of the cluster role. Agencies noted that they could count on reliable information to provide an important starting point to their work. The approach to information management in Yangon should offer a useful model for future emergencies.
- Establishing reporting templates with clear guidelines will add value to agencies' own data collection and analysis and also facilitate consistent information disseminated to the cluster. The templates used in the Myanmar context proved useful and could be replicated in future operations.

### 2.8 Post-Nargis Joint Assessment (PONJA)

On May 25, the TCG commissioned The Post-Nargis Joint Assessment (PONJA), an intensive assessment consisting of Village Tract Assessment (VTA) and a Damage and Loss Assessment (DaLA). The exercise incorporated staff from the Government of Myanmar, the UN, NGOs and ASEAN (supported by the World Bank). The shelter cluster was involved in the design of the questions relating to shelter issues and formulated areas of analysis. The results of the PONJA were released on July 21.

While the PONJA has been lauded as providing a snapshot of the situation, those cluster members who worked on the analysis found it difficult to reconcile conceptual and strategic differences with agencies leading the process such as the World Bank. For example, the figures used in early recovery and long term development were different than those used in the emergency response. The World Bank did not join the cluster meetings and therefore had a limited understanding of the approach and activities being done by the cluster. A more integrated approach would have benefited the process.

Despite these challenges, the PONJA has been recognized as a good example of an interagency assessment with extensive community consultations undertaken at a relatively early phase of the emergency.

### *Recommendations*

---

- An assessment as comprehensive and involved as PONJA can yield findings critical for multi-sector operations and funding. The cluster should work to educate authors who may be more focused on longer term development than on emergency operations, and encourage closer links between them and the cluster's strategy.

## 2.9 Inter-cluster Coordination

Although clusters worked together in some cases, most respondents mentioned that inter-cluster coordination could have been improved. For example, the Inter-cluster information management group was a useful body coordinated by OCHA but it was slow to start up because of changing IM cluster focal points.

The shelter cluster did make attempts to work with other clusters though – namely logistics, WASH and health – to avoid overlap in delivery and incorporate items into the shelter kits. However, some respondents noted that closer involvement with the early recovery cluster would have benefited the response. Also, NFIs were not delivered at the same time as food. As a result, when kits arrived in some areas, some of the items were sold in order to get much needed food.

Shelter representatives attended logistics cluster meetings and vice versa where they presented their planning and determined supply chain needs. Some respondents mentioned, however, that this linkage could have been deeper as shelter constituted the bulk of items that were coming into the country.

### *Recommendations*

---

- Links between relevant clusters such as shelter, logistics and WASH and Early Recovery should be further formalized and strengthened so that there are consistent associations in all future operations.
- Joint reporting formats with information managers from other clusters can help provide an accurate overall picture of distributions. This is an area that should be continued and strengthened in future emergencies.

## 2.10 Local Agency Involvement

Although there were many local NGOs involved in the response, the local involvement in cluster activities was limited. The Myanmar Red Cross Society (MRCS) was lauded as the “unsung hero” of the response as their vast volunteer network and longstanding presence in the country allowed them to gain access to the most affected regions more quickly than any other agency. By 16 May, MRCS had reached 47,000 beneficiaries in Yangon and Ayeyarwady divisions with relief supplies.<sup>17</sup>

---

<sup>17</sup> *Review of the RCRC Movement Response to Cyclone Nargis* (Jan 2009)

However, representatives from MRCS stated that they were not aware of cluster activities and that they did not understand why they were not more closely included in the work. Although they partnered with INGOs such as IRC to deliver materials, interviews with staff revealed that they had little understanding of the cluster system and what it was supposed to achieve. A more comprehensive involvement of this important agency would have been beneficial.

Cluster members mentioned that more could have been done to ensure active participation from other local groups as well. For example, there was no local translation at meetings, and procedures were not translated into the local language. Cluster membership also stated that while they did eventually hire national staff to work on the team, this was done late in the response. Many agencies depended on these local staff for assessments and other technical activities which they were not prepared to carry out. Training local counterparts at the height of the emergency, although perhaps difficult, would have been useful. Certainly as part of preparedness activities, local actors should be identified and trained.

The Cluster's Technical Working Group (TWIG) was an exception, as this forum included a wide representation of national counterparts. The Ministry of Construction, The Association of Myanmar Architects and the Myanmar Engineering Society regularly attended and contributed to the design of shelters. TWIG members noted the eagerness of local agencies to participate and made efforts to include their input in the technical guidelines they produced. Some local agencies, however, did not feel that their input was always valued or taken on board by the international actors. One respondent stated that he "doubted whether they wanted to move forward or just show off their experience and skills. Half of their minds were to improve their CVs for the future." They mentioned that the cluster did not set guidelines and standards to suit the situation and when they finally did, it was too late. "We already downloaded a lot of things from the internet. It would have been useful if it came from the cluster because we did not know how to do these things." Although it is clear that the cluster did in fact produce these guidelines (demonstrated through sitreps and other documents) these could have perhaps been communicated to the local agencies more clearly.

### *Recommendations*

---

- The cluster should hire, as early as possible, local counterparts for each position – IM, Technical and coordinator to ensure local voices are integrated into the response and help develop capacity.
- Resources at local Red Cross Red Crescent Societies should be used more often and with greater involvement. In addition, the role of the cluster and the rationale for separation from operations should be made clear to local Red Cross Red Crescent Societies.
- Although attempts were made to include local actors, improvements should be made earlier.

At a minimum, translation at cluster meetings and of relevant documents and guidelines should be standard so that local actors feel welcome and can participate.

- As part of preparedness activities in disaster prone areas, local actors should be identified and trained so that they can carry out some activities that internationals may not be able to due to geographic or governmental restrictions.

### 2.11 Beneficiary Involvement

Local community members were found to be extremely resilient as they were accustomed to rebuilding after storms and had never in the past relied on government assistance. In the Delta region, agencies reported that immediately after the disaster communities were already rebuilding even though their shelters were constructed from found materials which would not withstand the rest of the monsoon season.

Although this study did not include beneficiary interviews, other sources noted limited consultation with affected communities. Beneficiaries had few opportunities to feed into decision making and planning.<sup>18</sup> “Based on interviews with international agencies and in communities along with reviews of agency assessments, it was evident that outreach to national organizations and affected communities needs to be further strengthened.” This is partly due to agency’s limited ability to get to the field which minimized their interaction with beneficiaries.

### *Recommendations*

---

- Cluster should build accountability mechanisms into all of its response areas to ensure appropriate local participation in the design and implementation of projects. Although field visits were challenging initially, soliciting feedback from beneficiaries is crucial for a responsible operation.

### 2.12 Cross-cutting Themes

A number of respondents mentioned that the cluster did little to consider the environmental impact of the shelter response. Although alternatives (e.g. local shelter materials instead of tarps) would have undoubtedly delayed the initial response, they did not appear to be widely discussed and could have been incorporated into a longer-term recovery plan. Respondents felt that more environment-friendly approaches could have been piloted or at least discussed and considered by the cluster.

### *Recommendations*

---

---

<sup>18</sup> Review of the RCRC Movement Response to Cyclone Nargis (Jan 2009).

- 
- Encourage cluster to consider environmental impacts in both emergency distributions and longer-term recovery planning

### 2.13 Transition to Early Recovery

The transition to early recovery was the phase most fraught with difficulties. Although focal people were identified for the response early in the emergency phase, and UNHabitat and IFRC co-led the TWIG, the actual handover was a challenge for both agencies.

UNHabitat initially did not have sufficient funding to commit to taking over the shelter cluster role in the early recovery phase and was therefore reluctant to assume the leadership role. This caused anxiety and confusion within the cluster as members did not know which agency would take the lead. Members noted that this was not a new issue for UNHabitat and that in previous disasters (e.g., Bangladesh) the agency suffered from similar funding shortfalls. Eventually, with IFRC's help, UNHabitat secured funding from DFID to take the lead role, and took ownership of cluster coordination on August 1. To facilitate a smooth transition, the IFRC's information manager accompanied members of UNHabitat to the field sites.

However, respondents reported that IFRC left prematurely. Given the strength of IFRC's leadership, agencies felt that they should have stayed longer to ensure a smoother transition. Once IFRC left, the cluster lost momentum. Some cluster members thought that the cut-off date for the emergency phase to be declared over was arbitrary.

### *Recommendations*

---

- Ensure that UNHabitat and UNDP are incorporated into cluster leadership within the first weeks of the disaster.
- Consider the IFRC taking on an extended coordination role into recovery phase.
- At the global level, ensure that UNHabitat is adequately funded to take on cluster lead role in advance of the early recovery phase.
- Educate donors on transition to early recovery and advocate for lifting of funding restrictions by donors.

## **III. Conclusions**

Myanmar specific constraints such as international staff's limited access to the affected areas, the information scarce environment and the communication difficulties within the region proved challenging for all operational actors responding to Cyclone Nargis. Despite these however, the shelter cluster managed to operate effectively and has been noted as one of the more successful clusters (alongside health) in Myanmar. This sentiment was repeated by

persons working both within and outside of the cluster (including representatives from OCHA and donors). This is mainly attributed to the commitment of cluster members to supporting the system, as well as strong and capable leadership. The outputs during the period that IFRC was lead were impressive – there was strong reporting, comprehensive delivery, and close coordination. Although the cluster did face some obstacles, they managed to lead a robust response, many of the lessons of which should be replicated in future emergency situations.



## **Appendix A - Terms of Reference**

### **A Review of the Myanmar Cyclone Nargis Response 2008**

#### **IFRC-led Emergency Shelter Cluster**

#### **Background to the Myanmar Cyclone Emergency Shelter Cluster Review**

Under the terms of a Memorandum of Understanding between IFRC and UN OCHA<sup>19</sup>,

“subject to available resources, constitutional limits, and the rules and regulations of the Federation, the Federation will assume a coordination role for emergency shelter in specific emergency operations within an agreed coordination system”.

Cyclone Nargis struck Myanmar on 2 and 3 May 2008, devastating the Ayeyarwady and Yangon divisions. Collective assessment data from the authorities and international communities indicates that 115 townships were significantly affected by the cyclone. According to official figures, 84,500 people were killed and 53,800 are missing. The UN estimates that 2.4 million people are affected.

The in-country humanitarian country team met on 5<sup>th</sup> May and agreed the allocation of cluster responsibilities, which included UNHCR as the shelter cluster lead. This recommendation was forwarded to the UN Emergency Relief Coordinator who formally notified the global cluster leads. At the request of the UN High Commissioner for Refugees, on 9<sup>th</sup> May the International Federation agreed to take on the shelter cluster coordination role, with the understanding that UNHCR would continue to coordinate shelter activities in-country until the International Federation had dedicated capacity in Myanmar.

The difficulties in accessing Myanmar affected the Federation personnel and also the staff from all organisations that were participating in the operation. That is why two Emergency Shelter Clusters were activated: one in Bangkok and one in Yangon, Myanmar. The cluster in Bangkok had a supporting role to the one in Yangon. The cluster in Yangon was the one taking decisions

---

<sup>19</sup> IFRC-UNOCHA Memorandum of Understanding, signed September 19th 2006

and the cluster in Bangkok served mainly for disseminating the information to the agencies present in Bangkok and to support the cluster in Yangon as needed. The cluster in Yangon was run initially by UNHCR with IFRC participation and later by IFRC with UNHCR support.

The IFRC-led Shelter Coordination Team comprised a Coordinator, Information Manager and Technical Coordinator, plus administrative support for both clusters. The cluster in Bangkok reduced its personnel until it disappeared in July 2008. In keeping with the aspirations of IFRC to promote an interagency coordination team to reflect the interagency participation in the cluster, agreements were reached with Care Australia, and UN Habitat to second coordination team staff with funding from IFRC. UN Habitat were also formally requested to undertake the role of focal agency for early recovery and longer term settlement programming and related issues.

In accordance with the commitment of IFRC to coordinate emergency shelter and not transitional or permanent, discussions were held to agree the handover of coordination responsibilities from IFRC to UN Habitat. Formal handover from IFRC to UN Habitat was agreed and detailed in a handover document<sup>20</sup>. As part of IFRC's commitment to addressing ongoing emergency shelter needs, IFRC agreed to continue to provide capacity to the Shelter Coordination Team to follow-up on emergency shelter issues (as detailed in the handover document)

## **Objective of the Myanmar Cyclone Shelter Cluster Review**

The objectives of the review are to:

1. appraise the service provided by the International Federation as shelter cluster coordinator to shelter cluster participants – Government, UN agencies, Red Cross Red Crescent Movement (Myanmar Red Cross, IFRC, ICRC as appropriate), NGOs both national and international, and other actors;
2. appraise the service provided by the shelter cluster as a whole to meeting the needs of the households affected by the disaster;
3. review and analyse the experience of the International Federation with respect to the establishment and operation of the Shelter Cluster, with a particular emphasis on lessons to be learnt for future operations;

---

<sup>20</sup> ESC Myanmar Handover August 2008

4. provide recommendations with regard to the International Federation's leadership of future emergency shelter cluster coordination activities at both national and global levels.
5. examine if there were aspects of the Federation's cluster leadership which potentially might have or actually did compromise the mandate and principles of the Red Cross/Red Crescent.

## **Scope of the Review**

The review will encompass, but not be limited to, the following areas:

- The activation of the cluster process and the extent of involvement and influence of the Federation, as an IASC member, in the decision-making process;
- the understanding and support of the Federation's shelter coordination role within the in country delegation, the region and Geneva;
- the impact of the Shelter Cluster on the Federation Delegation, the Myanmar Red Cross Society, and other operational Red Cross Red Crescent Societies;
- the design and implementation of the Shelter Cluster, including factors and determinants which provided the Shelter Cluster's strengths and weaknesses;
- the value of linking and/or separating the Shelter Cluster and the Red Cross relief operation;
- the design and implementation of the exit/handover strategy;
- relations with other clusters, the UN system and the Government;
- the staffing of the Shelter Cluster and the support provided from the Secretariat;
- the equipping and funding of the Shelter Cluster;
- the involvement of the Shelter Cluster in the transition from meeting emergency shelter needs to permanent housing and resettlement;
- issues with regard to visibility for the International Federation and the Red Cross Red Crescent Movement.

## **Methodology**

The methodology employed by the reviewer/s in gathering and assessing information should include:

- A field visit to Myanmar;

- Review of available documented materials relating to the start-up, planning, implementation, and impact of the Shelter Cluster (reference to the Myanmar Emergency Shelter Cluster website);
- Interviews with key internal stakeholders within the Secretariat in Geneva, (by 'phone) with IFRC Regional Representation in Bangkok and Country Representation in Myanmar, the IFRC Field Assessment & Coordination Team (FACT), the Myanmar Red Cross, IFRC regional representatives, and other operational Red Cross Red Crescent Societies;
- Interviews with other key stakeholders, in particular Government officials where possible;
- Interviews with UN OCHA and the UN Humanitarian Coordinator's office;
- Interviews with shelter agencies participating in the Emergency Shelter Cluster, and in particular UNHCR, UN Habitat and IOM;
- Interviews with shelter agencies who second staff to the SCG regarding this arrangement, including Care Australia, and UN Habitat;
- If feasible, interviews with beneficiaries (beneficiary perceptions regarding the extent to which the shelter response and the cluster approach is fulfilling their needs, and their satisfaction with their involvement in planning processes).

Note: A suggested list of interviewees will be provided separately.

## **Proposed Timeline**

The exercise will be implemented over a period of 21 days between 20<sup>th</sup> December 2008 and 31<sup>st</sup> January 2009, the date of the travel to Myanmar subject to agreement with the IFRC Delegation in Myanmar. The consultant should apply for visas to Myanmar as soon as possible given the delays in granting visas.

## **Outputs**

1. Concise, written document with key recommendations and supporting information. This document should be of use for discussing the IFRC experiences of the cluster process internally and also with key donors and other stakeholders.
2. Additional notes, summaries of interviews etc. as appropriate, or supporting documentation.
3. Summary of review activities undertaken, including interviews, visits, documents reviewed etc.

Key reference documents to be provided:










1. IFRC-UN OCHA Shelter MoU
2. IFRC Emergency Shelter Cluster ToRs
3. Email to Global Emergency Cluster informing on the deployment of the SCG
4. Emergency Shelter Cluster Handover document IFRC-UNHabitat August 2008
5. All documents (meeting minutes, strategy documents etc.) available from the Emergency Shelter Cluster website or otherwise on request.
6. Reviews of IFRC-led shelter cluster coordination in Bangladesh (Cyclone 2007-2008), Tajikistan (Cold weather 2007), Pakistan (floods 2007) and the Philippines (typhoon 2006)

## APPENDIX B: Timeline for Major ESC Activities

May 2 -3	Cyclone Nargis hits the Ayeyarwady and Yangon Divisions of Myanmar
May 5	Government of Myanmar established an Emergency Committee chaired by the Prime Minister  200,000 CHF allocated from the International Federation's Disaster Relief Emergency Fund  FACT team was deployed to Bangkok
May 6	IFRC issues a emergency appeal for a preliminary figure of CHF 6,290,909 (USD 5.9 million) to support the MRCS in providing assistance to 30,000 families for 6 months. The funds are intended to cover shelter, clothing, utensils and tools and other immediate relief needs
May 7	Cluster Approach Activated by Humanitarian Country Team
May 8	An AN26 aircraft chartered by IFRC permitted to enter Myanmar from Kuala Lumpur, carrying initial relief supplies of 300 shelter kits into the country
May 9	Two members of logistics ERU obtain visas for entry to Myanmar First UN-NGO Flash Appeal Launched for US\$ 187 million for emergency relief in Myanmar with 20,300,000 for shelter (3 <sup>rd</sup> largest funded cluster)
May 10	IFRC takes cluster coordination convener role
May 12	2.8 million USD of the 20.3 million USD of CERF funding designated to shelter cluster  6 IFRC flights land in Yangon with a total of 35 tonnes of shelter materials, jerry cans, mosquito nets and water/sanitation equipment
May 16	Emergency Appeal for CHF 52.8 million to assist 100,000 households issued
May 17	Flash appeal updated - requesting US\$201 million to support survivors for at least six month
May 19	Second ESC convener and information manager arrive in country
May 23	UN Secretary General visits
May 25	Tripartite Core Group (TCG) comprised of high-level representatives of the Government of Myanmar, ASEAN and the UN, established at a donor conference in Yangon to oversee the coordination of relief assistance Decision to undertake the Post Nargis Joint Assessment (PONJA)
May 30	Emergency Shelter Cluster Technical Coordinator arrives
2 June	Common transport network established, including an air bridge for supplies from Bangkok to Yangon, warehouse services in Yangon and five hubs in the affected region (Labutta, Mawlamyinyun, Pathein, Pyapon, Bogale)
18 June	TWIG in Bangkok finalized plans on the procurement and packaging of all three kits
27 June	Preliminary VTA data distributed
30 June	Emergency shelter assistance had been provided to over 195,000 cyclone-affected households in 11 townships in Ayeyarwady Division and 29 townships in Yangon Division.
July 8	Revised Emergency appeal launched for CHF 73.9 million
July 10	Early recovery strategy distributed to cluster
July 21	PONJA findings released
August 1	The Emergency Shelter Cluster (ESC) became the Shelter Cluster with coordination handed over to UNHabitat

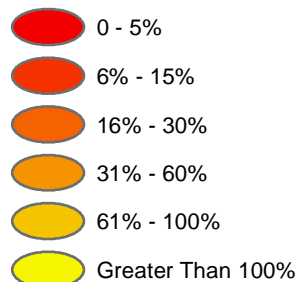
# MYANMAR EMERGENCY BAMBOO/TIMBER CONSTRUCTION COMMUNITY TOOL KIT [RECOMMENDED]

1 Kit per 5 households 29 june 2008 coordinated by Myanmar Emergency Shelter Cluster

SPECIFICATIONS	Quantity per Kit	Units	Indicative Picture	indicative budget costs in Yangon (june 2008)			comments
<b>LARGE MACHETE</b> , wooden handle. Blade sharpened for intended use of bamboo Supply blade covered by cardboard	5	pc		7,500kyat x 5 =37,500 (3,500kyat)	37500	34.1	there are different qualities, suggest higher quality as machete will be used continuously.
<b>HANDSAW</b> , total length 750mm, for wood, Good Quality, tempered, hardened and set teeth. Unbreakable handle. Blade covered by protective cardboard	1	pc		3,000kyat	3000	2.7	there are different qualities, suggest higher quality as saws will be used repeatedly.
<b>CLAW HAMMER</b> , Weight: 0.750 kg/pc. Replaceable Wooden handle. Forged head, not cast. Good Quality	3	pc		2,000kyat x 3=6,000	6000	5.5	Hammers are available with rubber handle or hammer head and wooden handle purchased separately. If bought separately each set become economic to 1300kyat per set.
<b>STEEL NAILS</b> ; for wood construction 2.5kg = 1.7viss Nails 4 inch (100 X3 mm) in sealed bag 1.5kg = 1 viss Nails 3 inch (75X3 mm) in sealed bag 1kg = 0.65 viss Nails 2.5 inch (25 X2 mm) in sealed bag	3.25	viss		3,000kyat/viss	9750	8.9	
	5	kg					
<b>NATURAL FIBRE ROPE</b> ie. coconut fiber rope Thickness 5-7 mm <b>OR</b> <b>BAMBOO STRIPS (Nee)</b>	200	m		70kayt /m 14,000kyat	14000	12.7	For tying bamboo together, natural fiber rope or bamboo strips are used. Nylon rope does not give such a tight tie. If transporting from Yangon consider bulk of material if specifying bamboo strips.
<b>CROW BAR</b> small 35cm-45cm length	1	no		3,500kyat (2200kyat)	3500	3.2	
<b>4 PIECE CHISLE SET</b> ; chisels of various sizes 1/4 inch to 3/4 inch head for joinery work.	2	set		3,500kyat x 2 (2,500kyat)	7000	6.4	
<b>SHARPENING STONE</b> for machete blade 20cm length	1	pc		3500kyat	3500	3.2	
<b>WOVEN SACK</b> , of synthetic material or woven natural fabric containing above items as kit, colour: white or gray, closed with string or wire.	1	pc		1000kyat	1000	0.9	
				<b>total*</b>	<b>85,250</b>	<b>77.5</b>	total weight approx 35lbs / 16 kg package size 50cm x 20cm x 75cm
( ) indicate lower prices available					Kyat	USD	
prices are indicative costs, based upon single item purchases from local retailers in Yangon							
* Rate used 1100kyats = 1USD							



### Township Community Tool Kits Distributed (Coverage)



Myanmar Information Management Unit (MIMU) is an Inter-Agency Standing Committee (IASC) common resource providing information management services, including GIS mapping and analysis, to the humanitarian and development actors both inside and outside of Myanmar.

Data sources: Boundaries - Ministry of Health 2001, modified by UN RC's Office 2004; Place names - Ministry of Home Affairs (GAD) and Ministry of Agriculture & Irrigation (SLRD) translated by MIMU. Emergency Shelter Cluster data distributed 14 November 2008.

Disclaimer: The names shown and the boundaries used on this map do not imply official endorsement or acceptance by the IASC membership.

Note: This map represents information as it has been reported to MIMU by the organisations concerned. Inclusion of an organisation on this map does not imply endorsement by the IASC Country Team or its projects. Note that this map only shows presence of organisations in a broad sector; it does not portray detailed information such as the volume of assistance, the number of beneficiaries, or the extent to which needs are met or unmet.

MIMU is grateful for the support of DFID.  
<http://myanmar.humanitarianinfo.org>

## COMMUNITY TOOL KITS DISTRIBUTED

# MYANMAR

Cyclone NARGIS

EMERGENCY SHELTER

14 November 2008

1:875,000

Map ID: MIMU060\_Shelter Community Tool Kits\_Distributed\_081126\_v7

Projection/Datum: Geographic / WGS84

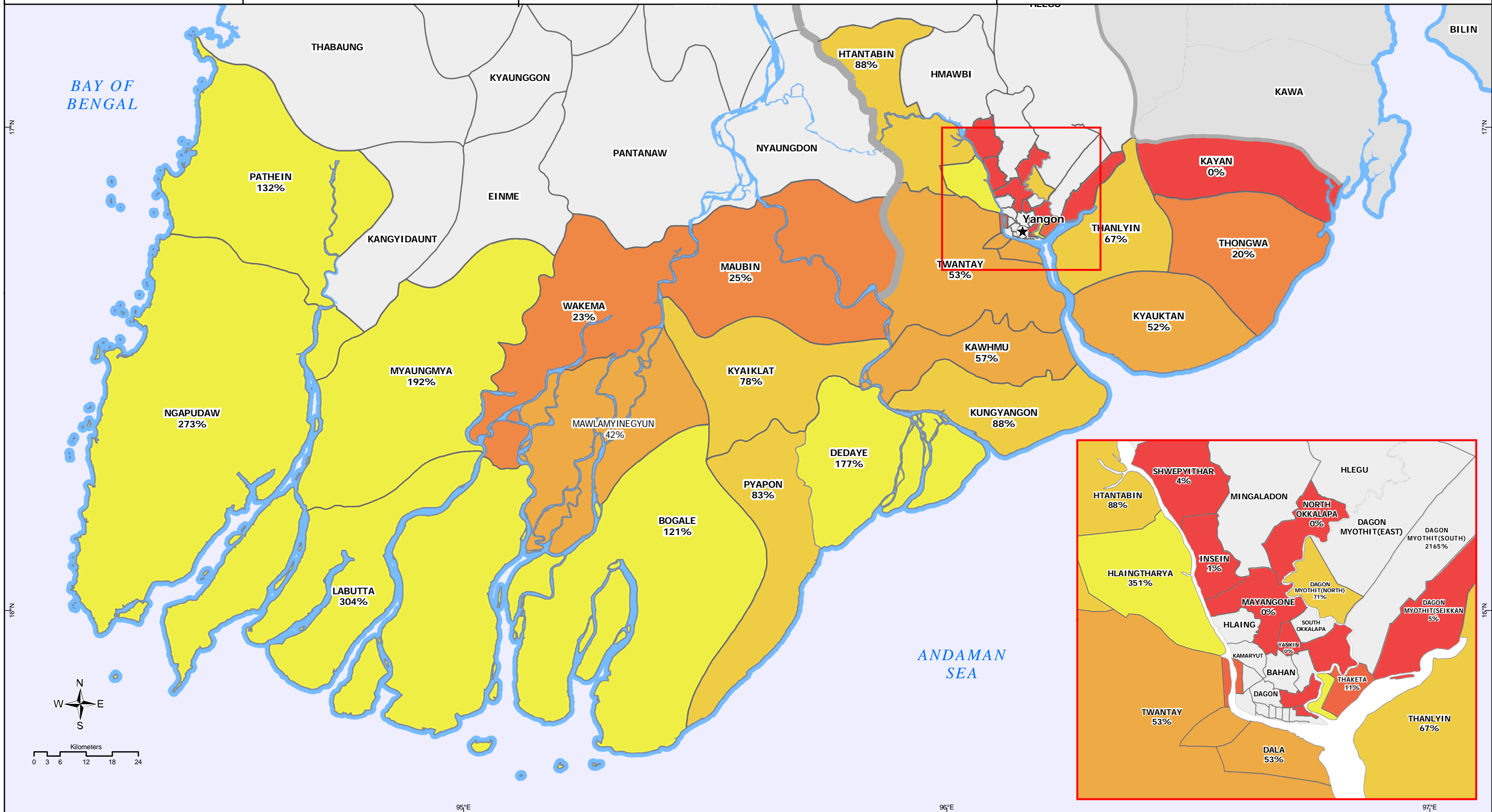
GLIDE Num: TR-2008-000057-MMR

Code: MIMU060

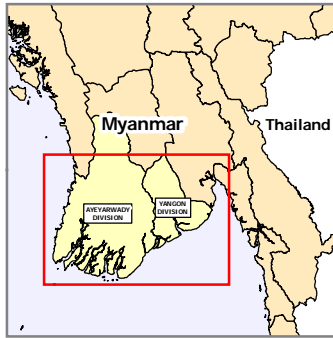
MIMU



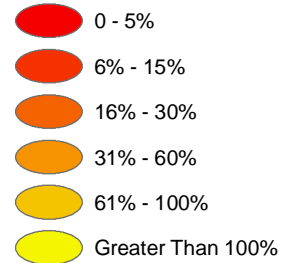
Myanmar Information  
Management  
Unit  
IASC







Township  
Community Tool Kits Planned  
(Projected Coverage)



Myanmar Information Management Unit (MIMU) is an Inter-Agency Standing Committee (IASC) common resource providing information management services, including GIS mapping and analysis, to the humanitarian and development actors both inside and outside of Myanmar.

Data sources: Boundaries - Ministry of Health 2001, modified by UN RC's Office 2004; Place names - Ministry of Home Affairs (GAD) and Ministry of Agriculture & Irrigation (SLRD) translated by MIMU. Emergency Shelter Cluster data distributed 14 November 2008.

Disclaimer: The names shown and the boundaries used on this map do not imply official endorsement or acceptance by the IASC membership.

Note: This map represents information as it has been reported to MIMU by the organisations concerned. Inclusion of an organisation on this map does not imply endorsement by the IASC Country Team or its projects. Note that this map only shows presence of organisations in a broad sector; it does not portray detailed information such as the volume of assistance, the number of beneficiaries, or the extent to which needs are met or unmet.

MIMU is grateful for the support of DFID.  
<http://myanmar.humanitarianinfo.org>

COMMUNITY TOOL KITS PLANNED

MYANMAR  
Cyclone NARGIS  
EMERGENCY SHELTER

14 November 2008

1:875,000

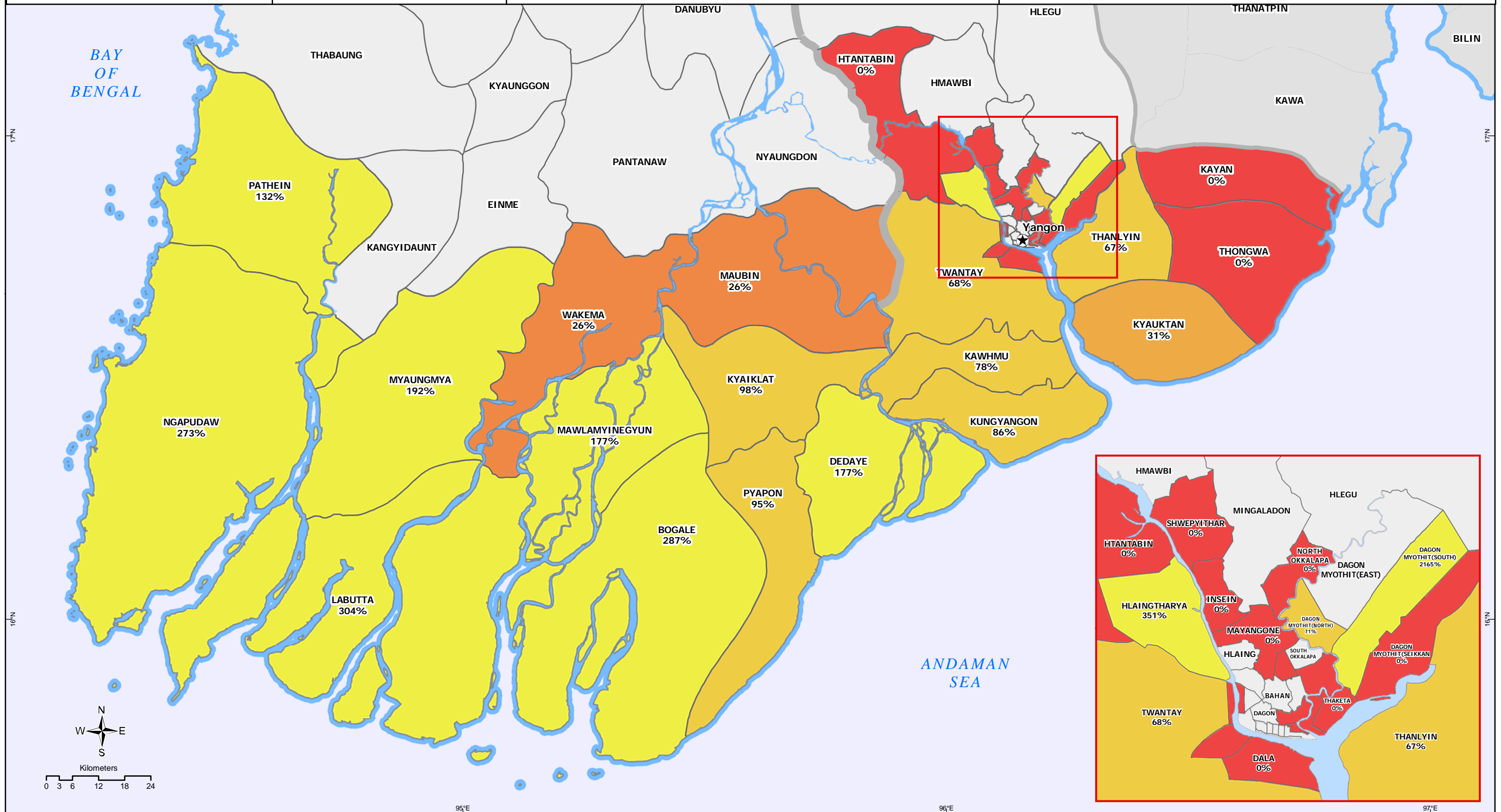


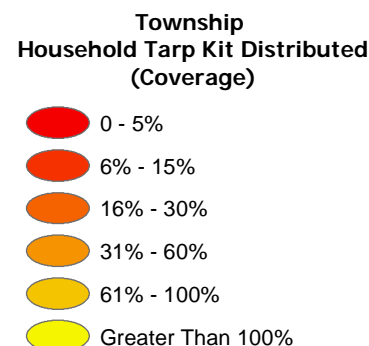
Map ID: MIMU061\_Shelter Community Tool Kits\_Planned\_081126\_v07  
Projection/Datum: Geographic / WGS84  
GLIDE Num: TR-2008-000057-MMR  
Code: MIMU061

MIMU



Myanmar Information  
Management Unit  
IASC





Myanmar Information Management Unit (MIMU) is an Inter-Agency Standing Committee (IASC) common resource providing information management services, including GIS mapping and analysis, to the humanitarian and development actors both inside and outside of Myanmar.

Data sources: Boundaries - Ministry of Health 2001, modified by UN RC's Office 2004; Place names - Ministry of Home Affairs (GAD) and Ministry of Agriculture & Irrigation (SLRD) translated by MIMU.  
Emergency Shelter Cluster data distributed 14 November 2008.

Disclaimer: The names shown and the boundaries used on this map do not imply official endorsement or acceptance by the IASC membership.

Note: This map represents information as it has been reported to MIMU by the organisations concerned. Inclusion of an organisation on this map does not imply endorsement by the IASC Country Team or its projects. Note that this map only shows presence of organisations in a broad sector; it does not portray detailed information such as the volume of assistance, the number of beneficiaries, or the extent to which needs are met or unmet.

MIMU is grateful for the support of DFID.  
<http://myanmar.humanitarianinfo.org>

## SHELTER TARP KITS DISTRIBUTED

# MYANMAR

## Cyclone NARGIS

EMERGENCY SHELTER

14 November 2008

1:875,000

Map ID: MIMU062\_Shelter\_Tarp Kits\_Distributed\_081126\_v07

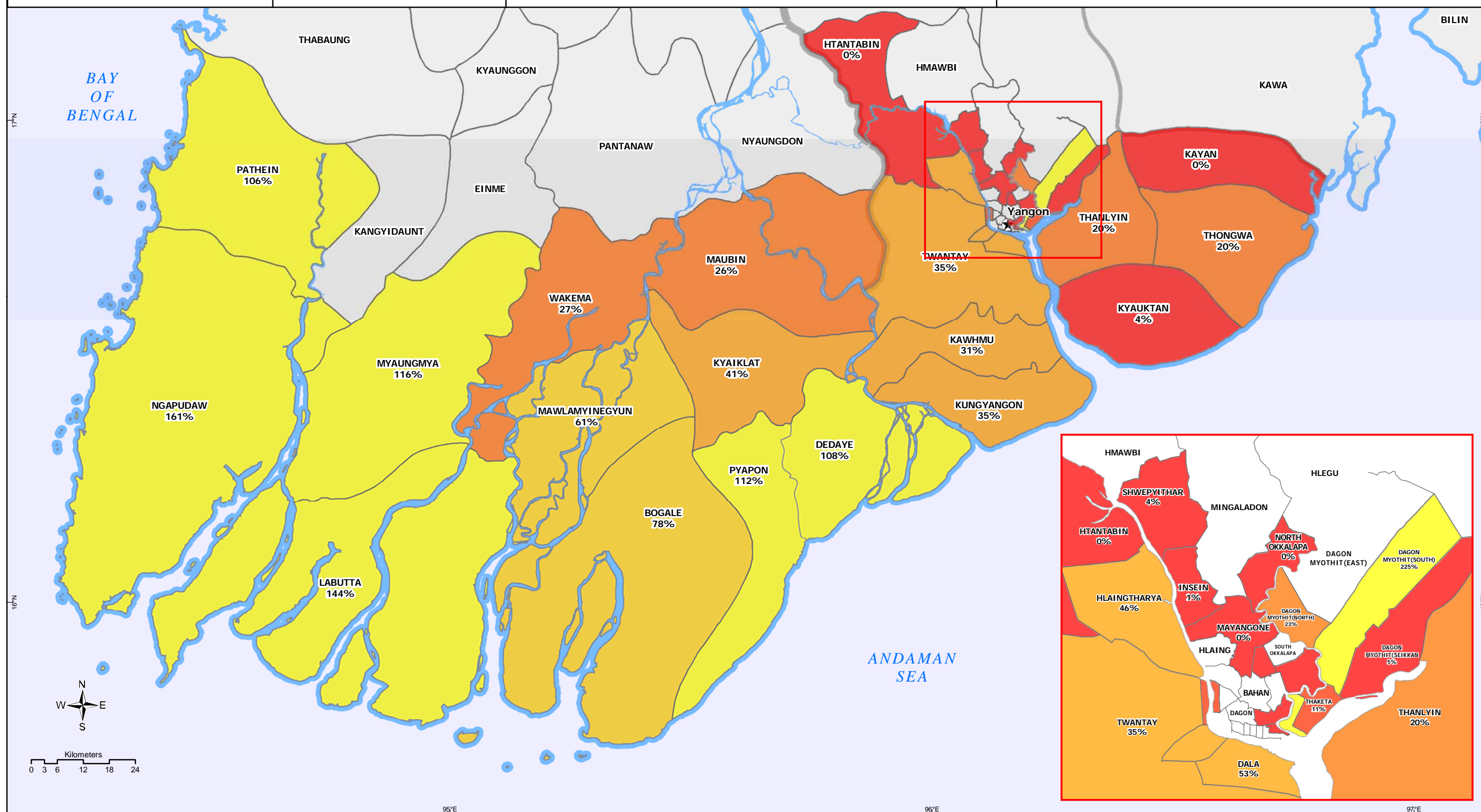
Projection/Datum: Geographic / WGS84

GLIDE Num: TR-2008-000057-MMR

Code: MIMU062



Myanmar Information  
Management Unit  
**IASC**







**Township Household Tarp Kits Planned (Projected Coverage)**



Myanmar Information Management Unit (MIMU) is an Inter-Agency Standing Committee (IASC) common resource providing information management services, including GIS mapping and analysis, to the humanitarian and development actors both inside and outside of Myanmar.

Data sources: Boundaries - Ministry of Health 2001, modified by UN RC's Office 2004; Place names - Ministry of Home Affairs (GAD) and Ministry of Agriculture & Irrigation (SLRD) translated by MIMU. Emergency Shelter Cluster data distributed 14 November 2008.

Disclaimer: The names shown and the boundaries used on this map do not imply official endorsement or acceptance by the IASC membership.

Note: This map represents information as it has been reported to MIMU by the organisations concerned. Inclusion of an organisation on this map does not imply endorsement by the IASC Country Team or its projects. Note that this map only shows presence of organisations in a broad sector; it does not portray detailed information such as the volume of assistance, the number of beneficiaries, or the extent to which needs are met or unmet.

MIMU is grateful for the support of DFID.  
<http://myanmar.humanitarianinfo.org>

**SHELTER TARP KITS PLANNED**

**MYANMAR**

Cyclone NARGIS

EMERGENCY SHELTER

14 November 2008

1:875,000

Map ID: MIMU063\_Shelter\_Tarp Kits\_Planned\_081126\_v07

Projection/Datum: Geographic / WGS84

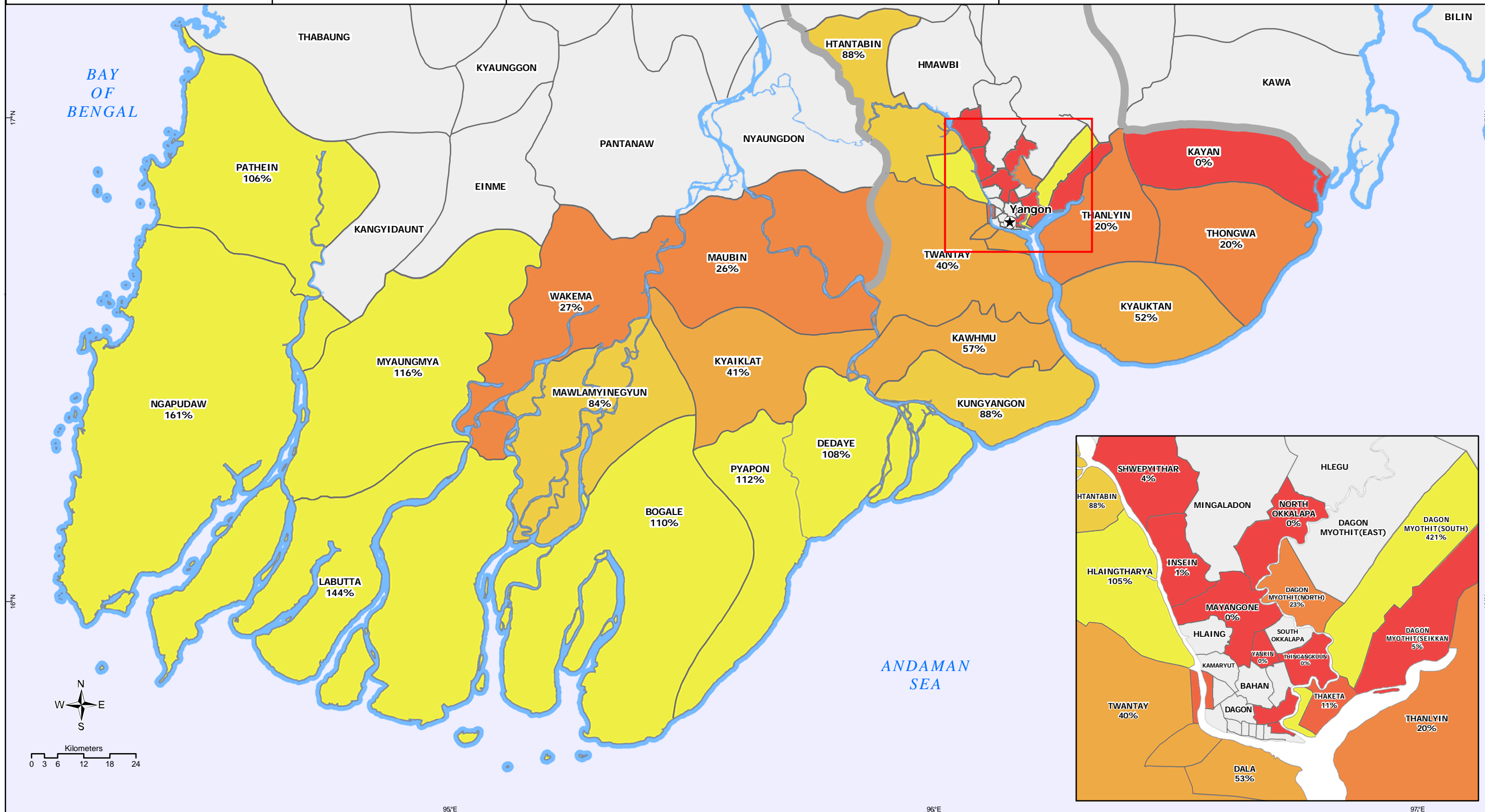
GLIDE Num: TR-2008-000057-MMR

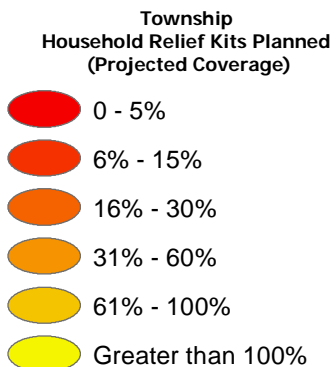
Code: MIMU063

MIMU



Myanmar Information Management Unit  
IASC





Myanmar Information Management Unit (MIMU) is an Inter-Agency Standing Committee (IASC) common resource providing information management services, including GIS mapping and analysis, to the humanitarian and development actors both inside and outside of Myanmar.

Data sources: Boundaries - Ministry of Health 2001, modified by UN RC's Office 2004; Place names - Ministry of Home Affairs (GAD) and Ministry of Agriculture & Irrigation (SLRD) translated by MIMU. Emergency Shelter Cluster data distributed 14 November 2008.

Disclaimer: The names shown and the boundaries used on this map do not imply official endorsement or acceptance by the IASC membership.

Note: This map represents information as it has been reported to MIMU by the organisations concerned. Inclusion of an organisation on this map does not imply endorsement by the IASC Country Team or its projects. Note that this map only shows presence of organisations in a broad sector; it does not portray detailed information such as the volume of assistance, the number of beneficiaries, or the extent to which needs are met or unmet.

MIMU is grateful for the support of DFID.  
<http://myanmar.humanitarianinfo.org>

## HOUSEHOLD RELIEF KITS PROJECTED

# MYANMAR

Cyclone NARGIS

EMERGENCY SHELTER

14 November 2008

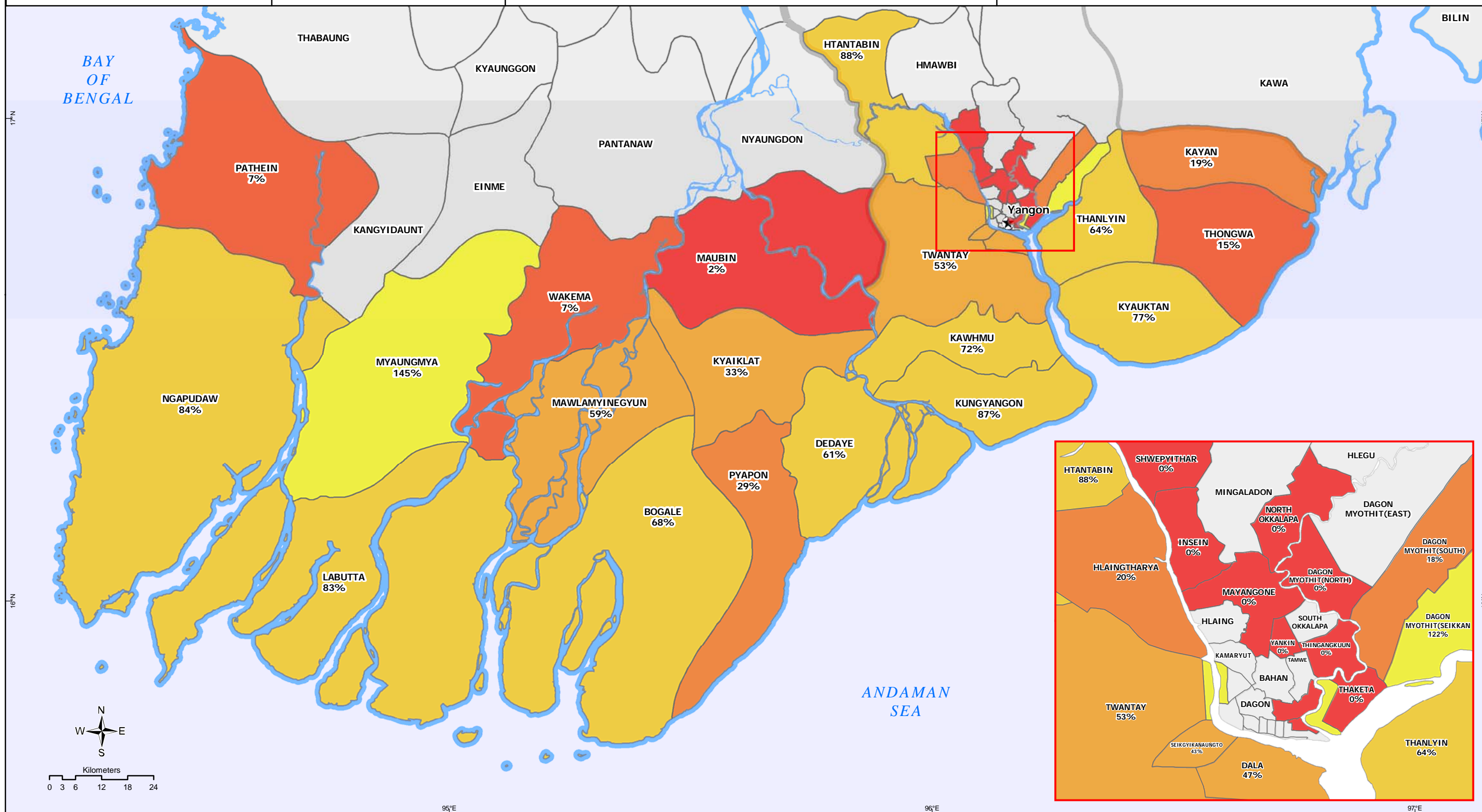
1:875,000

Map ID: MIMU065\_Shelter\_HH\_Relief\_Kits\_Projected\_081126\_v07  
Projection/Datum: Geographic / WGS84  
GLIDE Num: TR-2008-000057-MMR  
Code: MIMU065

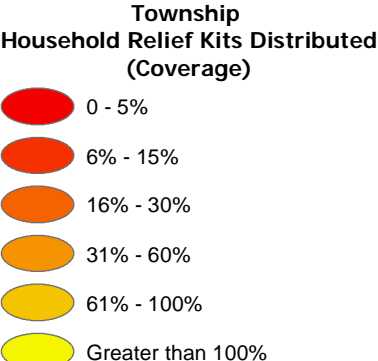
MIMU



Myanmar Information Management Unit  
IASC







Myanmar Information Management Unit (MIMU) is an Inter-Agency Standing Committee (IASC) common resource providing information management services, including GIS mapping and analysis, to the humanitarian and development actors both inside and outside of Myanmar.

Data sources: Boundaries - Ministry of Health 2001, modified by UN RC's Office 2004; Place names - Ministry of Home Affairs (GAD) and Ministry of Agriculture & Irrigation (SLRD) translated by MIMU.  
Emergency Shelter Cluster data distributed 14 November 2008.

Disclaimer: The names shown and the boundaries used on this map do not imply official endorsement or acceptance by the IASC membership.

Note: This map represents information as it has been reported to MIMU by the organisations concerned. Inclusion of an organisation on this map does not imply endorsement by the IASC Country Team or its projects. Note that this map only shows presence of organisations in a broad sector: it does not portray detailed information such as the volume of assistance, the number of beneficiaries, or the extent to which needs are met or unmet.

MIMU is grateful for the support of DFID.  
<http://myanmar.humanitarianinfo.org>

HOUSEHOLD RELIEF KITS DISTRIBUTED



# MYANMAR

Cyclone NARGIS  
EMERGENCY SHELTER

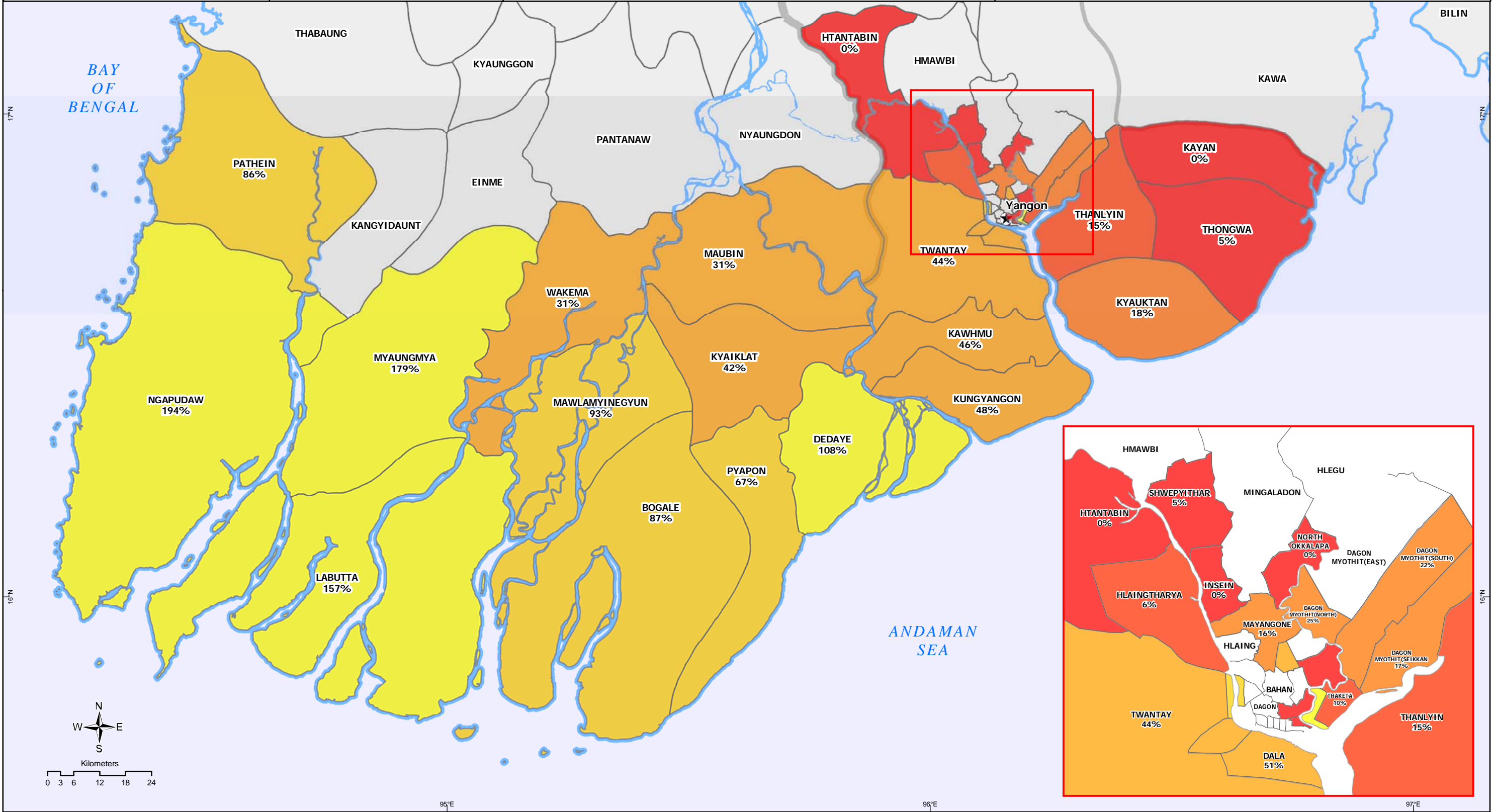
14 November 2008

1:875,000

Map ID: MIMU064\_Shelter\_HH Relief Kits\_Distributed\_081126\_v07  
Projection/Datum: Geographic / WGS84  
GLIDE Num: TR-2008-000057-MMR  
Code: MIMU064



Myanmar Information Management Unit  
IASC



## **APPENDIX E: Persons Consulted**

Alan Bradbury	IFRC
Antonio Masella	OCHA
Aung Min	Myanmar NGO Network
Bernd Schell	IFRC
Charlie Mason	Save the Children
Daire O'Reily	CARE
David Evans	UNHabitat
David Wright	CHF
Dr. Myo Thant Tyn	Myanmar NGO Network
Eelko Brouwer	Red Cross
Esteban Leon	UNHabitat
Felix de Vries	IFRC
Flemming Nielsen	IFRC
François Renaud	UNHCR
Graham Eastmond	IFRC
Graham Saunders	IFRC
Gregg McDonald	IFRC
James Shepherd-Barron	DFID
Jorge Gavidia	UNHabitat
Joseph Onato	UNICEF
Kerren Hedlund	ICVA
Lars Peter Nissen	Robust Consult
Lianne Kuppens	OCHA
Lizzie Babister	CARE
Mariko Sato	UNHabitat
Mia Marina	World Vision
Michael Annear	IFRC
Miguel Urquia	IFRC
MRCS President	MRCS
Neil Bauman	IFRC
Neil Brighton	CARE
Norwin Schaffer	OCHA
Richard Choularton	CHF
Rick Bauer	OXFAM
Seki Hirano	CARE
Stacey Ballou	OFDA
Steve Barton	IFRC
Sun OO	Association of Myanmar Architects
U Than Myint	Myanmar Engineering Society
Wan Sophonphanich	CARE

