

# Post-Nargis Social Impacts Monitoring: November 2008



A report prepared by the Tripartite Core Group comprised of representatives of the Government of the Union of Myanmar, the Association of Southeast Asian Nations and the United Nations with the support of the humanitarian and development community.



January 2009

## FOREWORD

On 2 May 2008, Cyclone Nargis struck the coast of Myanmar. Over two days, the cyclone moved across the Ayeyarwady Delta and southern Yangon Division resulting in tragic loss of life and widespread destruction. The disaster hit townships with a total population of 7.6 million. Many of those affected suffered devastating losses of family members, homes and livelihoods.

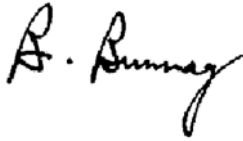
The response to this tragedy has involved a large number of actors: the government as well as the private sector, religious groups, local and international aid organizations, ASEAN and its member countries, UN agencies, local and international NGOs and several bilateral donors. In order to ensure that the relief and recovery efforts of all partners would effectively address the needs of the people of the Delta and to report on the scale of these efforts, the Tripartite Core Group approved on 9 September 2008 a comprehensive results framework and monitoring system. The framework includes three components: results monitoring, aid tracking, and community monitoring. The community monitoring component comprises: (1) the Post-Nargis Periodic Review, which is designed to report at regular intervals on progress in meeting needs at the household and community level for the most affected areas, primarily using quantitative survey methods; and (2) a complementary qualitative social monitoring of the impacts of Cyclone Nargis and the aid effort, the Post-Nargis Social Impacts Monitoring.

This report outlines the results from the first phase of the social impacts monitoring. It aims to assess the social dimensions of the impacts of Nargis and of aid delivery from the perspectives of affected communities six months on from the cyclone and the start of the relief effort. It focuses on issues of aid effectiveness, the socioeconomic impacts of the disaster, and the impact on social relations within and between communities.

Within two weeks of the disaster, 40 percent of the villages surveyed had received some assistance despite the difficult terrain and circumstances; within a month, 80 percent of the surveyed villages had received support; in the end, all villages in the study—even the most remote ones—had been reached. Although aid was not always delivered through the most effective channels and did not always correspond to the needs of the people, it did help them survive and reduce their suffering. Today's challenges are different: the report shows that the people need assistance to re-start their livelihoods. It also shows that aid would be more effective in the longer term if communities could determine themselves the support they need.

This report has been prepared under the auspices of the Tripartite Core Group in close cooperation with ASEAN, local and international NGOs, UN agencies and the World Bank, and with the active participation of local communities. We hope that it in turn plays a part in aiding the recovery of those affected by Cyclone Nargis.

On behalf of the Tripartite Core Group,



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## **ACKNOWLEDGMENTS**

The Tripartite Core Group wishes to express its sincere appreciation to the many people who made the Post-Nargis Social Impacts Monitoring possible, particularly to the more than 1,500 villagers who participated in the research and offered their hospitality and time to the researchers. Survivors of the cyclone across the Delta have shown strength and continuing resilience in the aftermath of disaster. The report is dedicated to them.



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## EXECUTIVE SUMMARY

Natural disasters have impacts on the social fabric of affected communities. Understanding these is vital for effectively delivering post-disaster assistance. The Post-Nargis Social Impacts Monitoring examines how key dimensions of village life appear to have changed (or stayed the same) six months after the cyclone hit Myanmar. It builds upon the framework developed by the Post-Nargis Joint Assessment to assess three areas:

First, it examines the recovery effort at the village level as experienced by affected villagers. This includes an assessment of how much and what types of aid people are getting, needs and shortfalls, and aid targeting and delivery.

Second, it examines the socioeconomic impacts of Nargis, including the effects on farmers, fishermen and labourers, how they are recovering, and other issues such as debt and migration.

Third, it examines the impact on social relations and cohesion, within and between villages, and between leaders and their communities.

In-depth qualitative interviews and focus group discussions were held with more than 1,500 people in 40 villages in eight townships across the Delta. The villages were selected to be representative of villages in the Delta. The distribution of selected villages by township broadly correlated with levels of township impact, with more villages selected in highly affected townships. Villages were also chosen according to primary livelihood, remoteness from urban centres and levels of affectedness to ensure variation within the sample. Furthermore, an attempt was made to ensure as much crossover as possible with the Post-Nargis Periodic Review I village sample: around half of the villages of the social impacts monitoring study are also covered by the Periodic Review. This not only allows for comparative analysis and triangulation of data but also means that villages are located at roughly equal spatial intervals across the Delta (see Map A1 in the Annex).

The social impacts of the cyclone are likely to change over time. Consequently, the monitoring will be repeated one year after Nargis to see which impacts are enduring and to identify any new emerging dynamics.

### ***Aid Effectiveness***

Relief and recovery assistance has reached even the most remote villages: all affected villages sampled had received assistance. 40 percent of the affected villages studied received help within two weeks; 80 percent received help within a month. This assistance came from a wide range of providers: the government, private individuals and groups, religious organisations, the private sector, local and international NGOs, UN agencies, ASEAN and its member countries, and many other bilateral donors.

More detailed information about the aid effort Delta-wide and the significant accomplishments to date can be found in the Tripartite Core Group's Post-Nargis Periodic Review I and Post-Nargis Recovery and Preparedness Plan.

Levels of aid vary between and within villages. Although there is a broad correlation between the level of aid received and the level of damage and loss, there is a negative correlation between the level of aid received and distance



from urban centres. A number of villages close to urban centres received high levels of aid despite being relatively less affected by Nargis.

The types of aid most frequently received were food, household goods, and shelter and farming inputs, which were distributed to most of the villages studied. Health assistance and fishing inputs were received by fewer villages. Aid appears to be helping villages recover: there is a link between the amount of aid received and the speed of recovery. However, the level of damage and loss is a larger determinant of recovery. Many moderately or highly affected villages were not recovering quickly despite receiving relatively high levels of aid. This suggests that the scale of aid and/or its effectiveness is still insufficient. Villagers said levels of aid were declining. Immense needs remain.

Livelihoods assistance, which has been limited to date compared to needs, has proven essential despite some technical shortfalls. Although villagers expressed appreciation for the livelihoods support they had received, which enabled many to sustain themselves through the rainy season, they also reported problems with farming inputs, such as unsuitable seeds and tractors with inappropriate wheels. Fishing inputs, such as boats and nets, have not been distributed widely enough. Labourers, who make up the majority of the population in over half of the villages studied, have received relatively little livelihoods support. Cash, which enables households to prioritise among their needs and which had been distributed in half of the affected villages studied, has been the most effective form of assistance.

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

As in many post-disaster relief settings, aid providers have used a wide range of mechanisms to target and distribute aid, which vary both between and within villages. This has led to some confusion and perceived inequities within villages and has constrained local level coordination. In almost every village, aid providers rather than aid recipients determined what kind of aid would be provided to whom.

Across almost all villages visited, villagers did not prioritise reducing their vulnerability to future disasters, even though many now fear storms. People tended to focus more on their immediate survival and recovery and lacked the means to reduce their villages' exposure to weather-related risks.

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

### ***Socioeconomic Impacts***

The monitoring showed that, as expected, farming productivity and crop yields have decreased significantly. Rice production is likely to decrease in 80 percent of the villages for which data were available, with most farmers experiencing losses in crop yields of 13-40 percent. Reasons for this include the intrusion of salt water and loss of key agricultural inputs such as animals, tractors, seeds and credit. Reductions in harvests have increased the debt burden of farmers, who have

been unable to repay old loans and have had to borrow to meet their consumption needs.

Fishing has also been severely affected. Fishermen are struggling to recover. This has affected those at every point in the value chain. Reduced catches and a lack of fishing boats and nets mean fishermen have been unable to repay their debts. This has prevented them from gaining access to new credit. This downturn in fishing is having knock-on economic impacts on those previously employed in supporting industries, often as day labourers.

Cyclone Nargis has drastically reduced the opportunities for paid work for landless labourers, who face reduced demand for their labour from the larger-scale farmers and fishermen who would normally employ them. Labourers have received relatively little livelihoods support compared to other groups. As a result, many face immense difficulties in getting by.

The most recurrent theme across all the affected villages studied was an increased debt burden. Debt levels were already high before the cyclone, but villagers reported being able to manage. Cyclone Nargis changed this: it was a massive shock to the system. In every village studied, villagers were worried that they could not meet their loan repayments and would not have enough money to meet their consumption needs in the following year. Many small businesses have been affected: rice mills and fish processing facilities were either severely damaged or destroyed, and in many cases have not received repayment of loans extended to farmers and fishermen.

The usual pre-Nargis cycle of borrow-harvest-repay has been broken. Fast-rising debt totals make it ever less likely that this normal cycle can be restored. If not addressed properly, this could lead to continued depression of the local economy, increased migration out of villages and the Delta, farmers and fishermen losing their land use or fishing rights in coming years, and a redistribution of assets to the few. At the time of the research, however, villagers did not report any formal land redistribution or loss of land use or fishing rights.

### ***Social Impacts***

Before Nargis, social relations and cohesion were strong in Delta villages. The social impacts monitoring found that social capital continues to be strong and has grown since Nargis. Villagers have worked together to overcome immediate challenges, which has strengthened social relations. Villagers have cooperated in rebuilding houses, rehabilitating public goods, and sharing aid and basic necessities such as shelter. In most of the villages studied, crime and violence levels have not risen since Nargis.

Villagers thought that gender relations had either remained the same or strengthened. In some cases the gender balance has changed, which has affected the gender division of labour. Widows and widowers have had to take on new tasks.

Youth in affected villages have played an important role in cyclone relief and recovery. In some instances, this has increased their overall role in community affairs. In most cases, villagers reported being satisfied with this.

There were too few ethnically or religiously heterogeneous villages in the sample to draw conclusions on the impacts of Nargis and the aid effort on inter-ethnic and inter-religious relations. On the whole, relations have remained strong. Only two villages reported that some minority religious groups had given assistance

exclusively to members of their own faiths and this had led to some tensions, indicating that aid targeting along exclusive ethnic or religious lines risks damaging social cohesion.

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

In most villages, significant collective community leadership emerged through village emergency committees. Since Nargis, village heads, elders, monks, men, youth and some women have taken on relief and recovery responsibilities.

In about one-third of the villages, relations between villagers and formal and informal leaders (religious leaders, elders) improved, and in about half of the villages, relations have not obviously changed. In some cases, suspicion over aid distribution has increased levels of discontent with village leaders. Generally, though, relations between formal and informal leaders were good.

### ***Conclusions***

Cyclone Nargis had a major impact on socioeconomic life in Delta villages. However, despite this immense shock, social relations and local capacity remain strong. Although relief assistance has reached all villages, much more assistance is needed for communities to recover, particularly in the form of cash grants. Communities remain resilient and functioning. Yet if people's livelihoods and village economies do not begin to recover soon, there are likely to be profound longer-term impacts, such as migration out of Delta villages and a tearing of the social fabric. If a way is not found for people to break out of the Nargis debt trap, there is a risk of longer-term redistribution of assets from many to a few.

How assistance is delivered is equally important. Assistance should build on the strengths of affected communities. Villagers in cyclone-hit communities know what they need and appreciate the aid they have received but so far have had little real say in the aid effort. This has led to the provision of some kinds of aid that are not adapted to local needs in the Delta. This underscores the need for future aid to be delivered in ways that build on local strengths, that give communities real decision-making power in how aid should be delivered and used, that include effective information and complaints-resolution mechanisms, and that enable communities to advocate for their needs with aid providers.

## SECTION 1: INTRODUCTION

Natural disasters have an impact on the social fabric of affected communities. These impacts are dynamic, changing in response to a range of factors including the sources, levels and types of aid provided, government policies and actions, and the choices of affected communities and individuals. Understanding such social impacts and dynamics is vital for effectively delivering post-disaster assistance. Well-designed programmes that draw on local capacities and build on an understanding of local realities, can address key needs and strengthen local institutions and practices in ways that enhance longer-run development and social cohesion. It is, therefore, important to track the social impacts of natural disasters over the course of the relief and recovery effort.

The Post-Nargis Joint Assessment (PONJA) was conducted in the months following Cyclone Nargis and was published in July 2008. It included an examination of the preliminary social impacts of the disaster at the community level.<sup>1</sup> It outlined some of the key domains of village life, social relations and cohesion within villages, and the role of local institutions before and after Nargis. It also provided a range of hypotheses on how these impacts might play out in future and looked to see how longer-term recovery responses might further affect the social fabric of villages in the Delta.

The Post-Nargis Social Impacts Monitoring builds upon this initial work. It takes the framework the PONJA developed for assessing the social impacts of the disaster and uses it to see how key dimensions of village life appear to have changed (or remained the same) six months after Nargis. Because the situation in the Delta is evolving, the monitoring will be repeated a year after Nargis to see which of the preliminary results from this early round of research are validated over time and to identify any further emerging dynamics.

### 1. Focus Areas

The report focuses on three areas:

**Aid effectiveness:** The social impacts monitoring assesses the recovery effort at the village level as experienced by affected villagers. It examines issues such as how much and what type of aid people are getting, needs and shortfalls, how assistance is being targeted and delivered, and the process of aid delivery and decision-making.

**Socioeconomic impacts:** The report looks at the impact of Nargis on key occupational groups such as farmers, fishermen and labourers, and the degree to which they are recovering. It considers other key socioeconomic issues in village life such as debt and migration.

**Social impacts:** Finally, the report assesses the way Nargis (and the subsequent aid effort) is changing relations within and between villages and between villagers and their leaders, and how it is affecting local social capital and collective action capacity.

### 2. Methods

In-depth qualitative fieldwork was conducted with over 1,500 people in 40 villages in eight Delta townships between late October and late November 2008

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<sup>1</sup> Tripartite Core Group (2008a). *Post-Nargis Joint Assessment*, Annex 15: Social Impact of Cyclone Nargis.

(see Map A1 in Annex A). The research was conducted in three rounds: a pre-test in eight villages, where the methodology was refined, and then two rounds of 16 villages each.

Villages were selected using a number of criteria aimed at getting as accurate a representation of villages in the Delta as possible. First, villages were chosen across eight of the most severely affected townships, the number of villages per township broadly correlating with the level of damage and loss of the township. Second, within each township and across the whole sample, villages were categorized based on the primary livelihood (farming or fishing) of villagers or whether the villages were peri-urban, where other livelihoods such as trading may be more prominent. Third, across the whole sample, though not within each township, provisions were made to ensure variety in the scale of the damage and loss caused by Nargis. Within these guidelines, an attempt was made to ensure as much crossover as possible with the Post-Nargis Periodic Review I sample, both to enable comparative analysis and triangulation of data and to ensure relatively equal spatial distance between villages. Four control villages that were affected less by Nargis were also included in the sample.<sup>2</sup>

In each village, researchers spent two days (and one or two nights) interviewing a wide range of villagers. Overall, the research teams conducted 222 formal key informant interviews, 159 focus group discussions with an average of seven to eight people each, and 102 informal discussions. Respondents included a wide cross-section of the communities studied, including: the village head and other official village leaders; village elders and religious leaders; others involved in aid decisions; farmers, fishermen, labourers and those in other occupations; (potentially) vulnerable groups, including female-headed households, the disabled or injured and the elderly; and young men and women. To the extent possible, the researchers tried to get perspectives on the same topics from each group in order to triangulate the information received.

Focus and question areas were identified through the initial social impacts monitoring conducted as part of the PONJA, with an extra emphasis on issues of aid effectiveness. There were three main focus areas: (i) aid effectiveness, including the aid effort, needs and shortfalls, aid targeting and decision-making, aid equity and complaints mechanisms; (ii) socioeconomic impacts, including the local economic structure, indebtedness, and migration; and (iii) social relations and cohesion, including social capital and collective action, group relations (gender, inter-generational, inter-religious and inter-ethnic), inter-village relations, and relations between villagers and village leaders.

The researchers also collected case studies focusing on the stories of those affected by the cyclone and on providing more in-depth explorations of the topics studied. Throughout the report, these are used to illustrate the experience of villagers in the Delta since Nargis. Standardised data were also collected on each community to allow for comparative village analysis.

A more comprehensive discussion of the methodology employed is given in Annex A.

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<sup>2</sup> All four of these villages turned out to have been affected by Nargis, although to a lesser extent than most other villages. One of the farming villages (not a control) turned out not to have been directly affected by the cyclone.

### **3. Report Structure**

The report continues with a presentation of the results from each of the three focus areas: aid effectiveness (Section Two); the socioeconomic impacts of Nargis and the aid effort (Section Three); and the impacts on social relations and cohesion post-Nargis (Section Four). Section Five provides a brief summary of conclusions.

The Annexes give a full outline of the methodology employed by the social impacts monitoring and provide tables outlining summary data for each of the 40 villages visited.



## SECTION 2: AID EFFECTIVENESS

The research teams interviewed villagers about types and levels of aid received, needs and shortfalls, methods of targeting, aid distribution, information sharing and decision-making. The research aims to understand how the aid effort looks from the perspective of affected communities. As such, it focuses on villagers' perceptions of aid, which were triangulated where possible with objectively verifiable data and criteria. For the purposes of the report, 'aid' refers to all types of aid received, both cash and in-kind and across multiple sectors. All types of aid providers from outside villages, such as government, local and international NGOs, UN agencies, private sector aid providers and religious groups, are referred to in this report as 'aid providers', as villagers themselves did not tend to distinguish among different kinds of sources of assistance.<sup>3</sup>

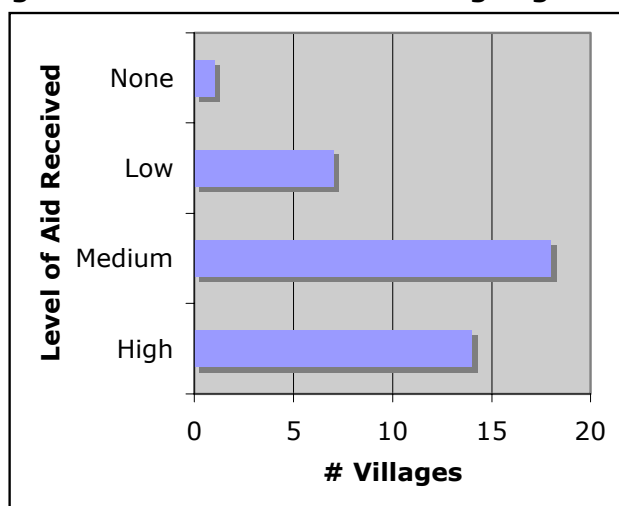
The research found a mixed picture on aid effectiveness. Aid had reached every affected village and helped avoid a possible further humanitarian disaster after the cyclone. However, aid was often insufficient to speed recovery. Key gaps remained, in particular livelihoods support, and there was a clear need for improved information-sharing and community participation in aid decision-making. Additional information about the aid effort Delta-wide and the significant accomplishments to date can be found in the Post-Nargis Periodic Review I and the Post-Nargis Recovery and Preparedness Plan.<sup>4</sup>

### 1. Perceptions of Aid Received

#### *How much are people getting?*

The research tracked the number of types of aid each village was receiving. Data were collected on nine different types of aid (see Figure 2 below). The number of types received is used as a proxy for the overall level of assistance (Figure 1).<sup>5</sup>

**Figure 1: How much aid are villages getting?**



<sup>3</sup> In each village, however, the research teams drew up a detailed matrix of aid received, broken down by aid provider.

<sup>4</sup> Tripartite Core Group (2008b). *Post-Nargis Periodic Review I*, and Tripartite Core Group (2008c). *Post-Nargis Recovery and Preparedness Plan*.

<sup>5</sup> For each village it was hard to quantify the amount of aid received within each type since no detailed records were being kept at the village level. However, the rough levels within each category did not vary much across villages. As such, the number of types of aid received is a reasonable proxy for overall levels of assistance.



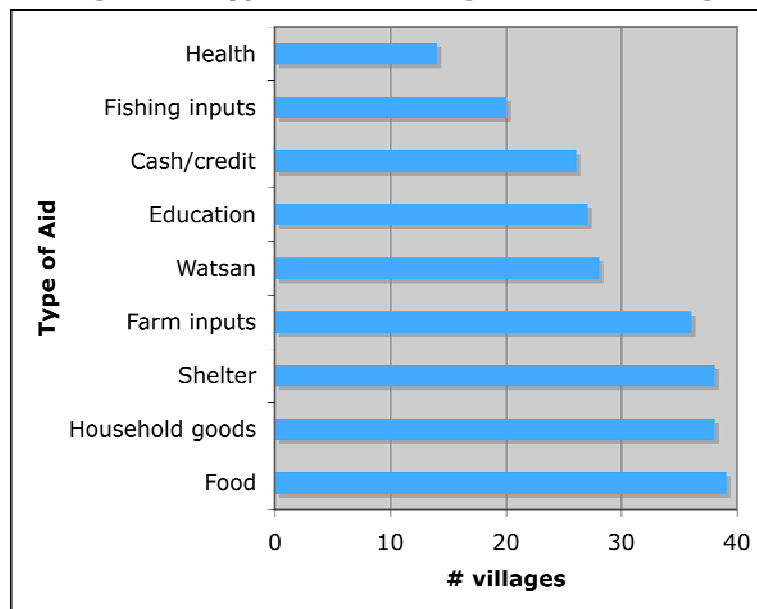
Of the 40 villages studied, 14 received high levels of aid (eight or nine types of assistance), 18 received moderate levels of aid (six or seven types) and seven received low levels (less than six types). One village in Ngapudaw received no assistance, but turned out to have been little affected by the cyclone.

Given worries that not every village in need is receiving help, it is reassuring that aid reached all the affected villages studied. The research found that aid had been spread widely, although according to villagers it often was insufficient to meet needs.

### ***What types of aid are villages getting?***

The most prominent types of aid received were food, household goods, shelter, and farming inputs (Figure 2). All affected villages had received food assistance and all but one had received household goods and shelter assistance. Farm inputs had been distributed to almost every village in the study with farmers.

**Figure 2: Types of aid villages are receiving**



Fewer villages had received other types of assistance. Only one-third of villages in the study had received health assistance. Fishing inputs had gone to half of the villages, including two with no resident fishermen, though another six affected villages with significant fishing populations had not received any fishing support.<sup>6</sup> Aid received was also on occasion inappropriate to the local context (Box 1).

In all villages studied that had received aid, villagers reported that assistance was now less frequent and lower in volume than in the immediate post-Nargis period.

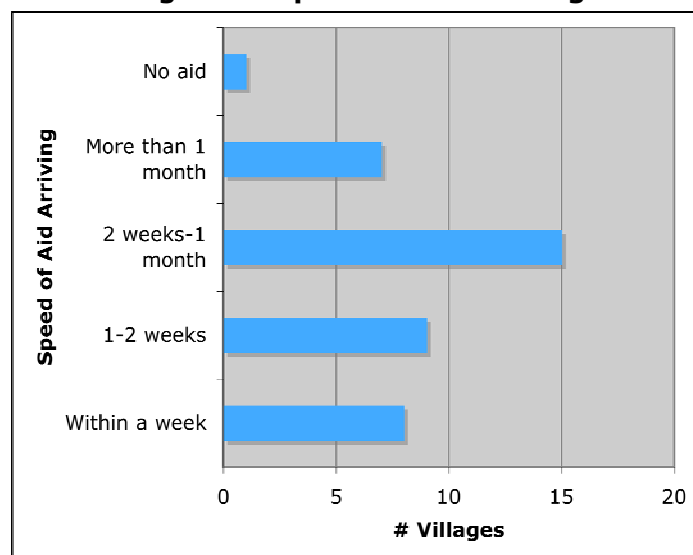
<sup>6</sup> In these villages, it is likely that larger percentages of the population worked in the fishing industry, for instance, making or mending nets or processing fish. The lack of replacement of vital fishing gear thus has spill-over impacts on others (see discussion below).

**Box 1: Unsuitable aid**

In one village, a foreign provider of aid delivered shelter kits that included tents and blankets. During the PONJA fieldwork, the tents were found to be standing tall but not in use. Villagers told the team that they preferred to stay in the bamboo shelters they had erected rather than in tents. When the research team returned in late October, the tents were packed away; beneficiaries said that they could not withstand the strong winds. The cooking stove in the kit could not be used because villagers had no fuel, and the blankets had not been used either as they were too thick for the Delta climate. The tools in the kit were the only things being used. The full shelter kit was now stowed away.

**How quickly did villages receive aid?**

80 percent of the affected villages visited received aid within a month of Nargis. Of these, just over half got assistance in the first two weeks (Figure 3). Apart from one, all villages that did not receive aid in the first month after the cyclone were villages with slight or low levels of loss and damage.<sup>7</sup> Villages that received assistance in the first week were not necessarily those that suffered the greatest losses: only three of the eight had high levels of damage. Proximity to urban centres played a larger role: seven of the eight that received aid within a week were close to urban areas.

**Figure 3: Speed of aid arriving****Why are some villages getting more aid than others?**

There is a broad correlation between the level of aid received and the level of loss and damage. As Table 1 shows, seven of the nine highly affected villages received high levels of aid and the other two received moderate levels of aid. All six moderately affected villages received moderate or high levels of aid.

<sup>7</sup> Villages were categorised by level of damage and loss from Nargis. The criterion used for categorisation is the number of deaths as a percentage of the pre-Nargis village population. Almost every village had a very large proportion of houses damaged or destroyed, so it was hard to use this as a criterion. Villages with no deaths are categorised as 'slightly' affected; villages where less than one percent of the population died are 'low' affected; villages where one to five percent died are 'moderately' affected; villages where more than five percent died are 'highly' affected.

**Table 1: Level of aid by level of damage and loss**

		Level of damage and loss			
		High	Moderate	Low	Slight
Level of aid received	High	7	4	2	1
	Moderate	2	2	9	5
	Low	0	0	3	4

Aid has also been distributed to villages that were only slightly affected by Nargis. Some less affected villages have received more aid than many others. Three villages with either slight or low levels of damage and loss received high levels of assistance. All are close to township capitals: two are in Kungyangon; the other in Pyapon received a relatively large amount of aid from eleven organisations despite experiencing just one death.

Remoteness appears to have helped determine levels of assistance, although some very remote areas had also received high levels of assistance (Table 2).<sup>8</sup> Only two of the nine highly affected villages were close to a township capital, yet half of the villages receiving high levels of assistance (seven) were near urban areas.

**Table 2: Level of aid by remoteness**

		Remoteness		
		Very remote	Remote	Close
Level of aid received	High	2	5	7
	Moderate	2	7	9
	Low	2	0	5

### ***How fast are villages recovering?***

People in about a quarter of the villages visited considered their communities to be recovering fast, somewhat less than half moderately and about one-third only slowly (Table 3).<sup>9</sup> Peri-urban villages were recovering significantly faster than the others, whereas farming villages appeared to be recovering more slowly than fishing villages (even though all but two of the affected farming villages—which were only slightly affected and overall received low levels of aid—received farm inputs).<sup>10</sup>

**Table 3: Predominant livelihood by speed of recovery**

		Speed of recovery		
		Fast	Moderate	Slow
Predominant livelihood	Farming	4	6	6
	Fishing	2	6	3
	Peri-urban	2	5	1
	Control	2	0	2

<sup>8</sup> Villages categorised as 'close' generally took less than two hours to reach by boat and land; 'remote' villages took between two and three hours; 'very remote' villages took more than three hours to reach. The most remote village studied took seven hours to reach.

<sup>9</sup> It is difficult to establish objective measures of speed of recovery given its multi-dimensional nature. For example, in some villages housing would be repaired very quickly but major livelihoods problems remain. In other villages, people could restart their livelihoods but faced many other difficulties. The measure of speed of recovery used here tries to combine these different elements of recovery. The research teams asked villagers how quickly they felt they were recovering and how this compared with neighbouring villages which experienced similar levels of damage. The teams then cross-checked this information with their own perceptions, and discussed with the other research teams to try to ensure that rankings were similar across the research teams.

<sup>10</sup> Farming villages had to wait to harvest their crop before they could start to recover. Fishermen, in contrast, were likely to be able to do some fishing (for example, from shore when they did not have a boat) before they could resume their livelihood.

The level of damage is more important in determining the speed of recovery than the level of aid received. As Table 4 shows, of the ten villages recovering quickly, eight had either slight or low levels of damage and loss.

**Table 4: Level of damage and loss and the speed of recovery**

		Speed of recovery		
		Fast	Moderate	Slow
Level of damage and loss	High	1	5	3
	Moderate	1	2	3
	Low	5	8	1
	Slight	3	2	5

In contrast, at an aggregate level the links between the amount of aid received and the speed of recovery are not strong (Table 5). Despite this, aid does have some impact. The one highly affected village recovering quickly had received a high level of assistance.

**Table 5: Impacts of aid on the speed of recovery**

		Speed of recovery		
		Fast	Moderate	Slow
Level of aid received	High	4	5	5
	Moderate	4	8	6
	Low	2	4	1

Nevertheless, the research suggests that existing levels of aid alone were not high enough to enable highly or moderately affected villages to recover quickly. Even where villages received all nine types of support, the level of support of each type tended to be too low to cover all in need.

## 2. Needs and Shortfalls

### *What are villagers' needs and how are they changing?*

According to the villagers interviewed, needs immediately after the cyclone were food, shelter, water, medicine and household goods such as plates, blankets and sleeping mats. As shown above, such goods were provided to most villages, apart from water and sanitation assistance. In the research villages, the combination of relief aid and community self-recovery initiatives managed to prevent widespread deaths during the immediate post-Nargis phase.

Food aid played an important role in sustaining villagers in the immediate aftermath of Nargis and at the time of the monitoring continued to play an important role in a number of villages. In most villages studied, levels of food aid had been reduced in recent months. As the fieldwork was conducted just as levels of food aid were beginning to decline, it was not possible to tell whether this would have large, longer-term impacts in affected villages with food security issues.<sup>11</sup> Food security continued to be an issue in the villages studied, especially for labourers, because of the slow recovery of livelihoods.

Over time, needs have changed. In the 40 villages studied, most villagers had repaired or rebuilt their houses, though to a lower standard than before.<sup>12</sup> This was largely a result of communities' own initiatives, often with support from

<sup>11</sup> The qualitative fieldwork component of the Post-Nargis Periodic Review I identifies this as a potential problem, arguing that for some vulnerable populations hunger is now a bigger issue than in the immediate post-Nargis period due to reductions in food aid.

<sup>12</sup> The Post-Nargis Periodic Review I finds that in 45 percent of the 108 communities they surveyed, more than 5 percent of households are living in makeshift shelters using plastic as walls or roofing.

private local aid providers. Health needs remained but at the village level were similar to those before Nargis. A large number of schools had been or were being constructed, again largely with support from local aid providers.<sup>13</sup>

Other continued needs include clean drinking water. Half of the villages visited had received some water or sanitation assistance but many needs in this area remained. Despite repeated efforts from villagers to rehabilitate their water sources, in some villages water supplies were still saline. As a result, drinking water shortages can be expected during the dry season.<sup>14</sup>

Many villagers suffer from psychological stress.<sup>15</sup> They are afraid of another cyclone and look for shelter when they see a cloudy sky or a chance of rain. Such stress has led to cases of depression and community problems (Box 2). The lack of work opportunities has made this worse: with less to do, people have had more time to think and talk with friends and relatives about the disaster and their lost loved ones, which has made them feel depressed and less capable of working than in the past.<sup>16</sup> And yet in none of the villages surveyed had villagers received psychological or psychosocial support.

#### **Box 2: Trauma from Nargis**

A man in his sixties, who lived in a highly affected village in Bogale, lost his wife, one of his sons and three grandchildren to Nargis. He was unable to bury his family members' bodies properly. He attempted to deal with his problems through alcohol, which only compounded his depression. Finally, he tried to take his own life. One of grandchildren saw what he was doing and saved his life. Since then, under the careful watch and care of his close relatives, he has made a slow but steady recovery.

Another village in Bogale suffered a tragic double murder. A villager had lost his mother, wife and child to the cyclone. Shortly after Nargis hit, he was searching for the bodies of his family members amongst the corpses. Another man made a joke asking him if he was searching for fish to eat, saying he would give the widower two fishes (by which he meant corpses) if he was hungry. The widower was angered by the improper joke. Later that evening, stimulated by his friends and under the influence of alcohol, he could no longer control his temper. He cut the throat of the man who had made the joke and killed the man's mother-in-law. The murderer is now in prison.

People in the villages studied prioritised assistance that would help them re-establish their livelihoods. At the time of the research, their most important needs were livelihoods recovery assistance and basic community assets for farmers, fishermen and labourers. Assistance requested by farmers included diesel, fertiliser, tractors, draught cattle, capital and seeds. Assistance requested by fishing communities included boats, nets, traps, and capital. Labourers needed food, small livestock and income opportunities. Villagers also prioritised some community assets, particularly funds to help reconstruct or renovate ponds, monasteries, dikes and schools (although many of these were being re-built already).

<sup>13</sup> The research teams observed that many of the temporary schools were still functioning even when it was raining hard.

<sup>14</sup> The research took place at the beginning of the dry season, a time at which people still had access to the rain water they had collected in clay/plastic pots during the monsoon season. Thus it was difficult to assess the scale of the likely problem in upcoming months.

<sup>15</sup> According to the PONJA, around two months after Nargis 23 percent of households in the affected areas surveyed reported having experienced and/or observed psychological problems as a result of the cyclone (Tripartite Core Group 2008a, *op. cit.*, p. 156).

<sup>16</sup> This is not only the case for human survivors. The social impacts team heard reports that a large number of cattle that survived cannot now be used for ploughing. They are scared of working if there is rain or wind.

In almost all surveyed villages, the level of assistance provided was too low to meet people's basic needs adequately. Often many types of aid were provided but in insufficient quantities to meet the needs of the whole affected population. Villagers have shared their resources with others in the village when facing delays or problems with aid. As time has gone by, the levels and frequency of aid has decreased. With very few exceptions, at the time of the monitoring the families in the surveyed villages were still struggling to make ends meet.

### ***How helpful has livelihoods assistance been?***

Aid providers have contributed some livelihoods assistance.<sup>17</sup> Much of this has helped Nargis survivors to restart their economic activities. Yet there are large gaps and some of the aid delivered so far has had limited impact.<sup>18</sup>

***Farming inputs.*** Farmers have received seeds, draught cattle and tractors. Some of this in-kind assistance has been helpful. Some problems with farm aid were reported. Farmers expressed frustration that seeds provided were often not compatible with the local agro-ecology and were of mixed varieties, unsuitable for the Delta, of poor germination, or arrived too late for planting. Many farmers said that they had to broadcast (plant) their fields at least three times in order to get adequate seedlings per acre. These complaints were common across villages.

Various aid providers gave tractors. In many cases the tractors' wheels were not compatible with local soil types, and farmers had to pay to replace them, costing Kyat 200,000 per set of wheels. Government tractors were provided on instalment with loan repayments to be made in three tranches over three years. Farmers were unclear about the exact repayment schedules and whether they would have to pay interest.

Some tractors were provided by NGOs to farmer groups. However, the research found that often farmers' groups had problems working out systems for allocating the resource across group members. Better-off farmers, or those connected to or in the village administration, often were able to use tractors first, while poorer farmers had to wait their turn.

***Fishing inputs.*** Aid providers of all types provided many boats and nets. However, almost all fishermen stated that individual households did not receive the complete set of equipment they needed to fully resume fishing. Of the twenty-six villages with fishermen, half had received fishing inputs, but very few villages had received both boats and nets, and none received enough to cover all fishermen. Consequently, fishermen needed to share their equipment with others to get a complete set. This meant they had to take turns going fishing, reducing the amount of fish caught per family.

In many cases, the size of the boats, capacity of engines and types of nets reportedly did not meet local requirements. Fishing nets can be up to four times as expensive as the cost of the boats themselves, and replacement costs may be prohibitively high, especially for those undertaking small and subsistence fishing.<sup>19</sup> Fishermen need different types of nets for different seasons and types

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<sup>17</sup> As noted earlier, an 'aid provider' includes anyone who provides assistance from outside the village: government, UN agencies, international and local NGOs, bilateral donor countries, the private sector, religious organisations and private individuals.

<sup>18</sup> Impacts are discussed in greater depth in Section 3.

<sup>19</sup> Small fishing here means fishermen who, unlike subsistence fishermen, tend to employ family labour, fish in the waters of neighbouring villages and sell their catch to village-level middlemen, but who, unlike medium or big fishermen, tend to use non-motorised boats.

of fish. This is one reason why fishing was recovering quickly in only eight of the 26 villages visited with fishermen.

**Support to labourers.** Assistance aimed at boosting the return to work of labourers has been limited. Immediately after the cyclone, labourers received similar levels of food, shelter and household assistance as fishermen and farmers, but have received little longer-term support. Labourers require small amounts of capital in order to pursue income-generating opportunities other than seasonal labour jobs, which have decreased as the economy of Delta villages has stagnated. They could use assistance to open small shops, breed livestock on a small-scale, or undertake subsistence fishing. Yet there has been little such aid. As a result, vulnerable families are still relying on food aid, which is decreasing in amount and frequency.

The lack of progress in restoring livelihoods is having knock-on effects on other areas of village life (Box 3).

### **Box 3: Priced out of school**

In a village visited in Mawlamyinegyun, many more children are quitting school than before. School expenses are far beyond what people can afford. This is not because school expenses have increased. Rather, in the absence of work, people are struggling just to survive. Before Nargis, villagers normally paid their children's school boat fees for the year in the form of an agreed contribution of paddy to the boat operator. Now, many do not have enough rice to pay the boat fee and so do not send their children to school.

**Cash.** The most effective type of livelihoods assistance has been cash payments to village households. Almost all the villagers interviewed said they required some amount of capital to re-establish their livelihoods or to buy essential items. Villagers said they could use cash for what they needed most, prioritizing its use for consumption and investment in ways that were most helpful to them.<sup>20</sup>

However, cash was only being provided in half of the villages visited and in some cases was in the form of credit, which contributes to increased indebtedness (see Section 3). There are no standard procedures for distributing and targeting cash. In several villages, one NGO provided cash to all households regardless of vulnerability. In others, although this was rare, aid providers provided cash only to households considered vulnerable. Villagers used the money to buy household items, farming and fishing implements, pigs, ducks, and other household or investment items. Though the injection of large amounts of cash led to price increases in a few villages<sup>21</sup>, villagers greatly appreciated and benefited from such support.

### **Is aid burdening communities?**

In general, villagers welcomed almost all aid provided and did not view it as burdensome. Until the time of the research, little of the aid provided had required maintenance, apart from power tractors provided to farmers. Villagers had renovated or reconstructed houses, schools, ponds, paths and other community infrastructure, either in cooperation with NGOs or on their own initiative. In many cases, such labour contributions went unpaid. Villagers accepted this because the personal and community needs they faced after Nargis were immense. However,

<sup>20</sup> The fieldwork found some cases of people monetizing some of the in-kind assistance given to them, where aid that did not fit with needs was exchanged or sold.

<sup>21</sup> In one village in Dedaye, for instance, the price of a duck and a pig increased from Kyat 3,000 to Kyat 4,000, and from Kyat 35,000 to Kyat 40,000, respectively.

this lack of remuneration did cause difficulties for many of those who needed money to cover basic household needs.

The research found some examples of villagers viewing excessive community meetings as a burden. In one case, women chose not to continue as members of a microcredit scheme because the meetings were too frequent and long.

In any post-disaster context, there is a risk that aid provision can lead to dependence. In general, this had not occurred in the villages studied, in part because aid was insufficient to meet needs.

The social impacts monitoring team heard one story where aid had inadvertently had negative impacts (Box 4). However, this was an isolated case. In almost all occasions, villagers said they were happy to receive assistance.

#### **Box 4: Disease makes aid ineffective**

In one village in Kyaiklat an aid provider gave chicks. Each of the thirty households in the village received three chicks. As every household was assisted, people were happy. However, this did not last long. Some of the chicks got sick and died. Before long, the disease was transmitted across most of the chicks. Then the other chickens raised by the villagers contracted the disease; many of these died. The villagers collectively received ninety chicks but ended up losing many more.

#### ***Is aid helping reduce vulnerability to future disasters?***

No noticeable emergency preparedness or risk reduction system has emerged in any of the surveyed villages. Township Peace and Development Councils raised awareness of disaster preparedness among village leaders and NGOs carried out some sensitisation among the villagers, especially among the elders. Yet this had not yet led to concrete changes in behaviour, building design or the development of likely response strategies to future disasters.

Most villagers interviewed thought that emergency preparedness was beyond their capacity and that they did not have any resources for this, especially in such a difficult period. There were few exceptions where individuals took their own disaster-preparedness initiatives. In three villages, villagers had made preparedness plans, such as constructing raised wooden platforms for their families to use in case of high water levels and keeping on hand a ready supply of string, torches and empty plastic containers to use as flotation devices. A few other innovative villagers took further measures such as tying their houses to strong trees and putting important documents and food in plastic bags, which they buried in pits. Nevertheless, across most of the villages visited, reducing vulnerability to future disasters was not something prioritised by villagers, who tended to focus more on survival and recovery.

### **3. Targeting and Delivering Aid**

#### ***How is aid being targeted?***

A wide range of mechanisms has been employed for targeting aid. These differ both between and within villages. Although there is wide variation, a number of different generic types of targeting mechanisms can be identified (Box 5).

In all affected villages but three, all households within the village had received assistance in some way or another.<sup>22</sup> Often *all* of the mechanisms outlined below

<sup>22</sup> This excludes the one village that received no assistance.



were used in the *same* village. Different aid providers each had their own targeting mechanisms, and different programmes used different targeting approaches. Furthermore, different aid providers often even distributed the same types of aid (for example, food) in different ways within villages, sometimes during the same time period.

**Box 5: The targeting of aid**

In some cases, aid providers went directly to each household. In others, they defined selection criteria and then worked through village leaders or committees including emergency committees that were established in many villages. Whether aid was delivered directly or through the village leadership structure depended largely on the policy of the aid provider. Where aid went through the village leadership structures, there were more reported cases of the vulnerable not receiving their full share although communities have some mechanisms for complaining when this happens (see Box 8 below).

Some relief and recovery assistance (from food to livelihoods inputs) was delivered in insufficient quantities to help all those in need in a village. Some noted that allocations tended to be biased towards people with links to those in positions of power in the village. Where village leaders were asked to manage distribution, they often chose to have 'lucky draws' to decide on who should get help. Most villagers the research teams spoke to were content with such arrangements.

Livelihoods assistance tended to be given to farmers and fishermen rather than day labourers or those in supporting occupations. For this type of aid, committees for the aid project were usually established. While the members of these tended to be members in other committees as well, often these were distinct bodies not formally linked to pre-existing ones.

Government assistance tended to be transferred through formal structures: the Peace and Development Councils and village leaders. The extent to which it then reached the vulnerable in affected villages depended on the local leadership.

Across most of the 39 villages visited which were receiving aid, aid providers rather than recipients determined the types of aid provided. NGOs and other aid providers normally pre-identified the type(s) of assistance they would give and what type(s) of groups should receive it.

Aid providers considered needs and priorities as identified by the village committees or individual villagers only rarely. The social impacts team heard of very few cases where participatory needs assessments had been carried out before aid was distributed, and even fewer where communities could decide to spend assistance on what they wanted.<sup>23</sup> In several cases, villagers said that aid providers did not consult them during the planning process and as a result assistance had not focused adequately on the most marginalised and poorest households.

Individual, private providers of aid were more likely to consult with villagers and village committees on needs and priorities and to provide aid directly to villagers. This tended to be because they targeted fewer villages and so had more time for consultations and because, as informal aid providers, they were not constrained by sector or organisational guidelines.

One implication of the vast variety of targeting mechanisms used is that it makes it more difficult to assess accurately what aid has already been provided to

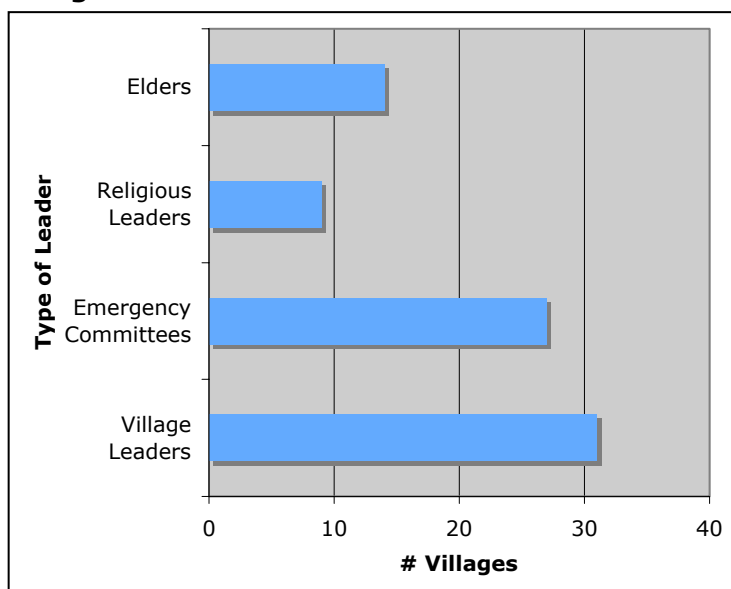
<sup>23</sup> In the immediate aftermath of a disaster, where speed is essential, it can be more challenging to implement participatory approaches. However, the monitoring found that such approaches were not being applied even six months after the cyclone.

whom. As a result, in deciding on aid distribution, aid providers are less able to take account of what has already been provided from other sources.

### ***What roles are emergency committees and village leaders playing?***

Figure 4 shows the main actors involved in managing and distributing aid in the 39 affected villages visited.<sup>24</sup>

**Figure 4: Village actors involved in aid distribution and management**



Village emergency committees had been established in 27 of the 39 villages receiving aid. In all but one of these villages, only one emergency committee existed.<sup>25</sup> These committees tended to play a larger role in distributing assistance than in identifying beneficiaries and priorities.

The establishment of the emergency committee varied from place to place. In some villages, an NGO (often the first to arrive after Nargis) would establish an emergency committee to help channel their aid. Subsequent NGOs would then use the same committee when they arrived. In other places, villages would set up committees themselves because they saw that other villages had them. These committees would then be used by subsequent NGOs providing aid. By and large, NGOs preferred to use emergency committees rather than formal village government institutions as they felt that they were more representative of different groups in the villages and because they were set up specifically to aid relief and recovery.

Village emergency committees usually started off including members from different groups across the wider community, such as young people and religious leaders. In some villages their composition has since changed so that formal leaders<sup>26</sup>, and those close to them, play a larger role. The social impacts monitoring found wide diversity in the make-up of these groups: in some villages,

<sup>24</sup> In most villages, more than one type of village actor played a key role.

<sup>25</sup> In the village that has two emergency committees, one was a village-wide group and one was for channelling faith-based aid for one religious group.

<sup>26</sup> 'Formal leaders' denotes the village head, who chairs the village Peace and Development Council, which is responsible for local administrative functions such as organizing farm activities and fishing concessions, maintaining statistics, recording land transactions and registering births and marriages. Village heads are formally elected by community members from a pre-approved list of candidates, and tend to be native to their villages.

committee members were elected by community members from different stakeholder groups representing elders, youth, and religious groups, but rarely women; in others, membership was restricted to formal leaders. The survey teams found that most international providers of aid did not use the village committees to monitor distributed aid.

Interactions between these committees and formal village leaders varied. In some cases, formal village leaders made decisions on top of the committee, whereas in other cases they made decisions collectively. In some villages, the formal leader received the assistance and transferred it to the village emergency committee, which then distributed it to villagers. In other villages, village leaders (who tended to head the emergency committee) allowed the committee to take charge. In yet others, village leaders played a larger role themselves. Table 6 outlines the various dominant delivery mechanisms used in the 38 villages for which data were available.<sup>27</sup>

**Table 6: Dominant patterns of aid distribution**

<b>Main Delivery Mechanism</b>	<b># Villages</b>
1. Aid provider to committee and then to villagers	11
2. Aid provider to committee via village leader and then to villagers	10
3. Aid provider to village leader and then to villagers	6
4. Aid provider to village elders and religious leaders and then to villagers	4
5. Aid provider to committee via village tract leader and then to villagers	2
6. Aid provider to religious leaders and then to villagers	2
7. Aid provider to committee via religious leaders and then to villagers	1
8. Patterns 1 and 4	3
9. Not applicable (village not affected)	1

#### ***How transparent is aid?***

Although the diversity of mechanisms employed is understandable, especially for the relief phase when speed is of the essence, it has raised some problems within villages. The array of mechanisms used has led to some confusion amongst aid recipients. Further, it may have increased opportunities for diversion of funds. However, the research teams heard of only one concrete case of this in the 39 villages that received aid, when people paid bribes in order to receive motorised boats.

The amount of information shared about aid varied between villages. In 25 of 39 villages, meetings were held to share information about aid projects, but often the information provided was vague. Meeting minutes were kept in only five villages. Fifteen villages had kept some records on aid distributed, but no village had follow-up meetings to discuss progress and lessons learned.

#### **4. Equity of Aid**

##### ***How equitable do villagers believe aid is within their villages?***

As discussed above, many of the villages studied had issues with how aid was being distributed. Determining whom to assist can be very difficult because different forms of aid have different aims and different villagers have different conceptions of what a just distribution looks like. At times it makes sense to target particular groups who need more (the vulnerable) or where assistance

<sup>27</sup> It should be noted that while dominant patterns can be identified for most villages, often within a village some projects/forms of aid used different mechanisms. It is difficult to quantify this, but the analysis above gives a picture of the diversity.

provided might have spillover effects (for example, for landowning farmers who employ others as labourers).

However, informants in only three villages reported that overall aid was being targeted inequitably.<sup>28</sup> In some of these places, people felt aid was inequitable because certain groups had received less than others. In others, people accepted aid being distributed unevenly if it went to those whom villagers thought needed it most. In general, aid that targeted all in the village led to few problems. However, for many types of assistance this was not possible. Across the villages, a clear pattern emerged: where villagers felt they had a say in aid distribution they were more likely to accept some groups receiving more than others, even when they 'lost out' themselves. The lucky draw system for distributing aid was generally deemed to be fair. In many villages, communities redistributed assistance amongst themselves to limit aid inequities and the problems they felt it might cause (Box 6).

**Box 6: Local redistribution of aid**

In one village in Ngapudaw, most people were counted as "marginalised people" and received food cards given out by an international NGO. Only those with cards were eligible to receive food distributed by the aid provider. In practice, a slightly different system emerged. Villagers collected their quota of food but then pooled it at the office of the village food distribution committee. The committee then allocated the food equally to all "impoverished people" in the village, some of whom were not included in the "marginalised" group. People in the village, including the "marginalised people", said they were satisfied with the process, which they said helped ensure village stability.

Villagers in 23 communities felt that the vulnerable or marginalised were less likely to benefit than others. Respondents deemed widows, the elderly, the disabled, orphans, the chronically ill and the poorest as the most vulnerable village members. Immediately after Nargis, many aid providers targeted all households in villages in which they worked, giving no special attention to marginalised groups. Villagers supported them with additional food, shelter, employment and social care. Later on, some assistance was specifically targeted at them in several instances, such as the provision of new houses to the elderly and cash grants to widows. In most communities where this occurred, communities accepted this targeting, as they felt those who received the aid were most in need.

**Box 7: In need of reliable information**

A 73-year-old woman in a village in Labutta lost all her family members, including her husband, to Nargis. She was listed as being among the "marginalised" people and received Kyat 40,000 from an international provider of aid. However, later, the money was taken back from her. She did not understand why and was told she was not on the list for support. Another project gave her Kyat 70,000 in livelihoods support, saying she had to later return Kyat 10,000. This money would be pooled and allocated to the people who did not receive any assistance in the first round. She was confused and said if she knew in advance that the support came with such conditions, she would not have accepted the money. She feels it is contributing to her debt burden.

Tensions, with the potential for escalation into broader conflict, emerged in only two of the nine religiously heterogeneous villages in the sample. In these villages, faith-based groups targeted aid only at members of the same religion (see discussion in Section 4).

<sup>28</sup> Note that often in the same village some people thought aid had been targeted in a fair way whilst others did not. Villages counted here include only those where sizeable proportions of the population or specific groups felt aid had been inequitable.

In some cases, as in Box 7, recipients of assistance did not understand the conditions under which aid was provided to them.

### ***How equitable do villagers think assistance is across villages?***

All but four villages that received aid felt they had received less assistance than neighbouring villages.<sup>29</sup> In some cases, this reflected reality, and resulted in a decrease in inter-village cooperation. Some villages were less affected than others, were not officially recognised (for example, registered as villages), were remote and difficult to reach, or did not have a dominant religious organisation providing aid. All these factors limited the amount of aid provided.

Yet often those who felt they had received less help than others actually appeared to have received *more* than neighbouring villages. In these cases, though, they lacked clear information about cross-village aid distribution and so their perceptions did not reflect reality.

## **5. Complaints Mechanisms**

Villagers did not know of any project-related complaints mechanisms in any of the 39 villages that received aid. This meant that their options for complaining if assistance was deemed to be inequitable or ineffective were limited.

### **Box 8: Complaining about aid**

In one village, an aid provider set up a village emergency committee. The emergency committee distributed some of the assistance to the village but kept a sizeable share for committee members. The villagers were not happy with this and complained to the local army commander. The commander negotiated with village leaders, and a new village emergency committee was established made up of four young men and women. The committee delivered, managed and provided assistance transparently and was popular amongst the villagers.

In another village, the formal leaders and village emergency committee divided the community into three groups: the better off, the moderately well off, and the poor. Villagers expected that this categorisation would be used to decide on aid distribution, with the poor receiving more than others. However, when distributing aid the committee did not use this categorisation. The assistance was insufficient for all so the lucky draw system was employed. The poorest families of the village protested against the village leader for not following the pre-identified categorisation of social classes. The village leader was forced to resign.

A variation on this case occurred in a village in Dedaye. When two international providers of aid visited the village to provide assistance, they asked the emergency committee to classify people into three groups according to their level of need. However, the committee refused to do this. As a result, the aid was never delivered. This led to impatience among labourers in the community. They told the researchers that they planned to wait for the aid providers to come again, and would try to meet them directly to tell them the emergency committee would not help and that they would undertake the classifying task instead.

In two of the villages in the pre-test, staff of an aid provider told villagers during aid distribution in the relief phase that they had no time to settle complaints. They threatened that if villagers complained they would be dropped from the beneficiary list. As such, villagers chose not to complain.

<sup>29</sup> Two villages reported having received more assistance than nearby villages. Villagers said this was because of proactive networking by villagers and pre-existing personal connections with private donors.

Villagers experienced some cases of unfair aid distribution. Some people received more aid than others did, and some aid was ineffective because of its lack of suitability to the local context. However, across almost all villages, villagers either did not complain to the authorities or did not know how to voice their complaints.

There were some exceptions across the villages studied. Box 8 above outlines four cases where community members complained about aid targeting and distribution, with mixed results.

The cases show that systems of checks and balances do exist within some communities to ensure that aid is delivered transparently. Although in some cases complaints were not effective, in others they led to changes being made in who controlled aid distribution. The cases also show that the absence of effective complaints systems can reduce the effectiveness of aid and that it is often particularly difficult to complain to aid providers outside of the village.



### SECTION 3: SOCIOECONOMIC IMPACTS

The villages studied in the social impacts monitoring have a diverse occupational mix. In almost half, farming is the dominant occupation; in about a quarter fishing dominates. However, most villages had a mix of farmers and fishermen. The proportion of labourers without land tended to be high. In 55 percent of the villages studied, more than half the population is landless; in five of these villages over 70 percent are landless labourers.<sup>30</sup>

The monitoring shows that there have been large impacts on the socioeconomic life of many Delta villages. Two-thirds of fishing villages were severely affected, accounting for almost four-fifths of all deaths in the surveyed villages. By contrast, around one-third of farming villages suffered high or moderate levels of damage and loss (Table 7).

**Table 7: Predominant livelihood by level of damage and loss**

Predominant livelihood	Level of damage and loss			
	High	Moderate	Low	Slightly
Farming	2	3	4	7
Fishing	7	2	1	1
Peri-urban	0	1	6	1
Control	0	0	3	1

Regardless of the predominant village livelihood type, the livelihoods of farmers, fishermen and labourers have all been severely affected. Levels of aid effort have not been sufficient for these groups to recover. Many villagers are getting caught in a vicious debt trap that could have profound economic and social impacts. Early signs of migration from Nargis-affected villages are observable.

#### 1. Impacts on Farmers

Before Nargis, around 50-60 percent of families in Delta villages got their income from agriculture.<sup>31</sup> In all but one of the 40 villages studied, some villagers made their living from farming, including those in peri-urban areas and villages where fishing is the primary occupation. The impacts of Nargis on farming are thus felt across the Delta.

##### *Farming before Nargis*

Land in Myanmar is owned by the state. Farmers are granted land use rights each year with renewal dependent on them using the land productively in the past year. The primary crop grown in the Delta is rice, which is generally harvested twice a year. The early monsoon season involves cultivating rice in rain-fed fields with rice grown from July and harvested in December. The summer crop is grown from mid-December and harvested in April. The yield per acre of early monsoon paddy is normally 20-25 percent less than that of the summer paddy. However, summer paddy is more labour intensive and demands more inputs for irrigation, ploughing, fertilisation and pesticides. As a result, the net income per acre between the early and summer paddy does not differ greatly. The PONJA

<sup>30</sup> See Annex B for a full village-by-village breakdown. In some villages, fishing is the primary occupation so owning land is less important for people's occupation. However, land is often used informally as collateral for loans and as such is important if villagers (farmers or fishermen) are to accumulate wealth.

<sup>31</sup> United Nations Development Programme, Ministry of National Planning and Economic Development and United Nations Office for Project Services (2007). *Integrated Household Living Conditions Survey in Myanmar*, Poverty Profile. Unpublished.



estimated that before Nargis, the 13 hardest-hit townships produced 3.3 and 1.0 million metric tons in the early and summer harvests, respectively.<sup>32</sup>

Farmers begin land preparation in June using draught cattle, buffalo or hand tractors. There are two types of sowing methods: direct sowing (mainly for areas with sandy clay soil) and transplanting (for clay loam soil). The former involves broadcasting seed directly: the amount of seed needed is high but labour costs are low. More preparation is required for transplanting, including preparing nursery beds, erecting fencing, and sowing the seed. Seedlings are transplanted in the field when they are 30-40 days old. Women, who often form cooperatives for this work, usually lead transplanting.<sup>33</sup> Farming usually employs more labourers, male and female, than fishing.

### ***The direct impacts of Nargis on farming***

The fieldwork showed that there has been a significant reduction in productivity and the amount of land that can be farmed. Data were available in 31 of the 39 villages affected by Nargis where monitoring took place. Farmers estimated that crop yields would stay the same or, in the case of one village, improve in only seven of these villages (Table 8). In over three-quarters of villages, yields of paddy are estimated to decline. 45 percent of villages reported declines of between 13-40 percent, and a large share said that yields would decrease, although they were not sure how much. One highly affected village in Bogale reported reductions in crop yields of 60 percent. Thirteen of the villages visited are only able to grow one crop this year.<sup>34</sup>

**Table 8: Reduction in yields of paddy**

Type	Perceived change in crop yields (compared to last year)	# Villages*	% Villages
1	Remain the same	6	19.4
2	13-25% reduction	7	22.6
3	30-40% reduction	7	22.6
4	41-50% reduction	1	3.2
5	50-60% reduction	1	3.2
6	Yield will decrease but do not know by how much	9	29.0
<b>Total</b>		<b>31</b>	<b>100.0</b>

\*: No data available for eight affected villages.

There are a number of reasons for the reduction in crop yields, most of which were foreseen by the PONJA. Salt water intruded large areas of land, although in some cases the monsoon rains washed away salt and so decreased salinity. An additional problem was that fields became infested with small crabs and snails, which ate away at seedlings. More important was the loss (and often inadequate replacement of) key agricultural inputs, such as draught animals, mechanical equipment, and seeds.

Across the villages studied, the proportion of draught cattle reported killed by the cyclone was large. In some villages, all cattle died. Many of those who survived were traumatised or weak with disease and unable to work effectively. Before Nargis, relatively few farmers used mechanical ploughs and tractors. Traditionally, farmers store seeds for the next crop season and do not need to

<sup>32</sup> Tripartite Core Group (2008a), *op. cit.*, p. 83.

<sup>33</sup> Because of the shortened planning season after Nargis seeds were broadcast rather than nursed and seedlings transplanted. Since transplanting is a female-led activity, women lost an important source of seasonal income (see also Section 2).

<sup>34</sup> The social impacts monitoring team heard from other villages that, compounding the reduction in yield, farmers who have been able to grow rice cannot sell it because people are still receiving free rice.

buy new seeds unless they want to change to different types than they have used before. In every affected farming village, seed storage facilities were destroyed or severely damaged by Nargis. Seeds got wet and were germinated by the rain. The supply of usable seed across all affected villages was thus reduced significantly.

### ***The impacts of aid for farmers***

The replacement of agricultural inputs was a major component of post-Nargis aid as soon as a month after the cyclone hit. Since then, it has risen in importance as other forms of aid such as food have started to be reduced (see Section 2). The in-depth social impacts monitoring found a mixed picture of the effectiveness of such aid.

The provision of seeds, tractors and power tillers had mixed impact in the villages studied. Seeds provided were often not compatible with the local agro-ecology and were of mixed varieties, unsuitable for the Delta. Tractors and tillers were also often not suitable to local conditions, for example because they were fitted with wheels that could not navigate the Delta's muddy terrain. Lack of fuel has been a problem as well. As a result, in some of the villages studied, the research teams observed such farming equipment lying unused. Another issue has been problems that farmers in some villages have had in sharing implements, animals and equipment provided to groups. Where pre-existing farmers' groups did not exist, there were difficulties in allocating time for each recipient to use the aid given. In some cases, this provided opportunities for elite capture, with richer farmers using the equipment first and others having to wait long for their turn.

In a number of villages visited, some draught cattle and buffalo provided died a few days after arriving at the village due to excessive travel, lack of pasture, or problems adapting to the local weather.

### ***Emerging issues***

The reductions in harvest will not only hurt farmers in the short term. Farmers' lack of capital—with assets and cash destroyed in the cyclone, and reduced profits from the first post-Nargis harvest—risks contributing to longer-run problems. Farmers were worried that if they were unable to repay their loans in full next year, it would be very hard for them to borrow more and their land might be lost in order to repay their outstanding debts. There is thus a risk of a vicious cycle emerging with season-on-season reductions in cultivated land increasing poverty, both for farmers and others reliant on them for work.

Before the farming season, farmers usually borrow money from moneylenders who live in town, repaying after the harvest with a c. 5-10 percent interest rate per month, and in some villages as high as 20 percent per month. The cyclone came just after the harvesting of the summer crop, most of which was destroyed. Farmers already had a debt burden for the previous year and found it difficult to access new loans without settling old ones.

This lack of available capital means that a large amount of land that could be farmed is lying fallow.<sup>35</sup> The more land farmers own, the more capital they need and the more they will have to borrow, especially given that Nargis was as likely to affect the land of large-scale farmers as that of small-scale farmers. Large-

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<sup>35</sup> In 36 percent of affected villages visited farmers could not sow their full land. Even in areas where they were able to do so, yields were low because of the other issues discussed in this section.

scale farmers have received very little assistance. Many have thus not been able to plant much of their land and consequently are suffering from rising debt.

Those further up the market chain have also been affected. Village level paddy buyers and middlemen have been unable to restart their businesses. Many of their rice mills and storage facilities were either severely damaged or destroyed and in many cases they have not received repayment of loans extended to farmers.

These issues are discussed in more detail in the section on indebtedness below.

## **2. Impacts on Fishermen**

All but twelve of the affected villages visited had resident fishermen. Many of the villages categorised as farming had large amounts of fishermen too.

### ***Fishing before Nargis***

The fishing industry in the Delta is based on distinct roles for different groups, each of which extracts profit at different points in the value chain. At the top is the 'tender owner' who lives in the township capital; below him is a middleman, the 'fish collector', at the village level; and further down are regular fishermen. Fishing rights for rivers, streams and creeks are auctioned off by the government. The tender owner appoints better-off fishermen from the respective area as middlemen. The tender owner lends capital to the middleman who in turn provides capital and tools to the fishermen and collects fish on a daily basis. Generally, fishermen have to sell their entire catch to the middleman who deducts half the amount for repayment and pays the other half to the fishermen to make a living. A fourth group works in supporting roles such as weaving nets and sorting various kinds of fish.

The fishing season usually starts in June (Nargis hit in May) and ends in February. The first three months is the peak season for fishermen; the amount of fish caught gradually decreases in the last three months. Every month, fishermen catch large amounts of fish on the fifteen high tide days and fewer in the remaining low tide days.

### ***Impacts of Nargis***

Nargis affected this system in a number of ways. After Nargis, the fishery department postponed issuing fishing permits until the end of August 2008. This allowed fishermen to fish freely in their neighbouring areas during the first three months after the cyclone.

After Nargis, tender owners could not afford, or did not want, to provide sufficient capital to the fishermen to repair or buy new fishing boats and nets. In the pre-test villages, fishermen caught only 20-30 percent of what they used to catch before the cyclone, which was just enough for them to eat. (Figures on the percentage decrease in fish yields were unavailable for the full set of villages.)

In around one-third of the villages with substantial fishing populations, some fishermen were able to fully recover their livelihoods (Table 9). Around the same number of villages have seen only a few fishermen resume their livelihoods. These villages, and those where fishing livelihoods are only partially recovered, were less likely to have received fishing inputs.

**Table 9: Provision of fishing inputs**

<b>Resuming Livelihood</b>	<b># Villages</b>	<b># Received Inputs</b>	<b># Not Received Inputs</b>
Fully	8	5	3
Partially	11	6	5
Only a few people resume	7	2	5
<b>Total</b>	<b>26</b>	<b>13</b>	<b>13</b>

A number of fishermen have already had to change to less productive forms of fishing or, in some cases, have become labourers (Box 9).

**Box 9: Difficulties in restarting fishing**

Before Nargis, fishing and farming were the main livelihoods in one moderately affected village in Dedaye with 59 fishermen. Since Nargis, 15 fishermen have gone out of business because they lack fishing materials. The other 44 fishermen are now fishing again but are facing great difficulty. These fishermen have had to take out loans of about Kyat 600,000-700,000 to buy new boats and fishing gear. If business is bad and they cannot pay back the loans before the fishing season ends, they will have to sell all their fishing materials to repay the loans.

Lack of capital and access to credit has meant that many fishermen have been unable to purchase boats, nets and other tools (Box 10). This has led many of them to change from catching river and sea fish to harvesting prawns in nearby ponds, as this requires less investment. Instead of fishing with nets, some small-scale fishermen have started to catch crab with low-cost bamboo cages. These forms of fishing make much lower sums of money. There are also reports of some migration of fishermen to other areas, such as Tanintharyi Division in southeast Myanmar.

**Box 10: Lack of capital undermines a widow's recovery**

One 45 year-old woman with six children, interviewed in a fishing village in Pyapon, had two family-owned motorboats which were damaged by Nargis. The cyclone also destroyed her family's house and fishing nets. Her husband died a few days after Nargis. Her capability to resume fishing has been undermined by a lack of money to repair the motorboats and to buy the necessary fishing equipment. She does not know how she can resume the family business and feed her children.

The downturn in fishing observed since Nargis has had knock-on economic impacts. Small- and large-scale fish processing, where fish is dried or turned into fish paste or fish sauce, have been affected. The research teams heard reports of many skilled labourers, including many women, having lost an important source of income and being left unemployed as a result.

### **3. Impacts on Labourers**

The PONJA hypothesised that Nargis could have regressive impacts, with those in supporting occupations suffering more than those with land.<sup>36</sup> Six months on, this appears to be playing out. Those without land, who make up a large proportion of the population in the villages visited, have seen a massive reduction in work opportunities. PONJA also noted that in the first two months after Nargis casual labourers were less likely to receive livelihoods support than others, because it was assumed that helping those who employed them would create more widespread employment. Again, this trend has continued. The PONJA predicted that employment opportunities were likely to rise again once recovery became

<sup>36</sup> Tripartite Core Group (2008a), *op. cit.*, p. 150.

more advanced. However, the slow speed with which village economies are recovering means that this appears to be far away.

### ***The role of labourers before Nargis***

Large proportions of people in affected areas were landless labourers before Nargis. A 2007 assessment of four townships in the Delta found 51-71 percent of households landless.<sup>37</sup> The proportion of landless labourers in the villages visited ranged from 16 percent in one village in Labutta to 88 percent in a village in Ngapudaw. Over half of the villages had more than 50 percent landless labourers.

Before Nargis, labourers undertook a variety of forms of work. Some worked in the fishing and farming sectors as permanent labourers. The fishing business employed men as full-time labourers and women as part-time labourers on a daily basis. Women repaired nets and sorted fish. Some poor women collected fish from middlemen, sold the catch in nearby villages and then repaid the middlemen, keeping some money as personal profit. In the farming sector, labourers provided help in sowing, transplanting, tending crops, and helping draw in the harvest. Many households earned money by doing seasonal jobs such as catching fish and crab, harvesting nipa<sup>38</sup>, logging, making charcoal, and thatching.

### ***The impacts of Nargis on labourers***

Labourers were severely affected by Nargis. As poorer members of their communities, they were more likely to have lost their houses, which were often made of light bamboo. As with other villagers, they often lost all their household assets (such as a small vegetable patch or small livestock such as chickens or ducks) and many family members.

Before Nargis, labourers, who often owned fishing nets or even small boats, could pursue subsistence fishing, often a husband and wife activity. Nargis destroyed their boats and fishing gear, but labourers have not yet received replacements, which has compromised their predicament even further.

There has also been an indirect impact: Nargis has drastically reduced the opportunities for paid work for labourers. Landowning farmers now cannot afford to employ as many labourers as before. Less land being cultivated means that there are fewer opportunities for hired labour. In the villages visited, farmers could employ only one third of the labour force that they hired before Nargis.

The impacts on the fishing industry have also reduced the demand for hired help. Home-based micro-enterprises such as fishing, net-knitting and assembly, which employ mainly women and family members, have been stalled because fishermen cannot resume business. The downturn in fishing has also reduced work on other post-harvest tasks that usually provide opportunities for part-time employment for women, widows and the poorest in villages, such as sorting, packing, delivering and marketing fish. This has led to a large reduction in opportunities for these groups to earn enough for a basic living.

### ***The impacts of aid***

Compared to other groups, labourers have benefited little from recovery assistance, most of which has been focused on small- and medium-scale

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<sup>37</sup> United Nations Development Programme et al. (2007), *op. cit.*

<sup>38</sup> A type of palm often used for thatch

fishermen and farmers. These groups are arguably better off than most labourers. Presumably this aid in part aims to create jobs for the labourers. However, since the quantity and the quality of the aid often did not meet needs, credit has been scarce, and planting was delayed, production has not resumed as anticipated. Furthermore, better-off farmers, who used to provide the greatest amount of labour opportunities in villages, have received less assistance than smaller-scale farmers. Consequently, because farming and fishing have not yet recovered in any of the villages studied, and farmers and fishermen themselves are still struggling, many labourers find themselves without work and are struggling to find enough money to get by.

#### 4. Indebtedness

An increasing debt burden is the more recurrent theme across all the affected villages visited (Table 10). There is a risk of a vicious circle: difficulties repaying existing (pre-Nargis) loans lead to difficulties accessing new loans; without new loans (and without recovery assistance) farmers and fishermen cannot buy equipment, recapitalise their farms or fishing businesses or hire labourers; and as a result, they produce less which leads to lower incomes and greater difficulty repaying existing loans. If the economic slump in the Delta continues, and village economies are not recapitalised with grants, the longer-term economic and social impacts on village life are likely to be profound.

**Table 10: Key debt issues**

<b>Issue</b>	
Average debt of farmers (per acre)	Kyat 70,000-100,000
Monthly interest rates (for those with collateral)	c. 5-10 percent
Monthly interest rates (for those without collateral)	10-20 percent

#### ***Borrowing before and after Nargis***

Even before the cyclone, debt levels were high. In the 2005 rainy season, 43 percent of households in the Delta were in debt compared with a national average of 33 percent.<sup>39</sup> Credit drove the Delta economy before Nargis. Better-off farmers and fishermen borrowed money from moneylenders in nearby towns with interest rates of 5-10 percent per month. Repayment could be made either in commodities (especially paddy) or cash. Fishermen borrowed money from fish collectors at the village and township level. Interest was not formally applied, but the fishermen were obliged to sell their catch to the collectors at below-market prices. Marginal farmers and fishermen accessed credit from better-off villagers in the same or nearby villages, usually at an interest rate of 10-20 percent per month. Interest rates were higher further away from urban centres, where people had fewer networks with businessmen and moneylenders, and where there was less competition among providers of credit.<sup>40</sup>

Although interest rates were high and much of the value generated by the labour of village borrowers went straight back to moneylenders, villagers interviewed during the PONJA said that, before Nargis, paying back debt was not normally a problem (although it stifled capital accumulation and thus stunted development).

Nargis was a massive shock to the system. With their assets destroyed and fish and farm harvests massively reduced, villagers found themselves without the

<sup>39</sup> United Nations Development Programme et al. (2007), *op. cit.*

<sup>40</sup> Another reason for higher interest rates in remote villages is that moneylenders are less able to monitor what is happening in the villages. Villagers told the research team that moneylenders normally proactively check progress on harvests, especially when borrowers are unable to pay. They cannot do this easily when a village is very remote.

income they would normally use to pay repay debts, necessary if further credit was to be obtained. At the same time, in the absence of cash aid, the need for money to replace basic assets such as shelters and for day-to-day consumption rose. Meanwhile, their debt totals were rising.

In every single village studied, villagers were worried about being able to service their debts and about having enough money for consumption in the following year. Even if they thought they could produce enough to cover their loan repayments, they feared they would still have to borrow money for consumption and thus would remain indebted. Few villagers believed they could cope with snowballing debt.

### ***How much debt are people taking on?***

On average, the field research found that land-owning<sup>41</sup> farmers tended to borrow Kyat 70,000-100,000 for every acre they farmed. On top of this, many farmers needed to repay the government for immediate assistance provided after the disaster in the form of loans, such as for seeds, diesel and tractors. These sums are cumulatively very high, and almost impossible for many farmers to pay off given the widespread reduction in farming yields.

Fishermen in the past borrowed money to buy fishing accessories, although the amount of investment varied by the type and scale of business. In the aftermath of Nargis, a new boat and fishing gear cost perhaps Kyat 700,000-1,100,000. The cost of a boat varies from Kyat 200,000-300,000, depending on the quality of the wood. Fishermen need different kinds of fishing nets for different seasons and types of fish. A full set costs a small fisherman from Kyat 500,000-800,000. The boat and gear can be used as collateral.

### ***What are the likely implications?***

The likely implications of this debt trap are profound: (i) debt totals will rise; (ii) people will be unable to get further credit; (iii) village economies will remain depressed and village employment opportunities reduced, leading to higher levels of migration out of villages in search of employment; and (iv) farmers and fishermen risk losing their assets and user and fishing rights to moneylenders, effectively becoming indentured.<sup>42</sup> Box 11 provides an example of the first stage of this cycle.

#### **Box 11: When ends do not meet**

A man in a village in Dedaye took out a loan of Kyat 500,000 for paddy cultivation and to raise ducks. He has to pay Kyat 50,000 in interest every month. However, he is able to pay only Kyat 5,000 and the remaining Kyat 45,000 is added to the loan amount every month. He has to settle all his loan and interest by January 2009 (after harvesting). The man does not know how long he can continue this way. He fears that if he cannot settle, the moneylender will take his paddy harvest equivalent to the amount of his loan and interest. Furthermore, he borrowed ten baskets of paddy seed from neighbouring farmers and will have to pay 20 baskets in return after the harvesting season.

First, because of people's inability to repay pre-Nargis debt, and to keep up with interest payments, debt totals will rise, making it unlikely that borrowers will be able to meet their payments. The usual pre-Nargis cycle of borrow-harvest-repay

<sup>41</sup> All land in Myanmar is legally owned by the state but people are granted user rights to the land. When this report refers to those who 'own' land it refers to those who possess these user rights.

<sup>42</sup> An indentured person is under contract of an employer for some period of time to pay off a loan with direct labour (instead of currency or goods) in exchange for his transportation, food, drink, clothing, lodging and other necessities.

has been broken, and fast-rising debt totals make it ever less likely that this normal cycle can be restored. This has an impact on paddy production and marketing. Usually farmers have to settle old loans after the harvesting season (December) in order to access new loans for winter and summer crops. Every year, paddy buyers come to the village and provide cash advances to buy paddy. However, it is expected that farmers will now have to look for the paddy buyer in this harvesting season.

In the case of fishermen, the middlemen could not deduct half the amount as loan repayments as before and in turn could not repay the tender owner. Fishermen told the researchers that as the number of fish they catch declines towards the end of the season, they would not be able to settle their loans. If this were to happen, villagers said would not be granted the right to catch fish next year.

Second, people's inability to pay off debt makes it more difficult for them to get further credit. Villagers reported that since the cyclone it has been much more difficult to gain access to loans. Although interest rates have remained largely unchanged, moneylenders do not provide as much capital as they used to: they themselves are faced with a much larger number of would-be borrowers combined with a much-reduced likelihood that borrowers will be able to meet loan repayments. Although some borrowers were able to get money from different sources, on the whole gaining access to new loans to restart businesses has become almost impossible (Box 12).

**Box 12: Worker in a debt trap**

One 40-year-old man in a highly affected village in Bogale lost his wife and two children during Nargis and was left with one daughter and three boys. After the cyclone, he went to Bogale to ask for help for the village. He received fifty bags of rice from an international provider of aid. The villagers also chose him as a representative for the distribution of supplies from another aid provider. Although he received aid from aid providers, he has to struggle for his family's survival. He lost all his paddy and fruit in the cyclone and could not repay his debt. He cannot get a new loan from the moneylenders. As a father of four young children he has had to take on the tasks his wife used to do for the family. He is now working as a farm labourer to try to pay back the loan and earn some money for the family's survival, but work is scarce.

The inability of farmers, fishermen, and better-off villagers to repay their loans and get more credit also reduces available credit for the poor and landless. Traditionally, landless families have managed to get a limited amount of credit from better-off farmers in the village, albeit with high interest rates (approximately 20 percent a month). In the past, many landless labourers took money as an advance on their wages at 50-75 percent of the daily wage rate in the village. With work limited, this source of funds has dried up. When short of funds, some labourers have traditionally been able to make ends meet by buying necessary items at village shops on credit. But if they are not able to pay back existing loans, they are less likely to be able to do so.

Third, the inability of farmers and fishermen to obtain capital is threatening not only their own livelihoods but, especially in the case of larger-scale farmers, those of the poor and landless whom they employ. Given the high proportion of labourers in Delta villages, this means that large numbers of people will be affected by such reduced levels of local employment opportunities, leading to the risk that villagers will start to migrate out of Delta villages in search of livelihood opportunities elsewhere (see below).



Finally, if the current trend continues, there is a risk that farmers and fishermen will effectively become indentured, leading to rising numbers of casual labourers and a redistribution of assets to a few wealthy people (from inside or outside the village). Many fishermen feared that they would not be given licenses to fish if they could not pay back money borrowed from those higher up in the chain. Farmers also feared losing their assets.

Here, the picture is somewhat different from the scenario outlined in the PONJA. The PONJA had identified the potential for land redistribution through Nargis, on the basis that farmers are granted annual land user rights if they can show they have used land productively in the previous year, something they would be prevented from doing by the disruption to harvests caused by Nargis.

The social impacts monitoring found a different dynamic at work, but one equally significant for many farmers. At the time of the research, villagers did not report any formal land redistribution or loss of land use or fishing rights. Often land is registered under the names of villagers' ancestors, a practice that makes it easier to keep land in the family when a farmer dies. The system of borrowing among farmers and moneylenders was also not one where farmers put up their formal land use rights as collateral; rather, it was informal and based on long-standing practices and expectations. Farmers thus did not fear losing formal rights. They did, however, fear that if they defaulted on their loans, moneylenders would try to take over their land even without the formal user rights. They also feared that even where this was unlikely (for instance, because moneylenders were too far away), all the profits they generated through farming would immediately go to servicing their debt, meaning they would never be able to break their debt cycle.

## 5. Migration

Of the 39 affected villages visited, fourteen have had people leave the village to try to find work elsewhere. So far, the proportion of people leaving has been small, but if the economy of the affected region remains depressed, it is possible that increasing numbers will leave the Delta.

### ***For how long are people leaving their villages?***

Despite the often-desperate situation in Nargis-hit areas, migration from affected villages was initially slow for one main reason: job opportunities, in other Delta villages or in township capitals and cities beyond, are few and far between. In some of the villages studied, small groups had left their village to seek work in Yangon or in township capitals. However, many soon returned, normally because they could not find adequate work (Box 13).

#### **Box 13: Women migrating to Yangon**

Six young women left one village in Bogale soon after Nargis in order to work for a garment factory in Yangon. They decided to go there for two reasons. First, they were afraid of experiencing another Nargis-like disaster. Second, there were no job openings in their village, which was highly affected by Nargis. So they travelled to Yangon. However, the job they got there was not profitable. They only received Kyat 30,000 per month as salary and they had to spend Kyat 20,000 on food and Kyat 6,000 for commuting. Finally, all of them decided to quit their job to return to the village. Three had already returned when the research team visited.

Yet over time, out-migration has started to increase. In particular, unemployed labourers have started moving in larger numbers. Some of this is for seasonal work. Seasonal migration of landless labour occurred in the Delta for farming, fishing and salt farming even before Nargis. After Nargis, more seasonal labour

migration could be observed during harvest time, with people flowing to areas that were less affected, and hence where demand for labour was higher. Villagers expected that more people would migrate temporarily (for instance, to work in nearby salt farms) than in previous years.

Increasingly, people have started to leave their villages in search of longer-run work opportunities. This reflects a lack of confidence in many villages that the situation will improve in the near future.

Overall, the number of people migrating from Delta villages is still low as a proportion of the village population. However, the research identified real potential for continued increases in out-migration if village economies remain depressed and if food and water security become more prominent issues, which would have deep and lasting impacts on village life in the Delta.

### ***Other population movements***

Some who were displaced by Nargis have yet to return.<sup>43</sup> In one case the research team heard of, this had led to tensions in the host community (Box 14).

#### **Box 14: Displaced persons who have not returned**

In one case, many people came to one village in Bogale after Nargis because it was less affected than neighbouring villages. Some who came have still not returned to their villages. This created difficulties in finding land to accommodate those who had arrived. Finally, the village authority seized the land of one man and distributed it to the displaced people without the owner's consent. This has caused tensions.

The population of several surveyed villages has increased because more people who used to live outside the village on farms have moved back after Nargis (Box 15). Some had their own house in the village where elderly family members were living, whereas others had to build a new house or stay with relatives.

#### **Box 15: Local migration**

Villagers in one community in Bogale reported that before Nargis there were two different kinds of households in the village: those who lived in the village and others, especially farmers, who stayed on the farm. Those who stayed on the farm did not have the strong houses and big trees that protected many in the village. A large number were killed by the cyclone. After Nargis, those who survived came back to the village mainly to receive aid, but also to be with their relatives in a safer place.

<sup>43</sup> The research teams did not find any large-scale displacement in the surveyed villages, all of which had been established some time before Nargis.



## SECTION 4: SOCIAL IMPACTS

The social impacts monitoring assessed the impacts of Nargis and aid on social relations and cohesion within affected villages. The findings point to strong and growing social capital and collective action capacity. Relations between men and women, and young and old, have also improved as villagers work together to overcome challenges. Ethnic and religious relations remain strong although in some cases faith-based aid has created tensions. The monitoring also found evidence of formal and informal leaders working together, and with communities, to address post-Nargis problems. Where this happened, recovery was progressing more quickly.

### 1. Social Capital, Collective Action and Conflict

#### *Mostly strong collective action post-Nargis*

Before Nargis, social capital and cohesion were strong in Delta villages. The relative scarcity of outside development resources, and limited interaction with the state at higher levels, meant that communities had to find ways of working together to improve their villages and manage public goods.<sup>44</sup> The PONJA hypothesised that Nargis would create potential for social capital to increase further at least in the short term, as communities faced the collective challenge of cyclone recovery.<sup>45</sup>

This hypothesis was borne out by the social impacts monitoring, which found that in most villages, social capital was strong and growing. Villagers in the communities studied had worked together to overcome immediate post-Nargis challenges and employed survival strategies requiring a wide range of forms of collective action and problem solving. There were various instances of successful cooperation. In several villages, villagers renovated and took shelter in less damaged houses, and then collectively rebuilt one another's destroyed houses in turn. Villagers also collectively rehabilitated public goods. A wide cross-section of the population (men and women, young and old) participated in renovating paths, rebuilding schools, cleaning debris, renovating ponds and restoring purified drinking water. In most villages, respondents said that inter-group relations were normal or good and that villagers were more or similarly united six months on from Nargis compared to before the cyclone.

Strong social solidarity also led to the (relatively) rich and the less affected helping the marginalised and most affected (Box 16). Many landowners lent money to and shared food with landless villagers, who also helped each other with what little they had. Village heads provided assistance to widows, the elderly, the disabled and the mentally ill. Villagers also helped vulnerable and marginalised people in their communities by building homes, contributing to funeral expenses and arranging accommodation for old people with no relatives.

In some communities, villagers and their leaders redistributed aid within their villages away from those originally targeted by aid providers in an effort to ensure social solidarity. In one village, the aid provider targeted aid at vulnerable or marginalised people, but the village emergency committee retargeted it to cover the wider population. Villagers said that this was to preserve village unity.

<sup>44</sup> See the PONJA for a discussion of pre-Nargis social relations. Tripartite Core Group (2008a), *op. cit.*, pp. 2-3.

<sup>45</sup> Tripartite Core Group (2008a), *op. cit.*, p. 152.

**Box 16: Shared aid**

Immediately after Nargis, when aid distribution was delayed, a respected villager in one village shared rice, which he had received from his brother, with the whole village. His brother had brought 15 bags of rice for him when he visited after Nargis. When he arrived in the village, he discovered the whole village had been suffering from starvation and he provided an additional seven *pyi*<sup>46</sup> of rice to every household in the village. The whole village was overwhelmed with gratitude and the story of the kind villager's family has been told repeatedly to this day.

***Why is social capital weaker in some villages?***

There were however some exceptions to this strong and growing capacity for collective action. A look at these examples suggests that social capital was damaged when villagers perceived aid distribution to be inequitable or to have excluded certain groups while others benefited. In a few cases, discussed in the inter-religious relations section below, religious groups provided assistance only to members of their own faiths. This kind of exclusive faith-based targeting, which was the exception much more than the practice, caused social tensions.

In other villages, tensions arose over the targeting of aid to vulnerable people for house reconstruction. In these instances, a lack of transparency and information about the way that aid was targeted caused villagers to become suspicious about each other and of the village emergency committee.

Finally, social capital was damaged when promises about aid were unfulfilled and villagers perceived certain groups in their community to have benefited over others (Box 17).

**Box 17: Aid inequality can spoil village unity**

One low-affected village in Dedaye had two areas: an inner part occupied mainly by labourers, and an outer part occupied by farmers. A member of an ethnic association visited the village two weeks after Nargis, because he was a friend of a labourer living in the inner village. All villagers were happy when he promised he would provide 17-24 corrugated iron roofing sheets for each household. However, in practice, only the 48 households of the inner part of the village received iron sheets, not the 260 in the outer part who also thought they would receive them.

The people from the outer part of the village made another request to the man for iron sheets but at the time of the research had yet to receive anything. This had fed discontent and tension. Tension among adults also spilled over to children: villagers said that inner-village children had started throwing stones at outer-village children because of the tension and vice-versa. Inequities in aid provision had thus damaged village unity and caused social division.

***How much crime and violence has there been since Nargis?***

In all but four villages visited, villagers said that crime rates had not risen since Nargis and remained low. In addition to the case of trauma-related violent crime mentioned in Section 2, the research teams heard evidence of some land conflicts, one of which became violent (Box 18), and a few cases of domestic violence (explored in the next section).

<sup>46</sup> One *pyi* is about two kilograms. One *pyi* was based originally on the weight of eight condensed milk tins.

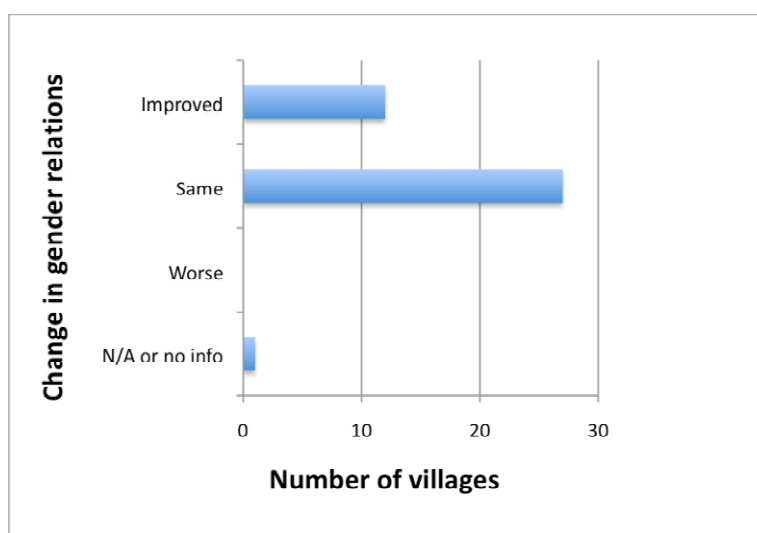
**Box 18: A deadly land conflict**

Two brothers-in-law in a village in Kyaiklat owned land next to each other and had worked together for years. After Nargis, they disputed the border between their fields, which was less clear after Nargis. As tensions mounted, one man lost his temper and stabbed the other who died.

There have been some cases of people taking animals and items found after Nargis that do not belong to them. This has led to some tensions. But generally, social solidarity has outweighed incentives for opportunistic crime.

**Gender relations and the role of women**

Overall, villagers thought that relations between men and women had either remained the same after Nargis or strengthened (Figure 5). However, although Nargis did not have much impact on villagers' perceptions of how good gender relations were overall, it did upset the gender balance.

**Figure 5: Gender relations**

Women were more likely than men to be killed by Nargis. Across 38 of the 40 villages studied, at least 396 women and 338 men died.<sup>47</sup> This has shifted the gender division of labour and created a noticeable double burden for widows and widowers, whom villagers considered to be among the most vulnerable groups in their communities.

This change in the gender balance has affected work roles. Before Nargis, there was usually a clear division of labour among men and women in Delta villages. In addition to the farming and fishing activities outlined above, women were normally responsible for daily household chores, including cooking, washing, child-care and cleaning, and ensuring their households had sufficient supplies of food, drinking water and cooking fuel. Women often also undertook productive activities such as livestock rearing and small trading and manufacturing. Men tended to have greater responsibility for economic and social activities outside the household, including earning income and engaging in community-wide activities

<sup>47</sup> For two villages, with a total of 847 deaths, we do not have fatality data disaggregated by gender. In five of the seven highly affected villages for which data are available, significantly more women (290) died than men (166).

such as rehabilitating paths, schools and monasteries and attending community meetings.

To some degree Nargis has altered this. In villages where disproportionately large numbers of women were killed, men who lost their wives have often had to take on household responsibilities normally held by women, such as cooking and childcare. Meanwhile, women who lost their husbands have often become heads of household and so are faced with the responsibility of earning money in addition to managing household affairs (Box 19). Given this multitude of tasks, this can prevent them from engaging fully in village affairs.

**Box 19: Changes in household responsibilities due to loss of family members**

Two cousins, who married five months before Nargis and were pregnant when it came, lost their husbands during the cyclone.

After Nargis, one of the women started a small shop with Kyat 10,000 she had received from relatives in return for looking after her nieces, nephews and grandmother. Now the head of household and breadwinner, she lives with six family members in a crowded house built of short planks of bamboo. She also took out a loan to buy goods for her shop.

The other woman's father, mother, husband and younger sister died during Nargis. She now leads a household that consists of her baby, a disabled sister, one younger brother and another sister. Since she has to look after her siblings and baby, she cannot work on the farm and is sharing the family-owned land with her uncle.

In some villages, widows and widowers have started to remarry. This was reported in five villages studied. At least 17 people had remarried, usually to people outside their villages.<sup>48</sup>

Women did not tend to play a major role in managing and distributing aid. The members of village emergency committees were usually men. Where women did participate, it was usually in a supporting rather than decision-making role, for instance by preparing meals and providing hospitality to visiting aid providers or by providing information on request about issues relating to women and children.

The researchers heard a few cases of Nargis-related domestic violence (an example is given in Box 20), though it was hard to ascertain whether levels of domestic violence had increased.<sup>49</sup>

**Box 20: Gender-based violence and changes in household structure**

One man in a village visited in Bogale had been strong and healthy but lost his wife and six children during Nargis. Since then he has struggled for his subsistence and attempted to deal with his problems through alcohol. In the same village live three sisters, aged 21, 18 and seven, whose parents and four other siblings were killed by Nargis.

As a result of the deaths in their family, the three sisters were living in their house without guardians. The man was interested in the eldest sister and tried but failed to win her love. One night, the other two sisters were away. Taking advantage of their absence and that of any other guardians, he tried to rape the elder sister. The attempt ended up failing because neighbours were still awake at the time. Afterwards, the village leaders arranged for a safe place for the three young women close to the village head's house.

<sup>48</sup> For some villages, we do not have exact numbers of people remarrying, so actual figures may be somewhat higher.

<sup>49</sup> It is very difficult to get accurate impressions of levels of domestic violence anywhere because it is often a hidden form of violence, and villagers (including the abused) may be reluctant to report it. That said the research teams all felt that domestic violence was not a widespread problem in the Delta at present.

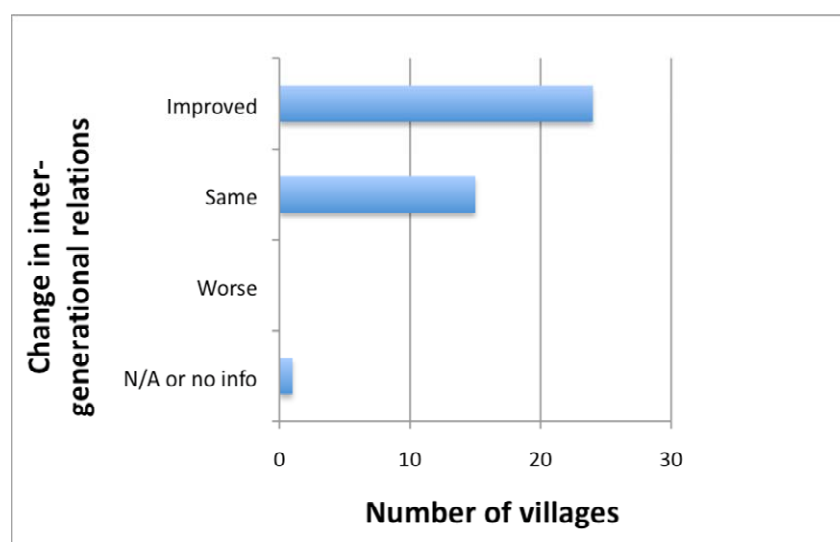
### ***Inter-generational relations***

The research in the 39 affected villages found that young men, and to some degree also young women, have played an active role in cyclone relief and recovery since Nargis. This has led them to play a more active role in community affairs than before. Some young people have become members of their village emergency committee. They help manage and distribute assistance and network with other villages.

The expanded role of youth is partly because many recovery activities, such as cleaning villages, renovating paths, cleaning ponds and renovating schools and monasteries, require physical labour, but also simply because many more old people than young died in Nargis. As a result, in many highly affected villages the inter-generational balance has shifted. The participation of young people in community-wide affairs and in village emergency committees differs from before Nargis, when elders traditionally took the lead. However, it is unclear whether this expanded role will persist beyond the end of the recovery effort.

In most cases, villagers reported being satisfied with the increased involvement of youth in village affairs. Despite a few cases of inter-generational tension, villagers thought that on the whole inter-generational relations were improving (Figure 6).

**Figure 6: Inter-generational relations**



The elderly appeared to be disproportionately affected psychologically by the cyclone. Older people's inability to lead community affairs and participate in community-wide cyclone recovery activities requiring physical strength also sometimes caused them to feel weak and useless.

### ***Inter-Religious and Inter-Ethnic Relations***

The Delta is home to a number of different ethnic and religious groups: Bamar (the majority), Kayin, Rakhine and Indians; Buddhists (the majority), Catholic and Protestant Christians, Muslims and Hindu. Most of these groups also populated the 40 villages studied: 31 were religiously homogenous and nine were mixed; 31 villages were ethnically homogenous and the remaining nine were mixed (Table 11).



**Table 11: Ethnic and religious mix of research villages**

	Ethnically homogenous	Ethnically heterogeneous	Total
Religiously homogenous	28	3	31
Religiously heterogeneous	3	6	9
<b>Total</b>	<b>31</b>	<b>9</b>	<b>40</b>

There were too few ethnically or religiously mixed villages to draw strong conclusions about inter-religious and inter-ethnic relations post-Nargis. In the heterogeneous villages studied inter-ethnic relations remained strong. Villagers in all nine ethnically mixed villages reported good or normal relations among different ethnic groups both before and after Nargis; in this there was no change. On the whole inter-religious relations have also remained strong. Villagers in all nine religiously heterogeneous villages said that inter-religious relations before Nargis were normal or good; out of these, two reported deteriorating relations, though from good to normal.

Growing tensions between religious groups in these two villages were driven by the provision of aid by minority faith groups to members of their own faiths but not others. In these cases, relations deteriorated due to perceived inequity. In one village, for example, inter-religious relations worsened after Nargis, partly because a religious organisation planned to found a school and because it did not distribute aid to the rest of the population.

In other cases, though, religious organisations provided assistance to people regardless of religion. In two Buddhist villages, villagers had received aid from Muslim, Christian and Buddhist organisations alike. In those villages, villagers had a positive view of different religions. These examples suggest that aid targeting along exclusive ethnic or religious lines risks damaging social cohesion, whereas inclusive approaches are more likely to strengthen inter-group relations.

Compared to village leaders or village emergency committees, religious leaders have played a moderate role in managing and distributing aid: village leaders and emergency committees have done so in the vast majority of the 40 villages studied, whereas religious leaders have done so in nine (see Figure 4 above, and the example in Box 21).

**Box 21: A strong role played by a local monk**

After Nargis, a Buddhist monk returned to his village from another township where he had meditated and studied. The former village leader had passed away during the cyclone, so the monk took on a leadership role. As soon as he arrived, he took all the injured people to the township hospital. He also brought the survivors into refugee camps. The monk then went to town and asked for donations from local organisations. Since the aid provided was insufficient, he went to Yangon and got rice, snacks and clothes. The monk also met a man at Yangon port and gave him his village address. Surprisingly, that man came to the village the next morning and gave food and clothes to villagers. The monk helped the villagers rebuild the school and a community hall, rehabilitate paths and build water tanks.

The monk preached and gave solace to those who had lost their family members and relatives in the cyclone. The villagers respected the monk greatly and followed his leadership. The monk said that although he had learned a lot of Buddhist scripture, he had not done anything for the good of his village. This is why he wanted to help his villagers as much as he could. Now, with rehabilitation almost finished, the monk plans to continue his studies in town.

## 2. Inter-Village Relations

Nargis has had mixed impacts on inter-village relations. During the relief phase, relationships between villages improved, and though the overall level has not changed significantly, there are some signs of increased interdependence among villages. There are also some indications, however, that the unequal distribution of recovery assistance could lead to future inter-village tension.

Before the cyclone, villages in the Delta were more or less dependent on each other for natural resources, labour and gaining access to loans and income opportunities. Villages depended on common resources such as water, fish, fuel, wood and construction material and had to find ways of managing those resources. Economic and familial links also helped build inter-village cohesion.

Although Nargis has not had a significant discernible impact on these relationships, the research found that in some instances inter-village relations had improved. Few villages affected by Nargis had sufficient resources to survive and recover without outside help. People in smaller villages, especially in the immediate aftermath of the disaster before outside aid arrived, had to look for food and borrow money for commodities from better-off people in less affected neighbouring villages. The research teams observed cases of affected villages sharing aid with worse-off villages nearby (Box 22).

### **Box 22: Providing help to neighbours**

One of the villages visited had received immense help from a neighbouring village. The village providing support was almost entirely made up of Christians. It was not affected heavily by the cyclone and so its villagers decided they should help those who had been affected. Right after the storm, the villagers organised themselves and went out to rescue people in a village nearby which had been seriously affected.

Villagers gave the cyclone survivors shelter in villages around the village tract and provided them with food and household goods. Some villagers donated land to those displaced families; others donated boats and fishing nets. Most of the assistance was contributed through the township church.

Many villagers said that their relationship with other villages had become closer after Nargis. The research found no cases of conflict over natural resources but did find instances of cooperation over shared resources (Box 23).

### **Box 23: Sharing common resources**

Before Nargis, one village in Dedaye often had tensions about water with neighbouring villages. Villagers sometimes also had had quarrels with people in other villages about accessing good pastures for their buffaloes, gathering firewood, and gaining access to fishing grounds. After Nargis, however, the situation changed. Villagers had to take shelter together for many days, and say they became like family. They understood and helped each other because they were the only survivors of Nargis. When aid was distributed, villagers patiently took turns rather than fighting with each other.

However, perceptions were widespread in the research villages that other similarly affected villages were receiving higher levels of assistance, even though crosschecks by the research teams often showed that this was not the case. These perceptions were evident in all but four villages. In most cases, this had not led to conflict, but the potential exists for such tensions and jealousies to rise if these perceptions continue and/or if villagers are not provided with transparent information on cross-village aid allocations.

### 3. Relations between Villagers and their Leaders

In most villages, significant collective community leadership emerged through the village emergency committees. Since Nargis, elders, youth, and to some extent monks and women, have taken on relief and recovery responsibilities. These groups have become members of emergency committees in their villages and serve their communities in various ways, such as organizing their communities, mobilizing resources, implementing rehabilitation projects, and managing and distributing aid.

Before Nargis, formal leaders used to handle most administrative tasks, day-to-day village affairs and social activities in their villages. Nargis recovery created an entire set of new village activities and tasks, for which informal leaders often took responsibility. As members of village emergency committees, formal and informal leaders are coordinating more closely than in the past.

In about half the villages, relations between villagers and formal and informal leaders have not obviously changed (Table 12). In one-third of the villages, relations improved. Villagers expressed discontent with village leaders over aid delivery in only a small proportion of villages. There they were suspicious of their village leaders' involvement in emergency committees and doubted their credibility.

The research teams found only one case of seriously deteriorating relations between villagers and their formal leaders, a case where villagers believed their village head had taken no action to ensure they did not starve. In another incident, villagers expressed discontent with religious leaders' unusually influential role since Nargis. In that case, the villagers complained that they did not receive much information about aid and village affairs and blamed the disproportionate role and influence of religious leaders. In that village, however, relations between formal and informal leaders had been weak before Nargis.

**Table 12: Relations between villagers and leaders in affected villages**

Relations between villages and their leaders	Improved	Stayed the Same	Got worse
Between villagers and formal leaders	13	20	6
Between villagers and religious leaders *	8	22	3
Between villagers and village elders	18	20	1

\* Data were not available for six villages.

However, the net impact of Nargis on the relations between formal and informal leaders has been positive. Where different types of leaders worked together, and explained what they were doing to affected communities, levels of trust were higher and recovery was proceeding more quickly than elsewhere.

## SECTION 5: CONCLUSIONS

This report has presented a picture of the impacts of Cyclone Nargis and of the relief and recovery effort in 40 Delta villages. Although assistance reached even the most remote villages and helped people survive in the aftermath of the cyclone, the report has also demonstrated the devastating impact Cyclone Nargis had on socioeconomic life in Delta villages. Much more assistance is needed for communities to recover in a sustainable manner, particularly in the form of cash grants. Although community life is currently strong, if people's livelihoods and village economies do not begin to recover soon, there might be profound longer-run impacts, such as migration out of Delta villages and a tearing of the social fabric. If a way is not found for people to pay back the debt they have accumulated before or since Nargis, there is a risk of longer-term redistribution of assets from many to a few.

How assistance is delivered is equally important. Assistance should build on the strengths and resilience of affected communities. Villagers in cyclone-hit communities know what they need and appreciate the aid they have received, but so far have had little real say in the aid effort. This has led some kinds of aid to be inappropriate to local needs in the Delta and, in a very few cases where perceived inequities arose because of exclusive aid targeting or a lack of transparency about aid decisions, has led to social tensions. This underscores the need for future aid to be delivered in a way that gives communities real decision-making power, has effective information and complaints-resolution mechanisms, and enables communities to advocate for their needs with aid providers.

In concluding, the report highlights some of the key findings and draws out some implications for the aid effort.

### 1. The 'What' of Aid

#### ***Relief reached every village ...***

Aid reached all the affected villages studied. Despite the challenging terrain and circumstances, 40 percent of the villages received assistance within two weeks of the cyclone; 80 percent received aid within a month. The most prominent types of aid were food, household goods, shelter, and farming inputs. All affected villages had received food assistance and all but one had received shelter and household goods. Farm inputs had been distributed to almost every village in the study with a farming population.

#### ***... but relief needs are still great.***

Aid reached all the affected villages studied. However, vast needs remain, including in relief and livelihoods. Food insecurity still exists, in particular for the poorest within villages. Relief and recovery are intertwined: the slow pace of livelihoods recovery means that many people do not have sufficient resources to buy food. Although there is a need to ensure that people move quickly from relief to recovery to avoid creating aid dependence and distortions in the local economy, if relief ends before people have been able to restart their livelihoods, many may go hungry. Building on the positive experience in many villages during the immediate relief phase, cash grants to the needy appear to be the most effective mechanism to reduce food insecurity; they would also provide incentives to farmers to increase local production.

***Village economies remain depressed and people have been unable to regain their livelihoods in a sustainable manner ...***

Delta villages suffered a profound shock and village economies remain depressed. In many villages people lost all their assets. Six months after Nargis, livelihoods recovery has been slow, a result of both the immense damage and insufficient (and sometimes unsuitable) aid. There has been a significant crop reduction in farming, and a systematic disruption of the fishing industry across the entire value chain. Landless labourers are particularly affected. Big farmers, who also lost their assets, have been unable to recapitalise, and so are employing fewer casual labourers—one-third of pre-Nargis levels.

***... and face a debt trap and credit crunch ...***

Early signs are that a large proportion of villagers are falling into a vicious debt trap. Levels of debt are rising, credit is increasingly hard to find, and people are worried about how to finance not only the investment necessary for livelihoods recovery but also consumption. Villagers had debt before Nargis but the borrow-harvest-repayment cycle has been disrupted and, because villagers have lost their assets, they are unable to service their debts.

***... causing villagers to migrate and social cohesion to be challenged.***

The reduced employment and livelihoods opportunities at the village level are beginning to have wider socioeconomic and social impacts. Out-migration from Delta villages is still low but already increasing. Continued scarcity of resources could challenge currently strong social cohesion and collective action capacity. The lack of livelihoods opportunities means that large numbers of villagers, including young men, are unemployed.

***People need livelihoods assistance, particularly in the form of cash grants ...***

Villagers repeatedly cited livelihoods assistance as their top priority. Farmers said they required agricultural inputs and fishermen nets and boats. Across the board, however, villagers consistently cited cash as their preferred method of assistance. Regardless of whether delivered in cash or in kind, without large increases in livelihoods assistance, recovery will continue to be slow.

Affected villages need large injections of cash. Cash has several advantages. Villagers prefer it, and it enables households to determine and meet the range of their own needs and priorities. Because villagers face such a serious problem of indebtedness already, however, for the time being cash injections should be in the form of grants rather than loans or microcredit.

***... and solutions must be found for indebtedness, or there is a risk wealth will be redistributed to a few people, mostly informal/private moneylenders.***

At the same time, solutions must be found to reduce growing levels of indebtedness. If not, there is a risk that fishermen may lose their fishing rights and farmers may effectively lose their land rights or become indentured to private moneylenders, with an attendant wholesale redistribution of wealth from many poor to a few better-off.

## 2. The 'How' of Aid

### ***Social capital is strong and provides a base for recovery ...***

Social relations have strengthened since Nargis with villagers and communities working together to address immediate needs. Existing collective action capacity can help speed recovery if aid programmes strengthen social networks and draw on communities' capacities.

### ***... but villagers did not have a real say in decision-making about aid ...***

Communities were universally able to identify what they needed, and to prioritise the types of assistance they wished to receive. However, most aid providers thus far have not given them much say in what they receive. Aid providers tended to come with pre-identified assistance and pre-identified targeting mechanisms, rather than giving villagers real decision-making power in what assistance was provided and how it was targeted.

Villagers also were generally not informed about who was eligible to receive assistance, how beneficiaries were selected and the type and amount of aid received. Village emergency committees mostly did not keep formal records or display aid information publicly.

### ***... which led to uneven aid effectiveness and cases of social tension ...***

This relative lack of community involvement in aid decision-making has led to unevenness in aid effectiveness. Although villagers tended to be happy with aid received, their lack of involvement sometimes meant that aid was inappropriate to local realities. For instance, agricultural inputs from some aid providers were unsuitable to Delta conditions and thus had limited impact.

In some cases pre-identified targeting mechanisms meant that certain groups were overlooked. Labourers have received less livelihoods assistance than others. With few employment opportunities, there is a need to provide capital so they can pursue other opportunities and to help them finance basic consumption needs in the coming year. Large-scale farmers have also been overlooked. For the most part aid providers assume they are richer and do not need assistance. However, vulnerability categories that existed before Nargis have changed. Large-scale farmers have lost their assets, too; in highly affected villages, many said that the only thing separating them from poorer villagers now was their ownership of land, which they can no longer use as before. Because they too have been unable to recapitalise, casual labourers who depend on them for employment also suffer.

Where perceived aid inequities arose, there were some cases of social tension, in a few cases because aid was targeted on exclusive religious lines and in others because a lack of transparency surrounding aid decisions caused villagers to become suspicious of one another and think that aid was being distributed unfairly. This highlights the importance of inclusiveness in decision-making and wide information-sharing.

### ***... highlighting the need to involve communities in planning and prioritisation and for effective information-sharing, targeting and complaints mechanisms.***

In a resource-scarce environment, it is important that communities have real power in deciding how to spend assistance. There is thus a need to move away from sector-based approaches to ones where communities can choose what to

receive and how to spend it. Especially as relief shifts to recovery, the guiding principle of aid interventions should be that villagers are active participants in all phases of planning and management, and that aid programmes should facilitate that engagement. Such consultations should be part of a structured planning process, not one-off assessments; information should be accessible, clear, widely shared and in the Myanmar language; there should be clear mechanisms for resolving complaints; and participation in such decision-making should be as broad-based as possible across different social groups within villages, including newly vulnerable groups.<sup>50</sup>

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<sup>50</sup> The *Post-Nargis Recovery and Preparedness Plan* (Tripartite Core Group (2008c)) articulates a framework for community-based recovery.

## **ANNEX A: SOCIAL IMPACTS MONITORING METHODOLOGY**

The first phase of the social impacts monitoring was conducted over a four-week period between late October and late November 2008, as part of the Tripartite Core Group's overarching monitoring strategy.

Qualitative assessments of aid effectiveness and the socioeconomic and social impacts of a natural disaster are usually conducted, if at all, later in the recovery period.<sup>51</sup> Rarely have they been integrated into more holistic assessments of how disasters, the aid effort and local responses are shaping broader domains of village life and relations. The social impacts monitoring is the first time that the social impacts of a disaster have been assessed as a core part of a post-disaster damage and loss assessment and formal monitoring system.

Myanmar Egress conducted the fieldwork with technical support from the World Bank. An advisory group, consisting of Tripartite Core Group members and civil society provided peer review at various stages.

### **1. Fieldwork**

A *pre-test* of the methodology and instruments was conducted in eight villages from October 27-31, 2008. Four research teams, each consisting of a supervisor, senior researcher and two additional researchers visited two villages each (for village selection, see below). Two days and one night were spent in each village. After each village visit the teams discussed their findings and experiences, including on survey methodology, fieldwork strategies, time management and the reliability of the information collected. This resulted in some (relatively minor) adjustments to the methodology. The quality of data collected was good, and thus the report utilises some findings from the pre-test villages.

Two rounds of fieldwork were conducted for the *full social impacts monitoring*, around November 3-11 and then November 16-24, 2008. Again, four teams went to the field, each consisting of one senior researcher and two researchers. Overall, 32 villages were covered. Each research team spent two full days and one or two nights in each village, with additional time allocated for travel.

The researchers and senior researchers were all from Myanmar civil society with extensive experience of working in remote villages and conducting social assessment work. The social impacts monitoring team represented a mix of Myanmar's ethnic groups and religions. Women formed over half the team. Research was conducted in local languages.

### **2. Sampling**

The first phase of the social impacts monitoring was carried out in *40 villages* in the Delta. This includes 32 villages where the full social impacts monitoring was conducted and eight villages where the methodology was pre-tested. Of the 32 villages where the full social impacts monitoring was implemented, 28 were affected by Nargis (although to differing extents) and four villages were selected as controls, where the impacts of

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<sup>51</sup> Other qualitative post-disaster assessments have focused mostly on livelihoods recovery, vulnerable groups, and community participation, such as for post-tsunami India (2005), post-earthquake Pakistan (2005), and post-cyclone Bangladesh (2007). Several of the impacts observed in the Delta today are not uncommon in post-disaster situations.



Nargis had been slighter.<sup>52</sup> The tables below summarise the village studied and the map shows their locations (see bottom of this Annex).

### ***Village selection for the full social impacts monitoring***

Villages were selected using a number of criteria aimed at getting a wide range of Nargis (and Nargis response) experiences.

First, villages were distributed across *eight of the most severely affected townships* as identified by the PONJA. The number of villages per township roughly correlates with the severity of damage and loss; thus the largest number of villages are from Labutta and Bogale which were most devastated by the cyclone.

Second, within each township (and across the whole sample) villages were categorised based on the *primary livelihood* (fishing or farming), or whether they are peri-urban (where other livelihoods, such as trading, may be more prominent).<sup>53</sup> One of the key recovery challenges is the reestablishment of livelihoods, but the specific difficulties will vary considerably between fishing, farming and peri-urban villages. Fishing villages experienced severe losses of or damage to fishing boats, nets, and ponds as well as changes in soil salinity affecting secondary economic activities, and may face storage and transportation difficulties, which affects the marketing of their products. Farming villages experienced loss of draught animals, and may face problems relating to land use rights and the organisation of agricultural labour. In peri-urban and urban areas, damage was mostly from winds rather than floods, so infrastructure damage was less severe than in other areas. However, many businesses depend on supplies of raw materials from more affected zones, and thus livelihoods are also threatened. Given the varying impacts and challenges, sampling was constructed to ensure these different 'types' of villages were represented. Farming villages were over-sampled due to the larger number of farming villages affected by Nargis.

Third, across the whole sample (but not necessarily within each township) provisions were made to ensure diversity in the *degree of affectedness* of villages. Four control villages were added to allow for comparisons to be made between areas that were affected and those less so. Within the sample of 28 'affected villages', and the eight villages where the pre-test took place, a proportion is less affected (see Annex B). This allows for comparisons to be made between areas that experience the cyclone differently.

Finally, to the extent possible, efforts were made to ensure that villages in the sample were the same as those studied by the *Post-Nargis Periodic Review I*, which collected quantitative data on village conditions and the aid response effort. Studying the same villages allows us to triangulate data. Given that Periodic Review villages were randomly sampled, and selected to ensure wide geographic coverage, this also improved the representativeness of the social impacts monitoring sample. Around half of the villages selected were also assessed in the Post-Nargis Periodic Review I.

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<sup>52</sup> When visiting these villages, all of which were predominately farming communities, the research teams found that Nargis had still had sizeable impacts in three of them, although these were less than in the other villages studied.

<sup>53</sup> For purposes of selecting villages, the social impacts monitoring uses the following definitions: (a) a *fishing village* is where fishing is the primary livelihood for a majority of households (i.e. more than any other livelihood); (b) a *farming village* is where farming is the primary livelihood for a majority of households; (c) *peri-urban villages* are those within or on the outskirts of an urban centre where neither fishing nor farming is the primary livelihood; (d) *control villages* are those noticeably less affected by Nargis.

### ***Village selection for the pre-test***

Village selection for the pre-test was driven by a number of factors. First, half of the villages selected had been visited during the initial social impacts monitoring conducted as part of the PONJA in June 2008.<sup>54</sup> Re-visiting a sample of these villages allowed for testing the veracity of the hypotheses and questions and allowed for broad observations to be made on progress in recovery thus far. Second, given time constraints, villages were selected in townships that were highly affected by Nargis but relatively easy to access. Third, village selection ensured that main livelihoods types to be covered by the social impacts monitoring proper were included.

### **3. Overview of Research Questions and Topics**

Focus and question areas were identified through the initial social impacts monitoring conducted as part of the PONJA. That report identified a number of hypotheses on forms of social impact that might play out in the post-Nargis period. In addition, an extra emphasis was given to issues of aid effectiveness. The PONJA report<sup>55</sup> identified four guiding principles for aid delivery: effectiveness, transparency and accountability; independence, self-sufficiency and capacity building; focus on the most vulnerable groups; and strengthening communities. These provided the basis for the questions on aid.

Specific question areas for the three topics examined are given below.

#### ***Aid effectiveness***

- (1) The aid effort: aid received; needs and shortfalls; aid dependency and burden; reducing future vulnerability; particular problems
- (2) Targeting aid: mechanisms for targeting aid; equity of aid targeting; distribution of aid across villages; marginalised groups
- (3) The process of aid delivery: actors involved; transparency; decision-making; complaints; accountability; cultural suitability

#### ***Socioeconomic impacts***

- (1) Local economic structure: occupational changes; impact on markets and skills; changes in household structures and roles; labour supply and demand
- (2) Land: land condition and harvest yields; changes to land use rights and land conflicts
- (3) Indebtedness
- (4) Migration and displacement: displacement; patterns of labour migration; social impacts of migration

#### ***Social impacts***

- (1) Gender relations: changes in work roles; changes in marriage patterns; domestic violence
- (2) Changes in inter-generational relations
- (3) Inter-village relations: changes in relations; varying impacts of cyclone damage and effect on inter-village relations; inter-village tensions and conflict
- (4) Inter-religious/inter-ethnic relations: changes in relations; role of religious and ethnic leaders

<sup>54</sup> Tripartite Core Group (2008a), *op. cit.*, Annex 15.

<sup>55</sup> Tripartite Core Group (2008a), *op. cit.*, pp. 27-28.

- (5) Intra-village relations and social capital: strengthening or weakening of social capital since Nargis; how problems and tensions have been resolved; new types of community cooperation since Nargis
- (6) Relations between villagers and formal/informal leaders: role of formal leaders; role of informal leaders (disaggregated by actor)

#### **4. Informants**

Informants within villages were not formally sampled. Rather, the research teams sought to interview a wide cross-section of the community. This included: the village head and other official village leaders; village elders and religious leaders; others who were/are involved in aid decisions in the village; farmers, fishermen, labourers and those in other occupations; (potentially) vulnerable groups, including female headed households, the handicapped or injured, and the elderly; and young men and women. All in all, the research teams interviewed an estimated 1,539 persons in the 40 villages, an average of almost 40 per village.

To the extent possible, the researchers tried to get the perspectives on the same topics from each group in order to triangulate information received. Where differences existed in the answers, this could also be important for assessing social impacts and local dynamics.

#### **5. Research Instruments**

Three research instruments were used.

First, *in-depth interviews* were conducted with a wide range of elite and non-elite villagers (see above). Interviews were semi- or unstructured, meaning that the researchers had the flexibility to focus on particular issues that the informant had information on and follow up interesting lines of inquiry. Guiding questions were provided to the researchers to help focus interviews, but the researchers were free to amend and adapt these as necessary, in particular to make sure that they fitted with the local context. Overall, 222 formal interviews were conducted.

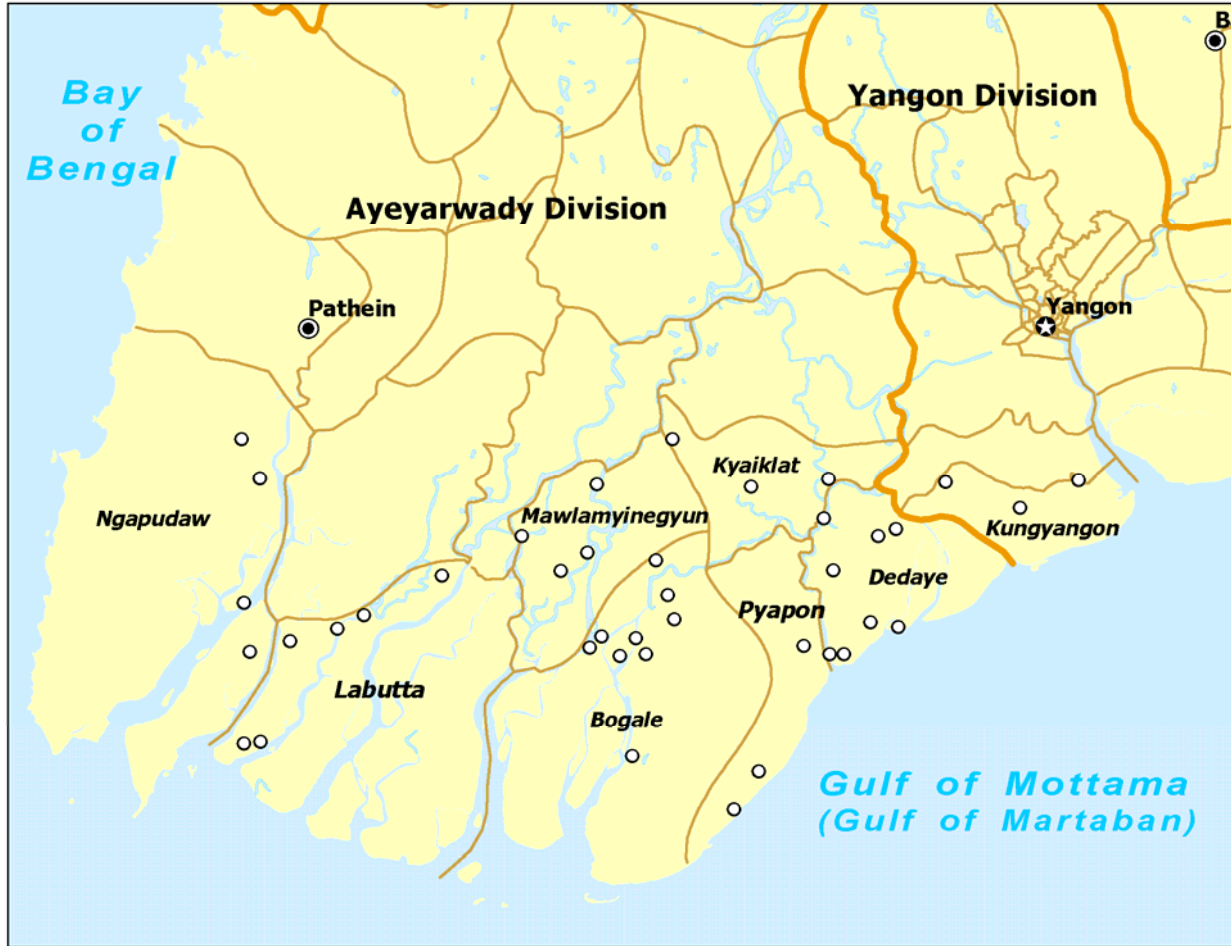
Second, *focus group discussions* were held with different groups within the villages studied. In each, around six to eight informants were interviewed together. Groups were constructed so that people with similar characteristics (for example, village leaders, young women, etc.) gathered together. This helped ensure the "openness" of the discussions. On average, four focus groups discussions were conducted per village, 159 in total.

Third, the researchers also conducted *informal interviews* and *participant observation*. This included many late-night discussions with those with whom the research teams stayed and discussions with individuals and groups over meals. 102 informal discussions were conducted. Directly observing dynamics and impacts also provided much information on the way villages were functioning, the effects of Nargis and how aid was operating.

**Table A1: Villages studied in the social impacts monitoring**

	<b>Labutta</b>	<b>Bogale</b>	<b>Mawlam- yinegyun</b>	<b>Ngapudaw</b>	<b>Pyapon</b>	<b>Dedaye</b>	<b>Kyaiklat</b>	<b>Kung- yangon</b>	<b>Total</b>
<b>Full social impacts monitoring</b>									
Control	0	1	0	0	1	1	0	1	4
Fishing	2	2	1	1	1	1	0	0	8
Farming	2	1	2	2	1	1	2	1	12
Peri-Urban	1	1	1	1	1	1	1	1	8
<b>Sub-total</b>	<b>5</b>	<b>5</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>3</b>	<b>3</b>	<b>32</b>
<b>Pre-test</b>	0	4	0	0	0	2	2	0	8
<b>Total</b>	<b>5</b>	<b>9</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>6</b>	<b>5</b>	<b>3</b>	<b>40</b>

**Map A1: Location of villages studied in the social impacts monitoring**



**ANNEX B: DATA TABLES****Table B1: Occupational mix and religious and ethnic diversity**

Village	Township	Category	Farming HH %	Fishing HH %	Labourer HH %	Other HH %	Ethnically diverse?	Religiously Diverse?
1	Dedaye	Farming	41%	0%	59%	0%	No	No
2	Bogale	Fishing	35%	65%	0%	0%	No	No
3	Labutta	Fishing	9%	75%	16%	0%	No	No
4	Labutta	Peri-urban	8%	15%	77%	0%	No	No
5	Ngapudaw	Peri-urban	0%	18%	72%	10%	No	No
6	Labutta	Fishing	22%	45%	27%	6%	No	No
7	Pyapon	Control	25%	5%	66%	4%	No	No
8	Pyapon	Farming	35%	0%	64%	1%	No	No
9	Dedaye	Farming	44%	0%	55%	1%	No	No
10	Kyaiklat	Peri-urban	24%	0%	76%	0%	No	No
11	Dedaye	Fishing <sup>56</sup>	19%	14%	66%	1%	No	No
12	Dedaye	Control	20%	0%	80%	0%	No	Yes
13	Kungyangon	Peri-urban	33%	0%	67%	0%	No	No
14	Bogale	Control	46%	0%	51%	3%	No	No

<sup>56</sup> 'Farming' and 'fishing' households in this table are households that, in addition to farming and fishing, owned land or fishing equipment. Although village 11 and village 31 had marginally more farming households than fishing households, they are classified as fishing villages because a large proportion of landless labourers in those villages worked in the fishing industry.

Village	Township	Category	Farming HH %	Fishing HH %	Labourer HH %	Other HH %	Ethnically diverse?	Religiously Diverse?
15	Bogale	Farming	31%	11%	58%	0%	No	Yes
16	Mawlamyinegyun	Farming	53%	0%	47%	0%	No	No
17	Mawlamyinegyun	Farming	45%	27%	27%	1%	Yes	No
18	Kyaiklat	Farming	25%	25%	35%	15%	No	No
19	Bogale	Fishing	30%	35%	30%	5%	Yes	Yes
20	Pyapon	Fishing	30%	35%	30%	5%	No	No
21	Dedaye	Peri-urban	55%	12%	30%	3%	No	No
22	Pyapon	Peri-urban	31%	0%	69%	0%	No	No
23	Bogale	Peri-urban	33%	8%	59%	0%	No	No
24	Labutta	Farming	33%	2%	65%	0%	No	No
25	Labutta	Farming	24%	5%	71%	0%	No	No
26	Ngapudaw	Farming	43%	1%	56%	0%	Yes	Yes
27	Ngapudaw	Farming	25%	8%	55%	12%	Yes	Yes
28	Ngapudaw	Farming	12%	0%	88%	0%	No	No
29	Pyapon	Farming	40%	33%	27%	0%	No	No
30	Bogale	Fishing	14%	24%	61%	1%	No	No
31	Dedaye	Fishing	47%	35%	17%	1%	No	No

<b>Village</b>	<b>Township</b>	<b>Category</b>	<b>Farming HH %</b>	<b>Fishing HH %</b>	<b>Labourer HH %</b>	<b>Other HH %</b>	<b>Ethnically diverse?</b>	<b>Religiously Diverse?</b>
32	Bogale	Farming	45%	37%	18%	0%	No	No
33	Bogale	Fishing	35%	41%	18%	6%	Yes	Yes
34	Bogale	Fishing	17%	22%	61%	0%	Yes	Yes
35	Mawlamyinegyun	Peri-urban	25%	48%	27%	0%	No	No
36	Mawlamyinegyun	Fishing	34%	50%	16%	0%	No	Yes
37	Kungyangon	Farming	41%	1%	48%	10%	No	No
38	Kungyangon	Control	54%	0%	32%	14%	Yes	No
39	Kyaiklat	Farming	37%	0%	63%	0%	Yes	No
40	Kyaiklat	Farming	51%	0%	44%	5%	Yes	Yes



**Table B2: Cyclone damage and aid patterns**

Village	Township	Category	Level of Cyclone Impact	Women Killed	Men Killed	Total Killed	% Population Killed	Level of Aid Received	Speed of Aid Arriving	Remoteness	Speed of Recovery
1	Dedaye	Farming	Moderate	4	4	8	3%	Moderate	1-2 weeks	Far	Fast
2	Bogale	Fishing	High	50	37	87	17%	High	1 week	Close	Fast
3	Labutta	Fishing	High	n.a.	n.a.	242	22%	High	1 week	Close	Slow
4	Labutta	Peri-urban	Low	0	1	1	0.1%	Moderate	1 week	Close	Fast
5	Ngapudaw	Peri-urban	Low	0	1	1	0.1%	High	1 week	Close	Fast
6	Labutta	Fishing	Low	0	1	1	0.1%	Low	> 1 month	Close	Fast
7	Pyapon	Control	Low	1	0	1	0.2%	Moderate	> 1 month	Far	Fast
8	Pyapon	Farming	Slightly	0	0	0	0%	High	1-2 weeks	Close	Fast
9	Dedaye	Farming	Low	2	1	3	0.3%	Moderate	1 week	Close	Moderate
10	Kyaiklat	Peri-urban	Slightly	0	0	0	0%	Moderate	> 1 month	Close	Slow
11	Dedaye	Fishing	High	46	24	70	6%	Moderate	1-2 weeks	Far	Moderate
12	Dedaye	Control	Slightly	0	0	0	0%	Moderate	2-4 weeks	Close	Slow
13	Kungyangon	Peri-urban	Moderate	12	14	26	2%	High	1 week	Close	Moderate
14	Bogale	Control	Low	3	1	4	0.5%	Moderate	1 week	Close	Slow
15	Bogale	Farming	Moderate	5	6	11	5.0%	Moderate	> 1 month	Close	Slow
16	Mawlam-yinegyun	Farming	Slightly	0	0	0	0%	Low	> 1 month	Close	Fast

Village	Township	Category	Level of Cyclone Impact	Women Killed	Men Killed	Total Killed	% Population Killed	Level of Aid Received	Speed of Aid Arriving	Remoteness	Speed of Recovery
17	Mawlam-yinegyun	Farming	Moderate	9	6	15	1%	High	2-4 weeks	Close	Slow
18	Kyaiklat	Farming	Slightly	0	0	0	0%	Moderate	2-4 weeks	Close	Slow
19	Bogale	Fishing	High	n.a.	n.a.	605	31%	High	1 week	Far	Slow
20	Pyapon	Fishing	Slightly	0	0	0	0%	Low	2-4 weeks	Very Far	Moderate
21	Dedaye	Peri-urban	Low	1	2	3	0.3%	Moderate	1-2 weeks	Close	Moderate
22	Pyapon	Peri-urban	Low	3	3	6	0.3%	Moderate	2-4 weeks	Close	Moderate
23	Bogale	Peri-urban	Low	2	1	3	0.3%	Low	2-4 weeks	Close	Moderate
24	Labutta	Farming	Low	0	1	1	0.4%	Moderate	2-4 weeks	Far	Moderate
25	Labutta	Farming	Low	1	0	1	0.3%	Moderate	2-4 weeks	Far	Moderate
26	Ngapudaw	Farming	Slightly	0	0	0	0%	Moderate	1-2 weeks	Far	Fast
27	Ngapudaw	Farming	Slightly	0	0	0	0%	Low	1-2 weeks	Close	Slow
28	Ngapudaw	Farming	Not affected	0	0	0	0%	No aid received	No Aid	Close	Not applicable
29	Pyapon	Farming	High	100	47	147	32%	Moderate	2-4 weeks	Far	Moderate
30	Bogale	Fishing	High	10	12	22	8%	High	2-4 weeks	Far	Moderate
31	Dedaye	Fishing	High	33	21	54	6%	High	1-2 weeks	Far	Moderate
32	Bogale	Farming	High	15	81	96	18%	High	1-2 weeks	Far	Slow
33	Bogale	Fishing	High	61	37	98	14%	High	2-4 weeks	Very Far	Moderate

Village	Township	Category	Level of Cyclone Impact	Women Killed	Men Killed	Total Killed	% Population Killed	Level of Aid Received	Speed of Aid Arriving	Remoteness	Speed of Recovery
34	Bogale	Fishing	Moderate	26	22	48	3%	High	2-4 weeks	Very Far	Slow
35	Mawlam-yinegyun	Peri-urban	Low	2	3	5	0.4%	Low	> 1 month	Close	Moderate
36	Mawlam-yinegyun	Fishing	Moderate	6	10	16	3%	High	1-2 weeks	Far	Moderate
37	Kungyangon	Farming	Low	3	1	4	0.6%	Moderate	2-4 weeks	Very Far	Moderate
38	Kungyangon	Control	Low	1	1	2	0.2%	High	2-4 weeks	Close	Fast
39	Kyaiklat	Farming	Slightly	0	0	0	0%	Low	2-4 weeks	Very Far	Moderate
40	Kyaiklat	Farming	Slightly	0	0	0	0%	Moderate	> 1 month	Very Far	Slow

**Table B3: Types of aid received**

Village	Township	Category	Food	Shelter	Water / Sanitation	Education	Health	Farm Inputs	Fishing Inputs	Cash/ Credit	Household Goods	Total
1	Dedaye	Farming	Yes	Yes	Yes	No	No	Yes	No	Yes	Yes	6
2	Bogale	Fishing	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	9
3	Labutta	Fishing	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	9
4	Labutta	Peri-urban	Yes	Yes	No	Yes	No	Yes	Yes	No	Yes	6
5	Ngapudaw	Peri-urban	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	9
6	Labutta	Fishing	Yes	Yes	No	No	No	Yes	Yes	No	Yes	5
7	Pyapon	Control	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes	7
8	Pyapon	Farming	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	9
9	Dedaye	Farming	Yes	Yes	No	Yes	No	Yes	No	Yes	Yes	6
10	Kyaiklat	Peri-urban	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	7
11	Dedaye	Fishing	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	7
12	Dedaye	Control	Yes	Yes	Yes	No	No	Yes	No	Yes	Yes	6
13	Kungyangon	Peri-urban	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	8
14	Bogale	Control	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	7
15	Bogale	Farming	Yes	No	Yes	Yes	No	Yes	No	Yes	Yes	6
16	Mawlamyinegyun	Farming	Yes	Yes	Yes	Yes	No	No	No	No	Yes	5



<b>Village</b>	<b>Township</b>	<b>Category</b>	<b>Food</b>	<b>Shelter</b>	<b>Water / Sanitation</b>	<b>Education</b>	<b>Health</b>	<b>Farm Inputs</b>	<b>Fishing Inputs</b>	<b>Cash/ Credit</b>	<b>Household Goods</b>	<b>Total</b>
34	Bogale	Fishing	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	8
35	Mawlamyinegyun	Peri-urban	Yes	Yes	No	No	No	Yes	No	Yes	Yes	5
36	Mawlamyinegyun	Fishing	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	8
37	Kungyangon	Farming	Yes	Yes	No	Yes	Yes	Yes	No	No	Yes	6
38	Kungyangon	Control	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	8
39	Kyaiklat	Farming	Yes	Yes	No	No	Yes	Yes	No	No	Yes	5
40	Kyaiklat	Farming	Yes	Yes	Yes	No	No	Yes	No	Yes	Yes	6