Post Tsunami Reconstruction and Rehabilitation – Household Views on Progress and Process[1]

Draft Report

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[1] The report was produced by a team composed of: Nisha Arunatilake, Kanchana Wickramasinghe, Priyanka Jayawardena, Dushni Weerakoon and Paul Steele of the Institute of Policy Studies and Sisira Jayasuriya of University of Melbourne, Australia. The authors acknowledge comments by Peter Mc Cawley and assistance in information gathering by MG Consultants.

Executive Summary

The challenges of reconstruction and rehabilitation following the December 2004 tsunami were new to Sri Lanka, and perhaps more complex than providing immediate relief. Macro level information is available – although disorganized and from various sources -- on different types and amounts of aid delivered to the tsunami affected, ranging from housing assistance to livelihood programs to counselling.[2] However, little information is available on the processes involved in delivering aid to the tsunami affected and the perceptions of individuals on the aid received and the aid delivery mechanisms. This report attempts to fill the gap in this information using data from two household surveys.

In keeping with the priorities of the time, the main focus of the first survey, conducted four months after the tsunami in collaboration with the World Bank, was to assess the views of the tsunami-affected households on the government imposed "no-build" buffer zone. The second survey, conducted eighteen months following the tsunami in collaboration with the Asian Development Bank Institute (ADBI), resurveyed the same households to obtain views on a broader range of issues including, housing, livelihoods recovery, aid distribution, community cohesiveness, and disaster management. In the first survey, data was collected from 622 households in 14 Grama Niladari divisions (GNDs) in 6 affected districts.[3] Household interviews were complemented by focus groups in the 14 GNDs and interviews with key informants. In addition, officers in charge of land were interviewed in Divisional Secretary offices covering each GND. Subsequently, in July 2006, an attempt was made to re-interview the 622 households in the original sample. In the second round, interviews were completed by 595 households, of which 564 were from the original sample while the rest (31) were replacement households. Following are the findings of these two surveys:

[2] A related IPS report on "Economic Challenges of Post Tsunami Reconstruction: Sri Lanka Two Years On" provides an analysis of some of this information.

[3] The original intention to include Jaffna and Mullativu was prevented by delays in LTTE agreement for the survey work to proceed.

Housing

The progress in housing is fairly slow, with close to half of tsunami-affected households still residing in temporary housing. Progress in housing is best for those outside the 2005 buffer zone in the Southern Province. Less than 6 per cent of surveyed households in this region were in temporary housing. The progress in housing is worst for those in the Eastern Province – for households both within and outside the 2005 buffer zone. The progress is especially poor for households affected by the conflict.

The government policy on the "no-build" buffer zone was a main reason for the slow progress in housing, especially for households within the 2005 "no-build" zone. Policy changes, lack of land, delays in donor assistance have been main reasons for the delay in the donor-driven housing programme. Change in buffer zone rule and delays in accessing housing material have affected the progress in the owner-build programme.

Despite delays, assistance through government has been the main source of funds for the rebuilding process. However, house completion was best when the funding was from private parties, such as private sector in the country, foreign individuals, etc., and it was worse when the individuals relied on their own funding. However, only a small share of households have got funds from private donors. Most perceive that access to housing assistance through government sources was fairly easy.

Most rebuilt houses despite being smaller than pre-tsunami houses are built with better materials. This is especially the case when houses are funded by own funds, funds from government or NGOs. Households receiving funding from NGOs or other private sources were less able to participate in house design.

In addition to the slow progress in the donor-driven housing programme, most relocated households are worse off now in terms of quality of housing and access to services and employment. Many relocated households do not have their own sources of water and are worse off in terms of access to roads, pre-schools and health clinics compared to their pre-tsunami levels of access. About 80 per cent of the relocated claim that access to employment opportunities has worsened as a result of moving to new places. In addition

almost half of the relocated households are not happy with the construction materials used to build houses in the new locations. Also, survey results show that people's lifestyles and socio-economic situations were not taken into consideration when designing houses. The delays in matching beneficiaries to houses have partly contributed to this mismatch. However, when asked, "if the household intended to sell the new house," almost all relocated households answered in the negative.

Majority of relocated households have not been given ownership legally. Irrespective of the type of the donor, less than 6 per cent of the relocated households were assigned legal ownership of new houses.

Survey results signal problems of coordination across various donors, especially those who have provided houses without adhering to government plans. Results also suggest that the available macro level information on the housing requirement may be misleading. The macro level takes the difference between the number of households eligible for housing and the number of houses already provided as the housing requirement. But, if people have received houses outside their eligibility, or if people who received houses were not those eligible for houses, the above calculation will be incorrect.

The general perceptions on government's 2005 buffer zone are good, with only a few exceptions. There was a consensus on this view among the key informants as well as the households. Paradoxically, households and key informants were also happy with the relaxation of the buffer zone in 2006. Perhaps this is due to most households having the prospect of better housing because of this policy.

A fair proportion (24 per cent) of the households were affected by the change in housing policy, although the majority was unaffected. The reasons for being affected by the housing policy imply that the coverage of the policy (i.e., eligibility) is more of a concern to people than the specificities of the policy.

Livelihoods Recovery

The results of the IPS-TS 2006 show that all the surveyed GNDs received livelihood support – in terms of equipment and boats, livelihoods training and credit. Survey results show that 71 per cent have regained their old source of livelihood. About 8 per cent of heads of households have changed their livelihood, while 21 per cent are unemployed.

Overall, the household and the community level perceptions on income recovery are at variance. Household level data show that on average close to 60 per cent of households feel that their family incomes are worse compared to pre-tsunami levels in terms of their ability to cover basic needs such as food and health. On the other hand, according to key informants, almost all surveyed GNDs in the Southern Province and close to a half of the surveyed GNDs in the Eastern Province state that households are better off now because of aid, training, and more employment opportunities. It is possible, that households under-report income recovery, expecting further income assistance. This reveals the need to use more objective criteria to assess income recovery.

Income recovery patterns vary across regions, occupation groups and industry groups. Compared to the Southern Province, a higher per cent of households in the Eastern Province feel that their livelihoods have not recovered back to their pre-tsunami levels. Majority of technicians and machine operators have not recovered incomes at least to cover food needs. Additionally, more than 50 per cent of skilled agricultural & fishery workers and those who are involved in elementary occupations have not recovered incomes.

Major constraints faced by households in recovering their incomes include loss of equipment, loss of work places, lack of working capital and personal injuries. Only 4 per cent of the surveyed households indicate ethnic conflict as the main obstacle for income recovery.

Availability of more employment opportunities, due to reconstruction, has helped income recovery more than livelihood assistance. The provision of training, equipment, credit grants & transfers has significantly mattered in income recovery only to a very small portion

of the households (less than 1 per cent). This could partly be due to problems with access to markets and other infrastructure facilities.

The most common strategy for coping with income loss is reducing non-essential consumption followed by borrowing or dis-saving. However, more alarmingly, a large percent of households have used reducing food consumption as a coping strategy. A smaller percent of households have also resorted to selling assets and sending more members of the household to work.

Although the macro level information suggests that there have been numerous micro-credit programs for the tsunami-affected people, the ground level evidence suggests that such programs have not successfully penetrated the communities in need. Particularly, only 15 per cent of the households from the Southern and Eastern provinces of the country have applied for loans and only 10 per cent have received loans. However, amongst lenders, rural-, Samurdhi- and other development banks were more accessible to households. Close to 80 per cent of those who applied for loans through these banks have received loans, and they were given at lower interest rates and required less guarantees.

Health and Education

There is some evidence of mental and physical health problems related to the tsunami. A few households reported experiencing more sleeping difficulties, and more children having nightmares compared to pre-tsunami levels. In addition, a large number of households have stated that some member of the household had experienced deterioration of physical health after the tsunami.

About 11 per cent of the households knew of someone committing suicide because of the tsunami. A third of the households have been offered or given counselling for distress. The percentage of households receiving counselling is comparably higher in the Eastern Province. It is possible that there were already counselling taking place in these areas for victims of conflict related mental health problems.

An alarming 30 per cent of households claimed having children who are yet to restart schooling after tsunami. This problem was only slightly more pronounced in the conflict affected Eastern Province, indicating that the main reason for school non-restart is not the conflict. Child labour is one reason for reduced school attendance. The school attendance does not seem to vary much across housing situations, although children from relocated households were slightly less likely to be attending school. Income recovery seems to have a bearing on restarting schooling after tsunami.

Aid Distribution and Disaster Preparedness

On the positive side, the results show only low levels of corruption at the household level. Very few households claimed to have had paid bribes to government or NGO officials to receive aid and only 14 households knew of instances where politicians have interfered with the tsunami recovery efforts.

Information provided by key informants shows conflicts with regard to allocation of new houses, distribution of funds, and allocation of livelihood related assets. On the positive side, however, most GNs were of the view that almost all conflicts were amicably resolved through discussions with relevant parties.

Local level capacity and increased workload has affected aid distribution. Multitude of institutions at the centre has led to duplication of work that resulted in increasing the administrative workload of already under-resourced local level players, reducing the efficiency of aid distribution.

A small number of cases have been reported where ineligible families received houses, but these cases are prominent only in some GNDs. Corruption in allocating government housing grants is observed in isolated places at low levels, but with regional variations. Corruption relating to allocation of housing sites are also low. Intervention of people unaffected by tsunami has affected aid distribution in some areas. Around 12 per cent of households believe that political parties and local politicians have interfered in aid distribution to ensure that their supporters benefit more.

As a whole, nearly one third of the surveyed population find that community cohesiveness has decreased following tsunami. However, this is at variance to the perceptions of key informants in the respective divisions. Also, there have been some problems at household level in aid utilization. This is mainly due to increased consumption of alcohol by some household heads.

Some households, especially in Galle, reported family conflicts due to use of cash grants for consumption of alcohol by males. Around 11 per cent of households have noticed an increase in family conflicts following tsunami.

Although there have been numerous disaster preparedness training programs in the affected areas, only few households have actually benefited from these.

Main Report

Post Tsunami Reconstruction and Rehabilitation – Household Views on Progress and Process

1.0 Introduction

The challenges of reconstruction and rehabilitation following the December 2004 tsunami were new to Sri Lanka, and perhaps more complex than providing immediate relief. The difficulties arise from two fronts. On the one hand, the geographic, social, political and economic diversity of the people affected by the tsunami and the multifarious set of donors who have come forward to assist has made coordination and effective delivery of aid difficult. On the other hand, the inexperience, lack of capacity and coordination of the policy makers and institutions responsible for collecting information, planning and coordinating aid efforts has created confusion and delays. Macro level information is available – although disorganized and from various sources -- on different types and amounts of aid delivered to the tsunami affected, ranging from housing assistance to livelihood programs to counselling.[4] However, little information is available on the processes involved in delivering aid to the tsunami affected and the perceptions of individuals on the aid received and the aid delivery mechanisms. This report attempts to fill the gap in this information using information from two household surveys.

Following the December 2004 tsunami the Institute of Policy Studies (IPS) conducted two surveys. In keeping with the priorities of the time, the main focus of the first survey (henceforth referred to as IPS-TS 2005), conducted four months after the tsunami, was to assess the views of the tsunami-affected households on the government imposed "no-build" buffer zone. The second survey (hence forth referred to as IPS-TS 2006), conducted eighteen months following the tsunami, resurveyed the same households to obtain views on

[4] "Economic Challenges of Post Tsunami Reconstruction: Sri Lanka Two Years On", Sisira Jayasuriya, Dushni Weerakoon, Nisha Arunatilake and Paul Steele, 2006.

a broader range of issues including, housing, livelihoods recovery, aid distribution, community cohesiveness, and disaster management.

This report highlights some of the key findings of the above two surveys. The report is organized as follows. Section 2.0 provides the background to the surveys and gives the characteristics of the surveyed households. Given its continued importance, section 3.0 assesses the housing situation. Specific attention is given to examining the ground situation in housing progress, how it contrasts with the macro level information, the perception of the beneficiaries on the housing programme. Section 4.0 examines progress in livelihoods recovery and the effectiveness of income recovery programmes. Section 5.0 examines the impacts on health and education. Section 6.0 examines the equity and efficiency of aid distribution, and its social implications. Section 7.0 examines perceptions on disaster preparedness.

2.0 Background and Methodology

In 2005, with assistance from the World Bank, the IPS conducted a tsunami housing survey to secure the views of tsunami survivors in order to inform decisions regarding housing and relocation issues by the Government of Sri Lanka, the World Bank and other interested organizations. Data was collected from 622 households in 14 Grama Niladari divisions (GNDs) in 6 affected districts[5] during April 2005. Household interviews were complemented by focus groups in the 14 GNDs and interviews with key informants. In addition, officers in charge of land were interviewed in the Divisional Secretary office covering each GND. (A summary of the methodology is given in Appendix 1). Subsequently, in July 2006, with assistance from ADBI, an attempt was made to re-interview the 622 households in the original sample, to better understand the progress of the tsunami reconstruction and rehabilitating efforts one and a half years after the tsunami. In the second round, interviews were completed by 595 households, of which 564 were from the original sample while the rest (31) were replacement households.

[5] The original intention to include Jaffna and Mullativu was prevented by delays in LTTE agreement for the survey work to proceed.

3.0 Housing

3.1 Government Policy on Housing

Following the immediate tsunami relief operation, it was clear that permanent shelter is one of the main priorities for tsunami survivors. The issue has been affected by the government's decision to enforce a "no-build" coastal buffer zone of 100 metres in the south and west and 200 metres in the north and east (henceforth referred to as the 2005 buffer-zone). The government introduced a two pronged approach to housing assistance; namely, the donor driven housing programme for households within the zone, and the owner driven housing programme for those outside.

In the owner-driven programme, for households outside the zone, the government has agreed to provide grants and loans for households to rebuild, with assistance from the World Bank, Swiss Development Corporation and more recently by the Red Cross. While the donor-driven programme, for houses that were within the buffer zone, government's policy was to identify land close to the affected communities and provide houses with funding from donors, keeping communities intact as far as possible. Standard requirements have been set down by the GOSL of a floor area of 500 sq. ft. where the donor is to make available common infrastructure and the government is to provide services up to the relocation site.

In the months that followed, it was clear that, among other things, the progress of the housing program was affected by the unavailability of suitable land for housing to relocate households from within the buffer zone. The original policy on housing was modified in May 2006, with the revised objectives of: a house for house, regardless of ownership and location, equity between beneficiaries, a house by end 2006 to all affected (see Appendix 2, for details of the two policies).

3.2 Progress in Housing

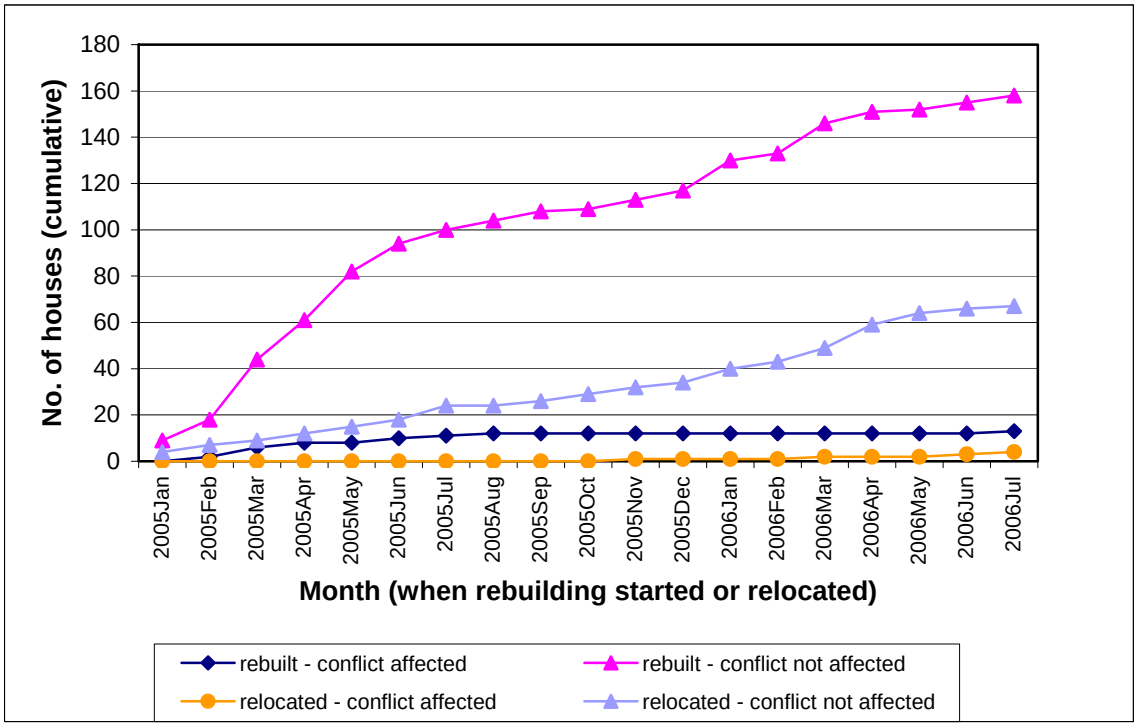
At the time of the IPS survey carried out in July 2006, 280 (47 per cent) of the 595 surveyed households were still residing in temporary houses -- that is, in camps, rented housing or living with friends and family. Of this an estimated 65 per cent were eligible for the 2005 donor-driven housing programme, compared to an estimated 17 per cent eligible for the 2005 owner-driven housing programme. Of the households in temporary housing, 40 per cent were expecting to relocate to a new site.

According to community level key informants, change in buffer zone limit, improper monitoring, lack of land and delays in obtaining donor assistance are the main reasons for the slow progress in housing for households eligible for the donor-driven housing programme. The households share the view that change in the buffer zone rule has delayed the construction of houses, in addition they also feel that delays in providing housing materials have slowed down progress.

In accordance with available macro level data, the IPS-TS 2006 survey – conducted in 14 GNDs in the Southern and Eastern provinces – shows that the progress in housing is best for those outside the 2005 buffer zone in the Southern Province. Less than 6 per cent of surveyed households in this region were in temporary housing. The progress in housing is worst for those in the Eastern Province – for households both within and outside the 2005 buffer zone. The progress is especially poor for households affected by the conflict (see Figure 1).

In the total sample 47 per cent of households are still in temporary housing. For the sub-sample of single female-headed households this percentage is 42, while the corresponding statistics is 44 for single male-headed households and 49 for households with two heads. This indicates that type of household head has not influenced progress in housing. However, this information may be biased, as some households who are not eligible stay in temporary housing with the hope of obtaining a new house.

Figure 1:
Housing Progress by Conflict Affected



Source: Own calculations using IPS-TS 2006 data.

Note: Of the total sample of 595, 171 houses have started to rebuild while 73 have relocated. Of the total sample, 61 households stated that they were affected by the conflict.

3.2.1 Rebuilding, Quality of Housing and Perception on Process

Despite delays, assistance through government has been the main source of funds for the rebuilding process. Majority of households who have rebuilt have obtained half or more funds for rebuilding through the government. A large portion of households have also received more than 50 per cent of funding from NGOs or used informal sources of funding for rebuilding. House completion was best when the funding were from private parties, such as private sector in the country, foreign individuals, etc, and it was worse when the individuals relied on their own funding for rebuilding. However, only a small share of households has got funds from private donors.

A quarter of households have received houses bigger than their previous house, irrespective of source of funding. However 50 to 60 per cent of houses mainly funded by own funds, funds from government or NGOs have used better materials for house construction, relative

to pre-tsunami housing material. Households receiving funding from NGOs or other private sources were less able to participate in house design (see Table 1)

Table 1:
Perceptions on Rebuilding of Houses, by Source of Funds

	Sample size (%)	**Completed[1] (%)**	**House bigger[1] (%)**	**Materials better[1] (%)**	**Participated in house design[1] (%)**
Using own funds or funds from relatives[2]	59 (100)	10 (17)	3 (5)	35 (59)	44 (74)
Receiving government funds[2]	134 (100)	47 (35)	16 (12)	63 (47)	66 (49)
Receiving funds from NGOs[2]	54 (100)	20 (37)	5 (9)	27 (50)	15 (28)
Receiving funds from other sources [3]	7 (100)	6 (86)	0 (0)	2 (29)	5 (71)

Source: Own calculation using IPS-TS, 2006.

Notes: 1. The percentages are out of the total number of households given in the first column. 2. Major portion (Half or more) of funds from this source. 3. Others include foreigners, local individual donors, religious priests, leaders & institutions.

3.2.2 Relocation, Quality of Housing and Perception on Process

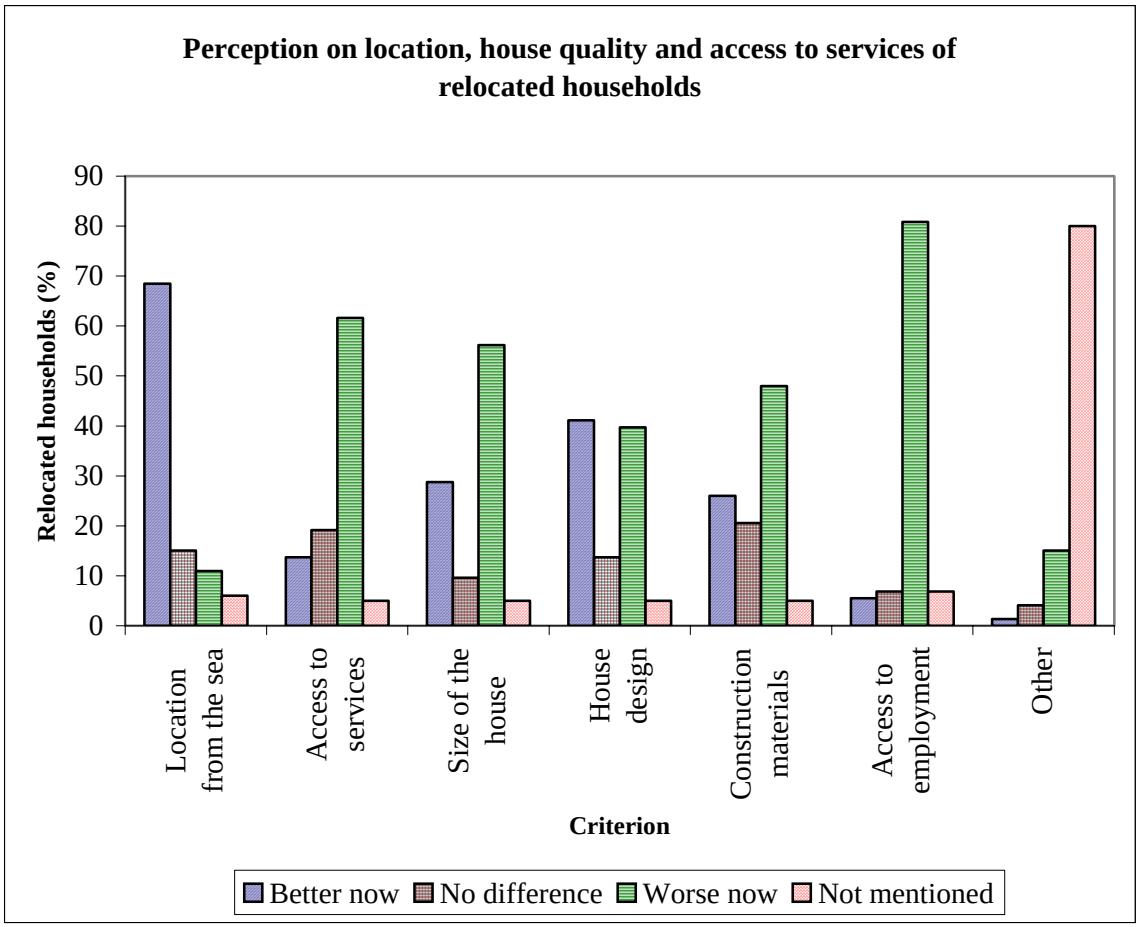
Table 2:
Quality of Housing Before and After Tsunami for Relocated Households

	Sample Size (100%)	Better Now %	Worse Now %	No Difference %
House design	69	42	41	14
Construction materials used for housing	69	27	49	21
Access to services (water, electricity, roads)	69	14	63	20
Primary school within 1 km	73	10	62	29
Clinic within 1 km	73	1	59	40

Source: Own calculations using IPS-TS 2005 and 2006.

In addition to the slow progress in the donor-driven housing programme, IPS-TS 2006 results show that some people are worse off now in terms of quality of housing and access to services and employment. Many relocated households do not have their own sources of water and are worse off in terms of access to roads, pre-schools and health clinics compared to their pre-tsunami levels of access (see Table 2). About 80 per cent of the relocated claim that access to employment opportunities has worsened as a result of moving to a new place. In addition, almost half of the relocated households are not happy with the construction materials used to build houses in the new locations (see Figure 2 and Appendix 3).

Figure 2:
Perception on Location, House Quality and Access to Services, Relocated



Source: Own calculations using IPS-TS, 2006.

Also, the survey results show that people's lifestyles and socio-economic situations were not taken into consideration when designing houses. The delays in matching beneficiaries to houses have partly contributed to this mismatch. For example, the percentage of households using expensive sources of fuel for cooking such as gas and electricity has increased from 10 per cent to 18 per cent, primarily because many of the new houses did not include a kitchen with a chimney to make the use of fuel wood for cooking possible. The alternate sources of fuel available may be too costly.

Most relocated households have not been given ownership legally. Irrespective of the type of the donor, less than 6 per cent of the relocated households were assigned legal ownerships of the new houses built in different locations. NGOs have issued letters giving

ownership for more than half of the relocated families but have given legal rights to only 4 per cent of the relocations. Not having legal ownership of the house may not create problems at present. However, as households change, it may lead to family disputes. Also, families may not be able to use housing assets as collateral.

It is the preference of almost all relocated households to reside in their new house. Only one of the surveyed households had thought of selling their new house. Others indicated a preference for residing in the new house, although some have found the design, size and other criteria worse than before. This suggests that the risk of households selling their houses and resettling on encroached land near the sea is small. However, this situation may change with time.

3.2.3 Progress by Housing Programme: Owner-driven, Donor-driven

IPS-TS 2005 and 2006 data give information on the location with respect to the 2005-buffer zone and house and land tenure for 559 households. Of these, an estimated 268 were eligible for the donor-driven housing and 157 were eligible for owner-driven housing. Under the 2005 buffer zone rule, a total of 134 households were not eligible for a new house either because they were not house owners before the tsunami (70 per cent of 134) or because they were outside the 2005-buffer zone, and were house owners without land tenure (30 per cent of 134).

The housing progress is worst for people who were eligible for donor-driven housing. About 65 per cent of such households are still in temporary housing situations. At the same time about 56 per cent of households that were not eligible for a new house have also received a house. There appears to be some inconsistencies in the government's housing policy and what has taken place in practice. Some households eligible to relocate under the donor-driven housing programme have rebuilt (19 per cent), while others eligible to rebuild under the owner-driven housing programme have relocated (16 per cent). Some households have received houses outside both these programmes, and others who were not eligible to receive a house under either programme have received houses (see Table 3).

Table 3:
Housing Situation as at July 2006
(by eligibility under 2005 housing programme)

Eligibility	Rebuilt	Relocated	Donor Built on Old Site	Temporary Housing	NI[a]	Total
Donor driven	52	25	11	175	5	268
%	19.4	9.3	4.1	65.3	1.9	100.0
Owner driven	76	25	22	26	8	157
%	48.4	15.9	14.0	16.6	5.1	100.0
Not eligible	34	17	24	59	0	134
%	25.4	12.7	17.9	44.0	0.0	100.0
Total	162	67	57	260	13	559

Notes: a: No Information. b:. Households not owning a house before the tsunami (70% of 134) and households owning a house on encroached land (30% of 134) outside the buffer zone were not eligible for a new house under the 2005 housing policy.

Source: Own calculations based on IPS TS 2005 and IPS TS 2006 data.

This data signals problems of coordination across various donors, especially those who have provided houses without adhering to government plans. Discussions with GND and district level government officials suggest that reluctance of local non-government agents to share information on aid distribution and their beneficiaries have exacerbated the problem of coordination and monitoring. More seriously, this suggests that the available macro level information on the housing requirement may be misleading. The macro level takes the difference between the number of households eligible for housing and the number of houses already provided as the housing requirement. But, if people have received houses outside their eligibility, or if people who received houses were not those eligible for houses, the above calculation will be incorrect.

3.3 Sources of Funds and Perceptions on Access to Housing Assistance

About 82 per cent of households that have received assistance for rebuilding found obtaining funds from government fairly easy, while only 11 per cent found it very difficult, and the rest had either not attempted to obtain funds from government or had declined to comment. In comparison, 45 per cent of households who had obtained assistance for rebuilding found obtaining assistance from NGOs fairly easy, while 15 per cent found it very difficult.

3.4 People's reactions to the "no-build" buffer zone and its change

The general perceptions on government's 2005 buffer zone are good, with only a few exceptions.[6] There was a consensus on this view at the community level as well as the household level. Majority (60 per cent) of the households surveyed, liked the 2005 buffer zone, while 38 per cent did not. The rest were either indifferent or had no opinion on the matter. The data at the Grama Niladari Division (GND) level agree with this finding with almost all Grama Niladaris (GNs) interviewed agreeing that the government's original buffer zone policy was good.

Paradoxically, they were also happy with the relaxation of the buffer zone in 2006. Although there were delays in providing housing because of the buffer zone rule, most households have the prospect of better housing because of this policy: IPS-TS 2005 results find that most houses that were destroyed were smaller than the minimum floor area of 500 sq. ft. specified for new houses under the donor-driven programme.[7] While all new houses are to be built with permanent housing materials a large share of destroyed houses were made of temporary housing material.[8] Also, households that did not have legal ownership

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6 For example, the GN from Pelena South did not like the policy, perhaps due to the fact that almost all (80 per cent) of the houses in Pelena South were within the no-build buffer zone.

7 About, 53 per cent of the surveyed houses made unusable by the tsunami were less than 450 sq. ft, while only 10 per cent were bigger than 600 sq. ft.

8 About 32 per cent of roofs of the surveyed houses were made of cadjan or metal sheets, while close to half the surveyed houses had walls made of temporary material.

of land were given houses under the donor-driven programme.[9] These factors may have outweighed the delays in housing progress due to the 2005 buffer-zone rule.

About 24 per cent of the households stated that they were affected by the new housing policy introduced in 2006. Of the people who are still in temporary housing, 17 per cent stated that they were affected by the new housing policy "a lot". Of the reasons given for being affected by the policy the most stated reasons were: "not getting a house because of ineligibility", "extended families not getting a house (even though they were affected by the tsunami)" and "conflicts among people". These reasons imply that the coverage of the policy (i.e., eligibility) is more of a concern to people than the specificities of the policy.

The change in housing policy has reduced the number of households to be relocated, in general. According to the information given by GNs where the IPS community level survey was conducted, on average the number of families to be relocated has decreased from 410 to 239 with the new housing policy. However, there are wide variations in the change in number of families to be relocated by GND. As expected, the change in housing policy has affected the people within the 2005 buffer-zone more. However, of these only 15 per cent of households stated that the change in housing policy affected them 'a lot', and a further 15 per cent were somewhat affected by the housing policy while the majority were not affected.

4.0 Livelihoods Recovery

The results of the IPS-TS 2006 show that all the surveyed GNDs received livelihood support – in terms of equipment and boats, livelihoods training and credit. Of the estimated 150,000 who lost their main source of income, available information suggests that around 75 per cent of the families had regained their main source of income by end 2005.[10] This is supported by the IPS-TS 2006 survey where 71 per cent are found to have regained their

[9] About 13 per cent of surveyed households inside the buffer zone owned houses on government land, while a further 9 per cent owned houses built on other people's private land.

[10] "Sri Lanka: Post Tsunami Recovery and Reconstruction", Joint Report of the Government of Sri Lanka and Development Partners, December 2005.

old source of livelihood. Only 8 per cent of heads of households have changed their livelihood,[11] while 21 per cent are unemployed.[12]

Overall, the household and the key informant perceptions on income recovery are at variance. The IPS-TS 2006 household level data show that on average close to 60 per cent of households feel that their family incomes are worse compared to pre-tsunami levels in terms of their ability to cover basic needs such as food and health. On the other hand, according to the key informants, almost all surveyed GNDs in the Southern Province and close to a half of the surveyed GNDs in the Eastern Province are better off now because of aid, training, and more employment opportunities. It is possible, that households under-report income recovery, expecting further income assistance. This reveals the need to use more objective data to assess income recovery.

Clearly, there appears to be regional variations in income recovery patterns. Compared to the Southern Province, a higher percentage of households in the Eastern Province feel that their livelihoods have not recovered back to their pre-tsunami levels.[13] According to the IPS-TS 2006 data – in both Southern and Eastern provinces – improper distribution of livelihood related assets, the implementation of the buffer zone rule and damages to work places have affected livelihood recovery. In addition to these, inability to participate in training due to security reasons has also slowed down livelihood recovery in the Eastern Province.

A substantial number of households in the tsunami-affected areas have changed their livelihoods following the tsunami. The percentage who changed their livelihoods is nearly 8 per cent. Provincial differences are also observed, where approximately 9 per cent from the Eastern province have changed their livelihoods and it is only 4 per cent in the Southern province. Nearly one third of such households belonged to the fishing industry, while most are falling into two occupation categories namely skilled agricultural and fishery workers

[11] About a half the household heads that have changed their livelihoods come from one GND, in the Eastern Province.

[12] Further, the current housing situation does not appear to have any effect on livelihood recovery.

[13] The income recovery patterns across GNDs are mixed. In some GNDs more than a half of the people have recovered their livelihoods to the pre-tsunami levels or more, while in most GNDs less than a half have recovered their livelihoods.

and other informal sector workers. Correspondingly, many households argue that some of the earlier fishermen have not received necessary equipment and required training to regain their livelihoods. Majority of households who shifted to different livelihoods are mainly self-employed workers and belong to the informal private sector.

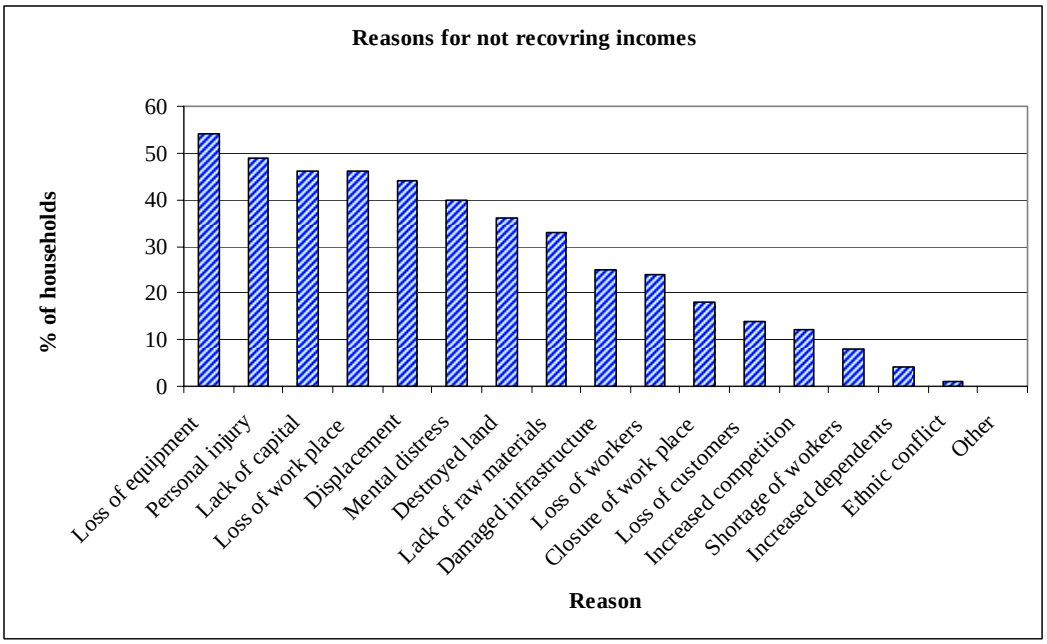
The percentage of unemployed household heads is fairly high in tsunami-hit areas. Around 16 per cent of the household heads remain unemployed after tsunami. The main reasons for being unemployed, as stated by the households include ill health and no capital. In addition, approximately 16 per cent of the unemployed are old aged and self-reliant. Majority has not provided reasons for being unemployed.[14]

4.1 Income Recovery, Constraints and Role of Livelihood Assistance Programmes

Major constraints faced by households in recovering their incomes include loss of equipment, loss of work places, lack of working capital and personal injuries. Only 4 per cent of the surveyed households indicate ethnic conflict as the main obstacle for income recovery. In addition, displacement has slowed down the recovery progress. Many households have stated that the delay in relocating and rebuilding houses has resulted in delays in commencing their livelihood activities. Even though some households have got assistance to restart self-employment activities, even now they have not been able to do so, as they still reside in temporary shelters. It was the view of many households that housing should be given priority (see Figure 3).

[14] Unfortunately, IPS-TS 2006 survey only collected labour force information from household heads.

Figure 3:



Source: Own calculations using IPS-TS, 2006.

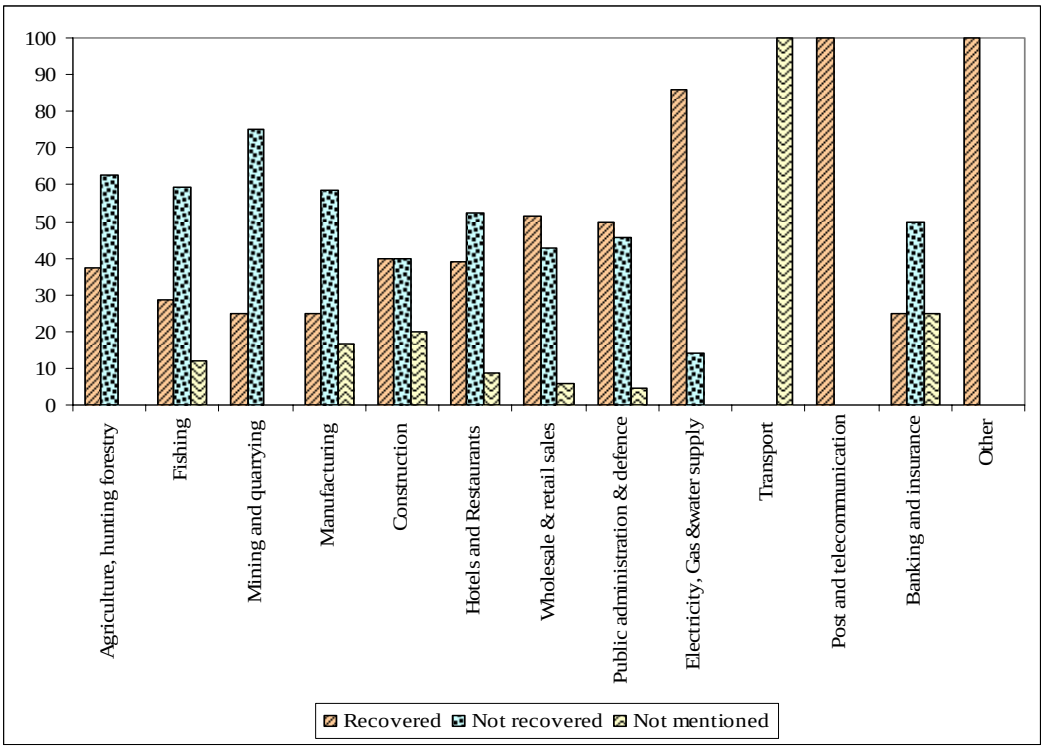
Availability of more employment opportunities has helped income recovery more than livelihood assistance. The provision of training, equipment, credit grants & transfers has significantly mattered in income recovery only to a very small portion of the households (less than 1 per cent). Nearly 3 per cent of the households have some way or other benefited from the availability of more employment opportunities due to tsunami reconstruction and other reasons. This could partly be due to problems with access to markets and other infrastructure facilities.

Income recovery patterns[15] differ among different occupation and industry groups and across employment status and sector of work. The majority of technicians and machine operators have not recovered incomes at least to cover food needs. Additionally, more than 50 per cent of skilled agricultural & fishery workers and those who are involved in elementary occupations have not recovered incomes. The recovery rates are lower among private sector workers, both formal and informal than other sectors of work. Based on the

[15] Those who have recovered incomes at least to cover food costs are categorized as 'recovered'.

employment status, over 75 per cent of the unpaid family workers have not recovered their incomes.

Figure 4:
Income Recovery Pattern by Industry Category



Source: Own calculations using IPS-TS 2006 data.

Note: Those who have recovered incomes at least to cover food costs are categorized as 'recovered'.

4.2 Coping Strategies

The most common strategy for coping with income loss is reducing non-essential consumption. Assistance from informal sources, borrowing and dis-saving was also common strategies of coping. More alarmingly, a large percentage of households have used reducing food consumption as a coping strategy. A smaller percentage of households have also resorted to selling assets and sending more members of the household to work (see Table 4).

Table 4:
Coping Strategies, by Magnitude of Income Shock

	Income recovery not sufficient to cover food needs (%)	**Income recovery not sufficient to cover health and education needs[1] (%)**	**Income recovery not sufficient to cover needs other than food, health and education (%)**
Sample size	347 (100)	44 (100)	54 (100)
Reduced luxury consumption	223 (64)	30 (68)	37 (68)
Got assistance from others	104 (30)	13 (30)	24 (44)
Dis-saving	40 (12)	24 (55)	24 (44)
Borrowing	83 (24)	8 (18)	11 (20)
Reduced food consumption	172 (50)	8 (18)	13 (24)
Selling assets	40 (12)	3 (7)	9 (17)
Sending additional household members to work[2]	33 (10)	7 (16)	5 (9)

Source: Own calculations using IPS-TS, 2006.

Note: 1. This category includes households that have recovered incomes to cover food needs but not sufficient to cover health and education needs.

4.3 Micro-credit

The number of households who have applied for loans, following the tsunami is fairly low. Only 15 per cent of the households have applied for loans from different lenders and nearly 67 per cent of those who applied, have got them. The reasons for not getting loans seem rather vague, most did not have a clear idea why they did not get loans. More than half the households, who have applied for loans, are those who have not been able to recover incomes, at least to cover food needs. In this category, 34 per cent have not been able to get the loans.

Most, 70 per cent, had to show collateral to receive loans. The types of collateral used most commonly included household assets other than land, livestock and houses. Further, nearly 57 per cent of households (of those who received loans) required personal guarantors to obtain the loans (see Table 5 for details on loans by lender).

Roughly half of the tsunami-affected households were reluctant to apply for loans because they were averse to getting into debt. This could partially be due to income insecurity following tsunami. Still, most affected households have not recovered their incomes (See the section on livelihood recovery). In addition, about 17 per cent of households claim lack of knowledge on the availability of credit facilities and the requirements for obtaining a loan as reasons for not applying for a loan.

Table 5:
Access to Credit and Terms and Conditions of Loans, by Lender

Applied for a loan				90 (15%)
	Type of lender			
	Government banks	**Private Banks**	**Other Banks[1]**	**Informal sources[2]**
Sample size (no.)	19	24	24	23
Successful in getting the loan (%)	11 (59)	18 (75)	19 (79)	17 (74)
Needed guarantors (%)	7 (37)	12 (50)	7 (29)	11 (65)
Needed collateral (%)	9 (47)	13 (54)	15 (63)	12 (52)
Interest rate, if yearly[3]	6- 17	2- 18	6-7	0-16
Interest rate, if monthly[3]	0-11	0-20	0-2	-
Did not apply for a loan (%)				505 (85)
Reasons for not applying[16]				
Did not want to get into debt (%)				309 (61)
Did not know they could (%)				44 (9)
Expected to be rejected (%)				44 (9)
No need of money (%)				18 (4)
Got help from friends and family (%)				11 (2)
Other(%)				94 (19)
Sample size (%)				595 (100)

Source: Own calculations using IPS-TS, 2006.

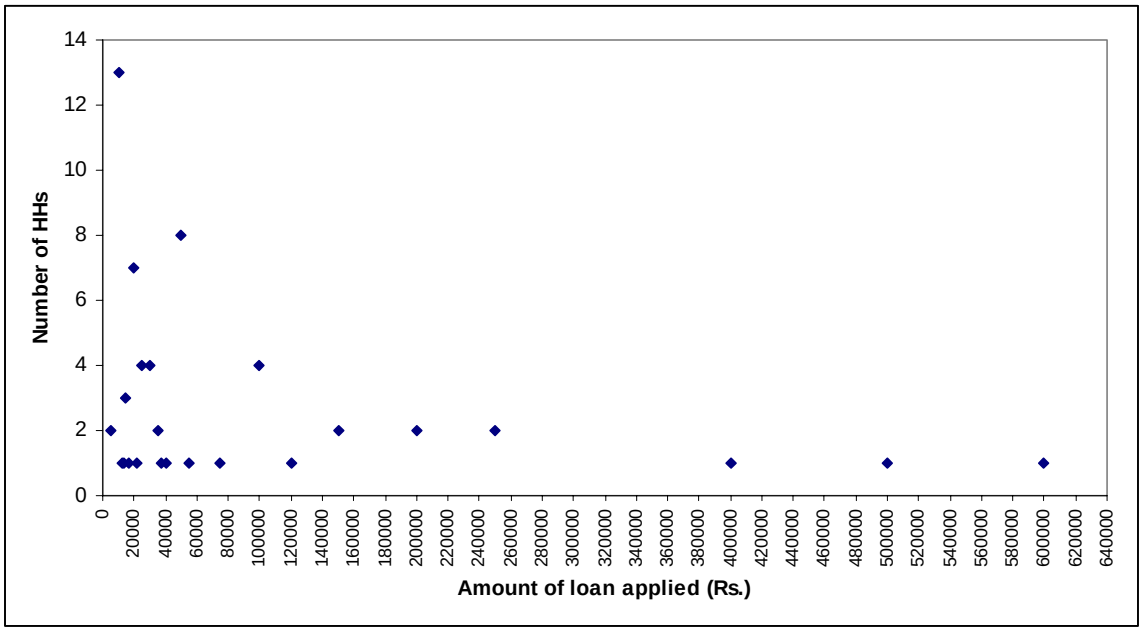
Note: 1. Other Banks include: Rural banks, Samurdhi banks and other development banks. 2. Informal sources include pawnbrokers, moneylenders, neighbours, friends and work place. 3. Not all loans were given on yearly interest rates. Some were on monthly or weekly interest rates.

[16] The summation of the percent values is more than 100 per cent, since some households have stated 2 reasons for not applying for loans.

Most of those who have intended to apply for loans have chosen formal credit institutions. Out of the total loan applicants around 74 per cent have selected banks, without looking for informal lenders such as pawnbrokers, moneylenders, friends and relatives etc.

For most of the applicants the loan amounts lie below the Rs. 100, 000 limit. The scatter diagram below summarizes the frequency of households applying for different loan amounts. Accordingly, the amount of loan is less than Rs. 100, 000 for more than 60 per cent of those who applied for loans. Majority of households are paying higher interest rates, which are more than 15 per cent per year. The loan period is less than 2 years for about 68 per cent.

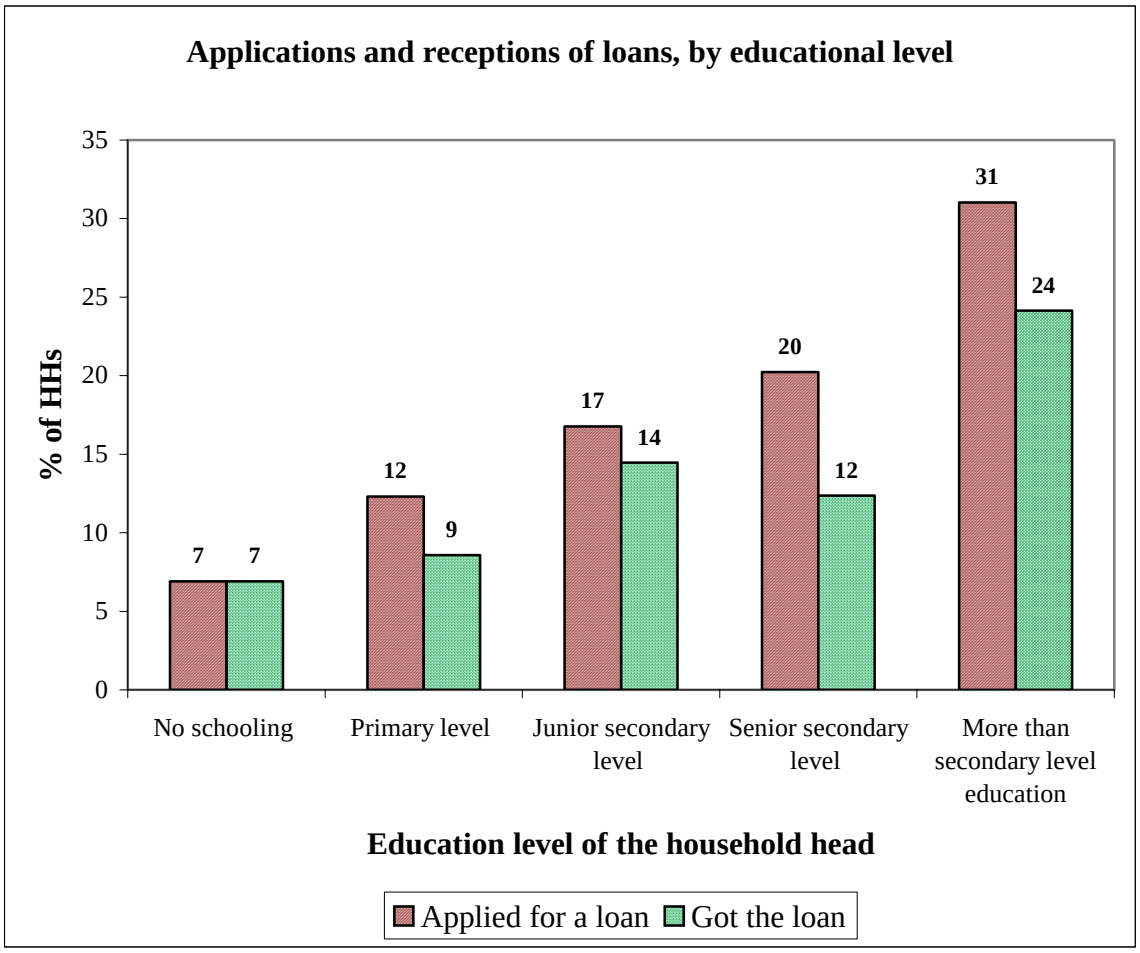
Figure 5:
Distribution of Loan Amounts



S**ource**: Calculated using IPS-TS 2006 data.

More educated household heads were more likely to apply for loans. However, the probability of getting a loan if applied, does not seem to be affected by the education level of the head of the household (see Figure 6).

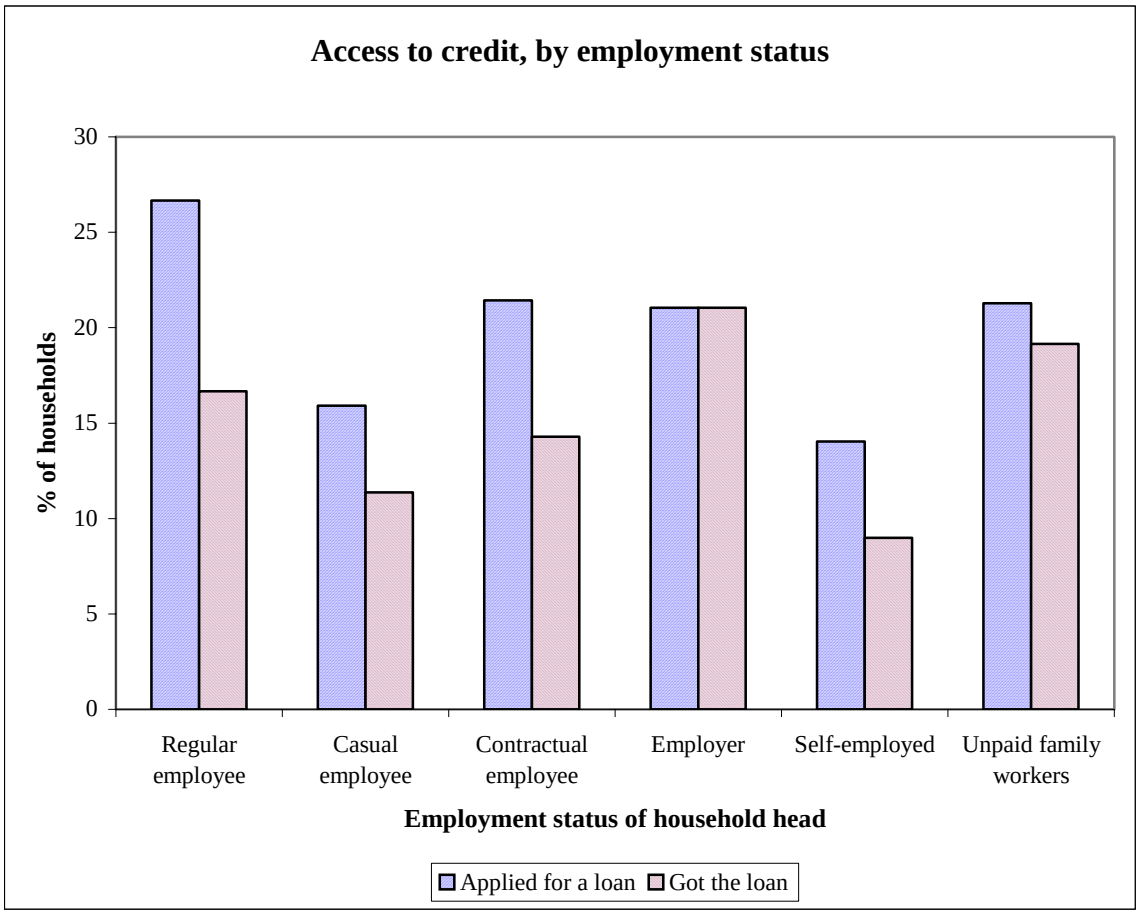
Figure 6:
Access to Credit, by Educational Level



Source: Own calculations using IPS-TS, 2006.

Despite the fact that most micro-credit schemes were targeting employers and self-employed, regular employees were most likely to apply for loans. In comparison, the percentage of self-employed persons who have applied for loans seemed quite low (see Figure 7).

Figure 7:
Access to Credit, by Employment Status



Source: Own calculations using IPS-TS, 2006.

Households engaged in fishing industry were less likely to get loans compared to those from other industries. Only 65 per cent of those who applied in fishing industry have been able to get loans. In spite of this, almost all households from agriculture, fishery, forestry, mining & quarrying and construction have been successful in getting loans. Poor documentation has been the main reason for not getting loans for fishermen.

Although the macro level information suggests that there have been numerous micro-credit programs for the tsunami-affected people, the ground level evidence suggests that such programs have not successfully penetrated the communities in need. Particularly, only 15 per cent of the households from the Southern and Eastern provinces of the country have applied for loans and only 10 per cent have received loans. However, amongst

lenders rural, Samurdhi and other development banks were more accessible to households. Close to 80 per cent of those who applied for loans through these banks have received loans, and they were given at lower interest rates and required less guarantees (see Table 5).

By household type, single-male headed households were more likely to apply for loans, they were also more likely to get loans. A larger percentage of female headed households had not applied for loans because of lack of knowledge (see Table 6).

Table 6:
Post-tsunami Access to Credit, by Type of Household Head

Criteria	Single-male headed	Single-female headed	Two-household heads
Sample size	45	112	433
Applied for loans (%)	9 (2)	16 (14)	65 (15)
Percent getting loans (%)	8 (1)	12 (11)	47 (11)
Reasons for not applying for loans			
Did not want to get into debt (%)	31 (69)	55 (49)	310 (52)
Expected to be rejected (%)	1 (2)	6 (5)	37 (8)
Didn't know they could (%)	0 (0)	12 (11)	32 (7)
Didn't need money (%)	0 (0)	3 (3)	15 (3)
Got assistance from friends (%)	0 (0)	1 (1)	10 (2)
Other (%)	4 (9)	19 (17)	71 (16)

Source: Own calculations using IPS-TS 2006 data.

5.0 Impact on Health and Education

5.1 Health

The IPS-TS 2006 results indicate some evidence of mental and physical health problems related to the tsunami. A few households reported experiencing more sleeping difficulties, and children having nightmares compared to pre-tsunami levels. About 11 per cent of the households knew of someone committing suicide because of the tsunami. A large number of households – 33 per cent of households in the sample – have been offered or given counselling for distress. The percentage of people who received counselling is comparably higher in the Eastern Province. It is possible that there was already counselling taking place in these areas for victims of conflict related mental health problems.

In addition, a large number of households have stated that some member of the household had experienced deterioration of physical health after tsunami. About 12 per cent of households stated having physically ill or injured members following the tsunami. Of these, 77 per cent claimed that their income earning capacity and/or day-to-day activities were affected by this physical disability.

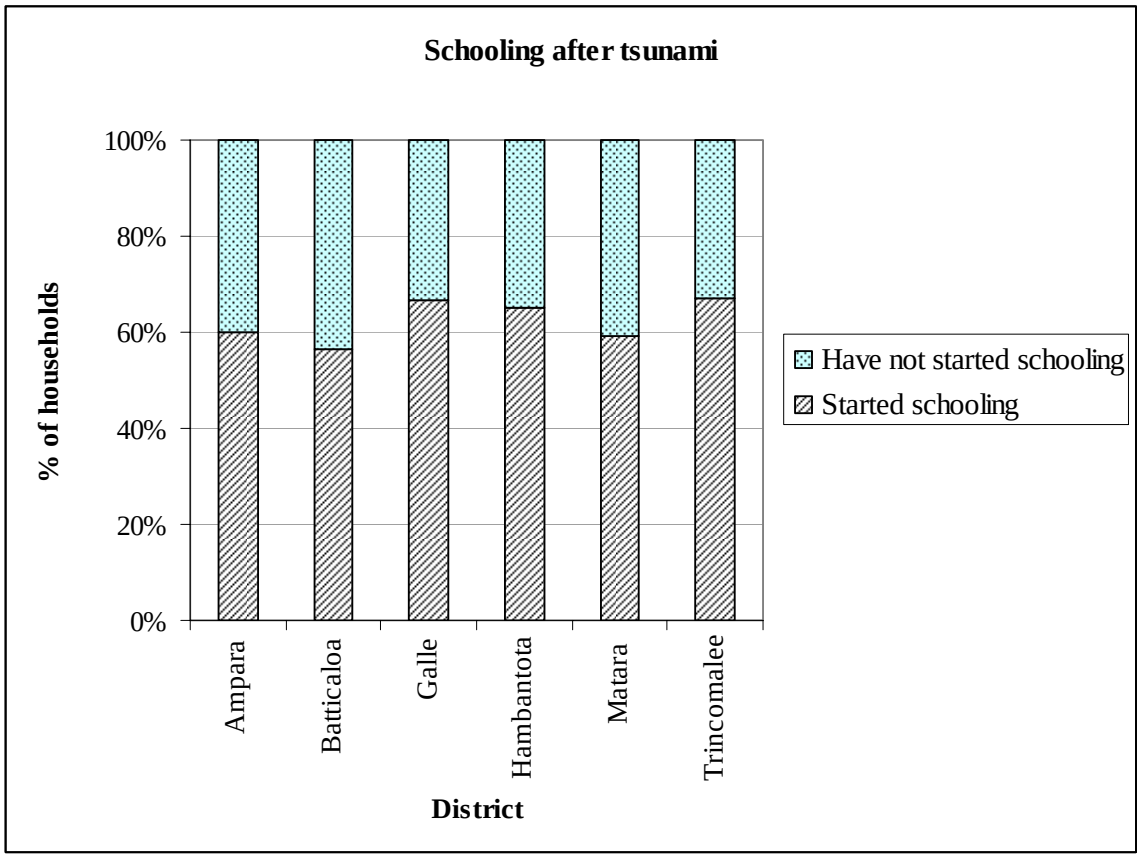
5.2 Education

Nearly 30 per cent of households claimed having children who are yet to restart schooling after the tsunami. This problem was only slightly more pronounced in the conflict affected Eastern Province, indicating that the main reason for school non-restart is not the conflict. The school attending percentage is highest among Galle and Trincomalee districts (67 per cent) and lowest in Batticaloa district (56 per cent). Anecdotal evidence provided by field offices indicates that one reason for school non-participation is the receipt of surplus livelihood related assets. In addition to low school participation, around 31 per cent of the households have found that children's performance at schools has declined after the tsunami (see Figure 8).

The performance in school is worse for children from households that have not recovered their incomes at least to cover food needs. As a whole 31 per cent of the household heads

have stated that the performances of their children in schools are not good, when compared with the pre-tsunami situation. Nearly two thirds of the households, who have not recovered income, have claimed that children's performance in school is poorer than before.

Figure 8:
Post-tsunami School Participation, by District



Source: Own calculations using IPS-TS, 2006.

Child labour is one reason for reduced school attendance. According to Ips-TS 2006 results, increasing household income earning activities have been a main reason for school non-attendance. Especially areas receiving surplus aid including equipment, boats were more likely to keep children away from school. As pointed out by several households (for instance in Pelena-South GN division), the aspirations of children and the youth have been changed towards income earning activities, at the cost of education, because of livelihood assistance.

The school attendance does not seem to vary much across housing situations, although children from relocated households were slightly less likely to be attending school. School attendance by housing situation was 62, 56 and 61 respectively for households in rebuilt houses, relocated houses and in temporary housing.

Income recovery seems to have a bearing on school participation after tsunami. Children have not restarted schooling in around 34 per cent of the households who have not recovered incomes at least to cover food needs. This percentage is only 23 per cent in households who have recovered incomes. In addition, children in around 46 per cent of households whose heads remain unemployed have not started schooling.

Even after the tsunami the majority of households have sent their children to the same school. Children in only 18 per cent of households have changed schools.[17]

6.0 Aid Distribution

As discussed previously, the ground situation on housing is at variance with the government's policy on housing, indicating problems with coordination and monitoring. Also, the reluctance of some non-governmental agents, operating independently, even to share beneficiary lists have further complicated the problems of coordination.

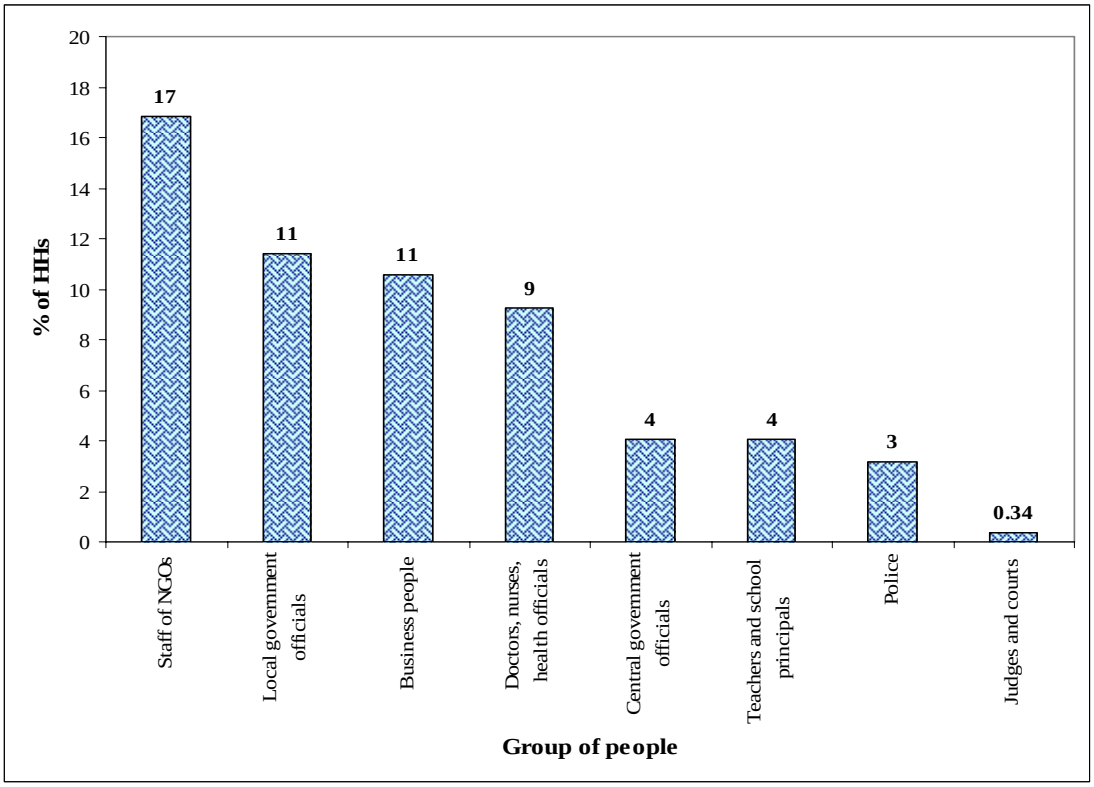
According to the IPS-TS 2006 results, about 17 per cent of households reported 'bad experiences' with NGO officials, compared to 4 per cent and 11 per cent of households reporting 'bad experiences' with central and local level government officials, respectively.

From the perspective of the households, IPS-TS 2006 results show mixed reactions to the effectiveness of assistance by international and local NGOs. About 44 per cent of the households surveyed have felt that INGOs were more effective in delivering aid, while 11

[17] This percentage is out of the households who had children who went to school before tsunami.

per cent felt that the local NGOs were more effective. About 15 per cent of households felt that there is not much of a difference between local and international NGOs.

Figure 9:
Percentage of Households having Bad Experiences with Officials



Source: Own calculations using IPS-TS, 2006.

Key informant information shows conflicts with regard to allocation of new houses, distribution of funds, and allocation of livelihood related assets.[18] On the positive side, however, most GNs were of the view that almost all conflicts were amicably resolved through discussions with relevant parties.

Under World Bank guidance when preparing beneficiaries for housing, credible attempts were made to make the process transparent. Draft versions of beneficiary lists were posted in public places and affected households were given the opportunity to contest these lists. Village level rehabilitation committees were also established to assess housing damage, and

[18] The level and nature of conflicts vary across GNDs, with some GNDs reporting no conflicts while others report all types of conflicts.

for the purposes of dispute resolution. However, anecdotal evidence suggests some implementation problems with these safeguard measures. For example, local level peer monitoring worked better in rural settings, where communities are more cohesive and community groups are present. In urban areas, these were less effective. Although dispute resolution mechanisms were put in place, inconsistencies and inadequacies in regulations and lack of decision making power given to local level authorities prolonged the resolution of some grievances – e.g., the eligibility of households in rented houses to receive benefits.

Also, the central government rushed to establish new institutions specifically to deal with tsunami related aid distribution, ignoring existing institutions. At the same time, sufficient attention was not given to building capacity at the local levels. This led to duplication of work that resulted in increasing the administrative workload of already under-resourced local level players, reducing the efficiency of aid distribution.

6.1 Corruption and Interference

As stated earlier, the IPS-TS 2006 results also indicate that delays in donor assistance to be a main reason for the slow progress of the donor driven housing programme. On the positive side, the IPS-TS results show only low levels of corruption at the household level. Very few households had paid bribes to government or NGO officials to receive aid and only 14 households knew of instances where politicians have interfered with the tsunami recovery efforts.

A small number of cases have been reported where ineligible families received houses, but these cases are prominent only in some GNDs. Only 3 per cent of the survey population have indicated knowledge of many instances where families who did not live in a tsunami damaged house in the buffer zone, receiving a new house.

Corruption in allocating government housing grants is observed in isolated places at low levels, but with regional variations. No one claimed large-scale corruption in allocating housing grants. About 5 per cent of the total sample has indicated knowledge of some instances where housing grants were given to individuals who were not eligible. These

claims were more common in some GNDs – 33 per cent in Thiruchendhoor, 14 per cent in Pelena South and 6 per cent for Onthachimadam North and Jaya Nagar.

Corruption relating to allocation of housing sites is also low. Only 11 per cent of relocated households knew of households obtaining housing sites by giving bribes. The majority of relocated households feel that proper criteria and rules were used in allocating housing sites.

Intervention of people unaffected by tsunami has affected aid distribution in some areas. For example, in Uppuveli Thambiluvil 1 East and Sinnamugathuwaram divisions intrusion of dominant groups and unaffected people has resulted in slowing aid distribution. More than 12 per cent of households believe that political parties and local politicians have interfered in aid distribution to ensure that their supporters benefit more.

6.2 Sources of Information

The sources of information where people find out government policy changes vary across regions. Altogether, the most important sources include radio, through relatives, GNs and neighbours. Newspapers and televisions have the ability of disseminating information to only less than 10 per cent of households. However, radio has been the main source of information in Batticaloa and Trincomalee districts. Most households from Matara district believe that they get to know about policy changes via their relatives. Over one fourth of the households from Ampara have received information through neighbours. In addition, GNs in Galle and Ampara have involved in disseminating the information regarding government policy changes.

6.3 Community Cohesiveness and Social Changes

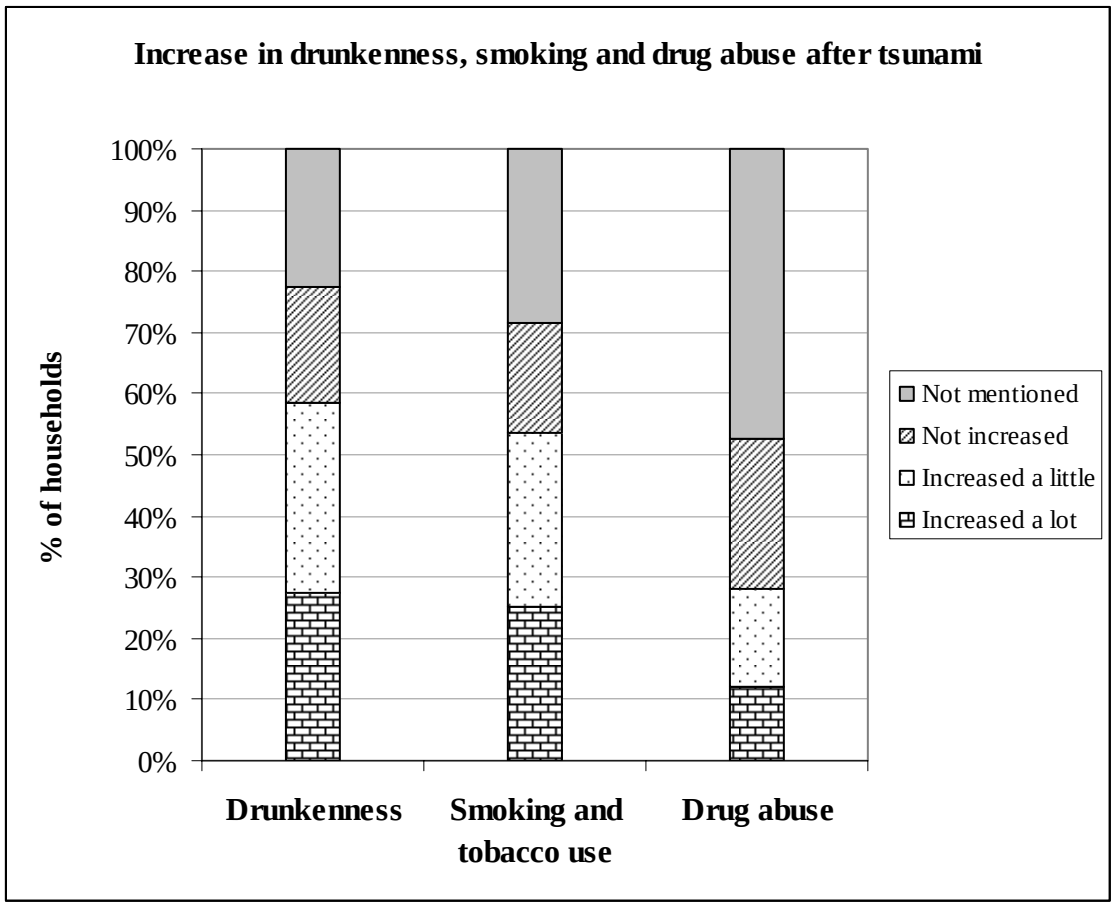
As a whole nearly one third of the surveyed populations find the cohesiveness in the communities has decreased following the tsunami. However this is at variance to the perceptions of key informants in the respective divisions. For instance, in Nithavur 01 division, all the community level key informants have stated that there has been a reduction in cohesiveness in the division, but the households do not share this opinion. Mostly

households who have not recovered incomes to meet food needs state that community cohesiveness has decreased.

During the field discussions with affected communities, households claimed that tsunami related aid has made people more selfish. Some households from Galle argue that the better off after tsunami do not care about neighbours. The uneven and uncoordinated distribution of aid has worsened this situation according to the respondents.

There have been some problems at household level in aid utilization. For instance, misuse of tsunami government cash grants has been an issue among some families in Galle. The situation is connected with increased alcoholism among the male household heads. During the IPS-TS, 2006, the households have suggested directing future cash assistance to a joint bank account, so that the wives also have access to grants. IPS-TS results reveal that 11 per cent of households have noticed an increase in family conflicts following tsunami.

Figure 10:
Increase in Drunkenness, Smoking and Drug Abuse after Tsunami



Source: Own calculations using IPS-TS, 2006.

7.0 Disaster Preparedness

Although there have been numerous disaster preparedness training programs in the affected areas, only few households have actually benefited from these. A number of players from government and NGOs have conducted tsunami evacuation training drills in the tsunami-affected districts. But only 6 per cent of people have practised tsunami evacuation drills. During the discussions with the affected communities, the respondents claimed that, generally one member from each household participate in such programs and they do not properly communicate the knowledge they gather among other members.

Only a few households have obtained insurance coverage against income loss. Tsunami has impacted the income earning activities of the majority of households and caused severe property losses and damages. However, only 4 per cent of households have purchased insurance to guard against future disasters. At the same time around 75 per cent of the surveyed households have stated that they do not have access to alternative income sources in the case of a future disaster like the tsunami, and they feel the need for protection from income losses, if such an event is to occur.

Appendix – 1

A1.1 Summary of Methodology – IPS Tsunami Survey 2005 (IPS-TS 2005)

This section provides a summary of the methodology for selecting the households for the IPS tsunami-housing survey. Full set of questionnaires for both rounds of the survey, and the focus group themes conducted along with the first survey are available on request.

A1.1.1 Selection of Grama Niladari Divisions (GND) and Households

Selection of Districts

Eight districts that were most severely affected by the tsunami in the Northern, Eastern and Southern provinces were selected for the survey. These consisted of: Trincomalee, Batticaloa and Ampara Districts from the Eastern Province, Jaffna and Mullaitivu Districts from the Northern Province, and Hambantota, Matara and Galle Districts from the Southern Province.

Number of Grama Niladari Divisions (GNDs) per District

In these eight districts, GN divisions were first identified where more than 50 per cent of houses were made unusable due to being completely or severely damaged using Department of Census and Statistics (DCS) data.

Table A1.1:
Distribution of GNDs across Selected Districts

District	Number of Unusable Houses	No. of GNDs Selected for Survey
Jaffna	3686	1
Mullaitivu	5137	1
Trincomalee	4643	2
Batticaloa	9905	4
Ampara	10566	4
Hambantota	1290	1
Matara	2401	1
Galle	6169	2

Note: Information from Mullativu was not available for the selection process.

The 16 GNDs for the study were distributed across the 8 districts based on the level of housing damage in each district (Table A1.1). Within the districts, GNDs were chosen based on socio-economic data so as to select a representative set of GNDs considering ethnicity, religion and livelihoods, and the location with respect to the 2005 buffer-zone. Socio-economic data for this purpose for the Southern districts were obtained from the 2001 Census by the Department of Census and Statistics. Since census data did not extend to the districts in the Eastern and the Northern provinces, socio-economic information for these provinces were obtained through key-informants from those areas. Key-informant information was also used to select GNDs with households both within and outside the 2005 buffer zone. (Information given by key informants in this regard were not entirely accurate, as a result some GNDs that were mostly within the no-built zone remained in the sample). The selected GNDs for the study are given in Table A1.2.

Table A1.2:
Selected GNDs for the Study

District	DS Division	Selected GN Division		(A) Completely Damaged + Partially Damaged (cannot be used)	(A) As a % of Number of Households before Tsunami
		Name	No.		
Matara	Weligama	Pelena South	387B	275	68.24
Hambantota	Hambantota	Hambantota East	93	326	50.00
Galle	Habaraduwa	Koggala	144A	97	54.80
	Galle four gravets	Dewata	100A	164	55.97
Ampara	Ninthavur	Ninthavur 01	41	222	65.10
	Pothuvil	Sinna Ullai	P/18	242	62.05
	Thirukkovil	Thambiluvil 1 East	TK/12C	360	64.76
	Alayadiwembu	Sinnamugamuwaram	AV/14	226	78.20
Batticaloa	Manmunai North	Navalady	172	433	100
		Thiruchendhoor	172B	618	78.83
	Koralai Pattu	Kalkuda	204	548	74.56
	Manmunai South & Eru	Onthachimadam North	111	318	76.56
Trincomalee	Kuchcheweli	Jaya Nagar	239C	378	74.12
	Town & Gravets	Uppuvelli	243	215	62.12
Jaffna	Vadamarachchi East	Maruthankarny	J/428	292	100
Mullativu	Maritimepattu	Kallapadu	91	N/A	N/A

Household Selection

A sample of 45 households from the list of *unusable houses* for each GND was randomly selected for the household survey, with 30 households outside the no-build zone and 15 within. However, in some GNDs there were less than 30 houses outside the buffer zone. In these instances more houses from within the buffer zone were interviewed to make up the sample. The households were selected using DCS tsunami census data where available. For the two GNDs where DCS data were not available, household lists obtained from GNs were used as a frame.

A1.1.2 Information Gathering

Due to delays in obtaining access, the survey could not cover Jaffna and Mullaitivu districts of the Northern Province. Therefore, information is available only for 14 GNDs in the Southern and Eastern provinces. Information from the selected GNDs were collected at several levels. To obtain community level perspectives on rebuilding, relocation and land issues, focus groups were conducted in all GNDs. In addition, community level information to ascertain community characteristics and information on rebuilding, relocation and land issues were obtained through key informant interviews based on a structured questionnaire. In addition to these interviews, information on land supply in the GNDs was obtained from the relevant Divisional Secretary's Office, also based on a structured questionnaire. The Household level interviews were conducted using a structured household questionnaire. The questionnaires were drafted in English and translated to Sinhala and Tamil for use in different GNDs.

A1. 2 Methodology for IPS Tsunami Survey 2006 (IPS-TS 2006)

In July 2006, an attempt was made to resurvey all the 622 households that were interviewed for the IPS-TS 2005 with the view to update the latest progress on the reconstruction effort. The survey was designed to address issues of permanent housing paucity, recovery in livelihoods, etc., to get a clearer picture of where Sri Lanka stands in the reconstruction process one and a half years on. In addition to the housing survey, 3 key

informant interviews in each GND were conducted. When a household was unable to be located, randomly selected replacement houses were surveyed from the GND. The resulting database consisted of 595 households, of which 564 were from the original 622 households.

A1.3 Characteristics of Sample

A1.3.1 Household Characteristics Outside the Buffer Zone (of those in unusable houses)

Of the 341 households surveyed outside the buffer zone, the main livelihood categories for the head of household pre-tsunami were 39 per cent in fishing related activites, 23 per cent not working, 8 per cent in trade and 6 per cent in manufacturing. (19 per cent were "other"). Prior to the tsunami majority (65per cent) of the households were earning Rs. 5000 or less, while 25 per cent were earning Rs. 5000 - Rs.10,000, 7 per cent were earning more than Rs. 10,000. By ethnicity, these households were 21 per cent Sinhalese, 42 per cent Sri Lankan Tamil, 4 per cent Indian Tamil, 30 per cent Sri Lankan Moor and 3.5 per cent Malay; and by religion, 21 per cent were Buddhist, 39 per cent Hindu, 33 per cent Muslim and 6.5 per cent Christian. 16 per cent of households were female-headed pre tsunami.

A1.3.2 Household Characteristics in the Buffer Zone (of those in unusable houses)

Of the 281 households surveyed within the buffer zone, the main livelihood categories for the head of household pre-tsunami were 65 per cent in fishing related activities, 8 per cent in trade and 5 per cent in manufacturing. (15 per cent were "other"). Most of the livelihood heads are still alive (5 per cent died) and just over a quarter can continue with their usual activities post-tsunami. Of these households, 19 per cent were Sinhalese, 52 per cent Sri Lankan Tamil, 3 per cent Indian Tamil, 22 per cent Sri Lankan Moor and 2.5 per cent Malay; by religion, 18 per cent are Buddhist, 35 per cent Hindu, 25 per cent Muslim and 22 per cent Christian. 13 per cent of the households surveyed are female-headed pre-tsunami, although this varies considerably across GNDs. In the households selected from the GNDs in Batticaloa and Trincomalee there are very few female-headed households, while the figure reaches 20 per cent in the Southern Province.

Appendix - 2: Government Polices on Post Tsunami Housing

A2.1 Housing Policy of 15 March 2005 (source: TAFREN)

Houses outside the buffer zone

All affected households outside the buffer zone that are able to demonstrate ownership of land will be entitled to a grant by the State. Households that do not have ownership to the land are not entitled to this assistance. Fully damaged houses (repair cost is more than 40 per cent of replacement cost) were given a grant of Rs.250,000 in four stages. Other partially damaged houses (repair cost is less than 40 per cent of replacement of the house) were given a grant of Rs. 100,000 in 2 disbursements. In addition, households that have successfully utilized the grant, will be eligible to apply for a concessionary loan of Rs. 500,000.

Houses inside the buffer zone

In the buffer zone reconstruction of houses (partially or fully damaged) was not allowed. Instead, the Government identified land closest to the affected village and relocated the affected families, as far as possible keeping communities intact. All affected households will be provided with a house built with donor assistance on land allocated by the state. *Households will not be required to demonstrate ownership to land.* The new homes will be built in line with guidelines issued by the UDA and will have a floor area of 500 sq. ft. and would be provided with electricity, running water, sanitation and drainage facilities. The proposed houses in urban and rural settlements will have facilities such as road systems, recreation etc. A "house for a house" extended families that lived in the same house are not entitled to more than one house.

A2.2 Housing Policy of April 2006 (source: RADA)

The April 2006 revised housing policy was drafted by RADA with the following (revised) objectives of housing reconstruction:

A house for house, regardless of ownership, all affected houses were considered regardless of location, equity between beneficiaries, providing a house to all affected families by end

2006, generalize the owner driven housing policy (that was adopted for houses outside the buffer zone) by donor assisted housing. Houses were provided under four options listed below. Families who were legally or illegally residing inside any government reservation within the tsunami-affected area were eligible for options 1, 2 and 3, applicable in that order. That is, only when option 1 was not applicable a household was allowed to go for option 2, and so on. Families who were legally residing outside government reservations in the tsunami-affected area were allowed houses under options 2,3 and 4, with priority given to options 2 and 4. Encroaches outside the government reservations in the tsunami affected area were given the choice of options 2 and 3 only if encroachment was on private land, and the lands were not able to be regularized. Option 4 was only available for encroachers outside government reservations where encroached land can be regularized.

Housing Options:

1 – Government land, and donor-assisted house under donor-driven housing programme

2 – Government land and government cash-grant of Rs. 250,000 to construct a house. Regulated donor assistance of not less than Rs. 250,000 provided to complete the house.

3 – Government cash grant to purchase land (Rs. 250,000 in Colombo district, Rs. 150,000 in Ampara district), and government cash grant of Rs. 250,000 to construct a house. Regulated donor assistance of not less than Rs. 250,000 provided to complete the house.

4 – Government cash grant (Rs. 250,000) provided to construct a fully damaged house (FD) and Government cash grant (Rs. 100,000) to repair a partially damaged house. Regulated donor assistance of not less than Rs. 250,000 provided to complete the house.

Appendix - 3

Table A3:
1 Perceptions on Relocating to New Houses, by Donor

	Received house from the government	Received house from a NGO	Received the house from private sector
No. and % households (Of the total)	10 (100%)	52 (100%)	7 (100%)
Mean time taken to relocate (months from tsunami)	*15 months*	*11 months*	*5 months*
Per cent saying yes:			
Chose to relocate?	6 (60%)	42 (81%)	7 (100%)
Expressed a preference on the site?	6 (60%)	45 (86%)	7 (100%)
Left close relatives behind?	4 (40%)	33 (63%)	6 (86%)
Happy with process of allocating houses?	0 (0%)	24 (46%)	1 (14%)
New house better?	5 (50%)	18 (35%)	6 (86%)
Has letter giving ownership of new house?	1 (10%)	27 (52%)	4 (57%)
Has legal document showing ownership of new house?	1 (10%)	2 (4%)	1 (14%)
Can sell the house if needed?	0 (0%)	3 (6%)	1 (14%)
Thought of selling the house	0 (0%)	1 (2%)	0 (0%)

Source: Own calculations using IPS-TS, 2006.