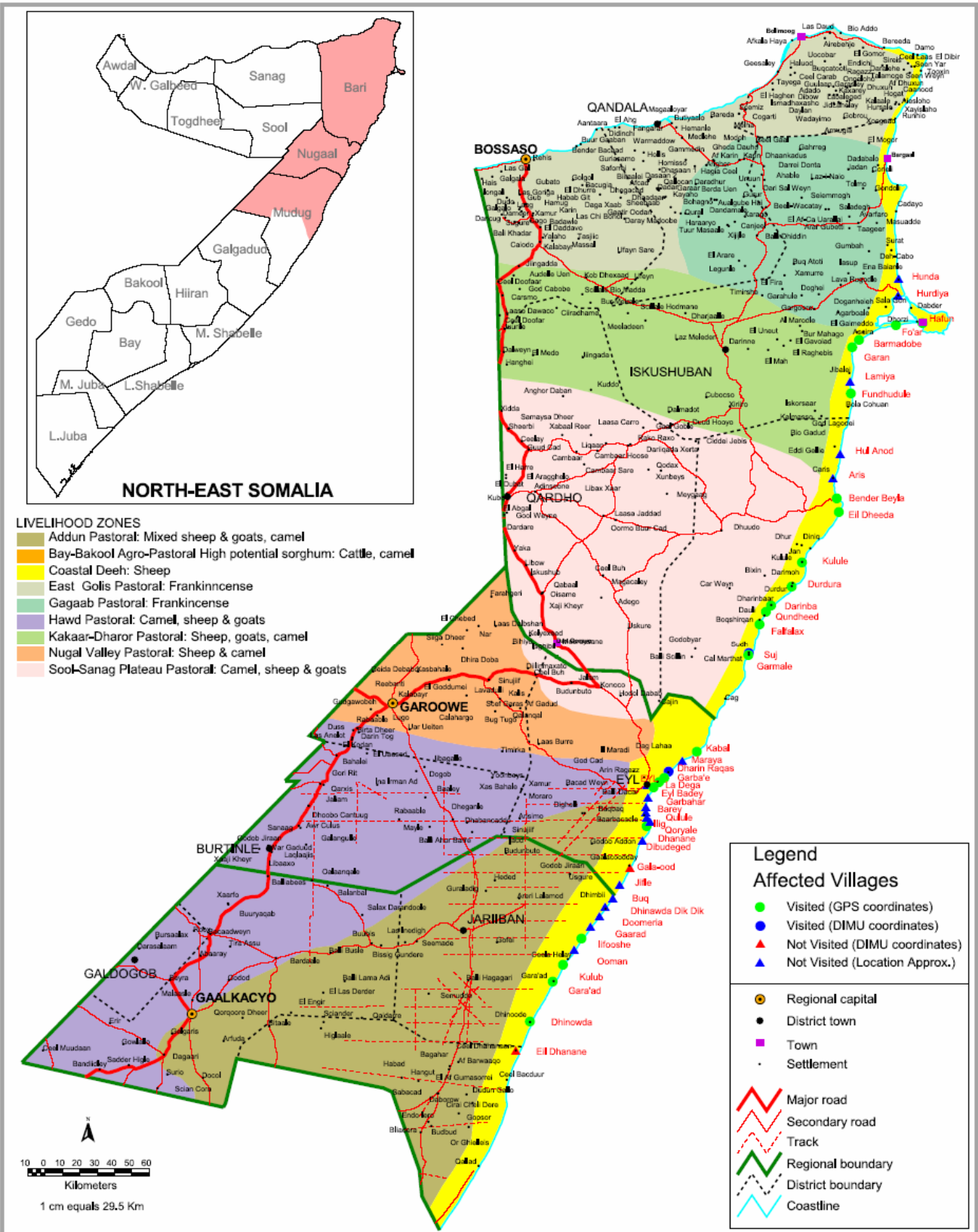


TSUNAMI INTER AGENCY ASSESSMENT MISSION

Hafun to Gara'ad Northeast Somali Coastline

Mission: 28th January to 8th February 2005

SOMALIA: TSUNAMI INTER-AGENCY TASK FORCE COASTAL SETTLEMENTS ASSESSED



Produced: February, 2005



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Executive Summary

Origin & Mandate of the Task Force

In response to the Tsunami that struck the Somali coastline on 26 December 2004, a Humanitarian Response Group meeting, chaired by the acting Humanitarian Coordinator, was convened in Nairobi on 28th December 2004. As a result, the HRG decided to develop a Tsunami Task Force to facilitate on daily basis, coordination of humanitarian response with interagency initiatives in Garowe and Bossaso (Puntland) in addition to sharing information with OCHA HQ for inclusion in the daily regional Tsunami situation reports issued by Geneva. Following the drafting of the Somalia section of the Regional Tsunami Flash Appeal, the activities of the Task Force came to an end.

The Humanitarian Response Group (HRG) subsequently assumed these responsibilities. In a meeting on January 11th, the HRG requested OCHA and FSAU/FAO to form an inter-agency Tsunami Assessment Task Force, with the mandate to conduct a humanitarian assessment to:

- (1) identify any gaps in the present humanitarian response, and
- (2) identify mid/long-term recovery needs of affected communities.

The assessment focused on the analysis of the impact and livelihood recovery and not on chronic poverty, *per se*. The Tsunami Assessment Task Force comprised of technical and managerial representatives for relevant sectors (water/sanitation, food/livelihood security, fisheries, health, shelter/infrastructure, education, and governance) and agencies (UN, NGO, donors, and the Somali Transitional Federal Government). In total, 18 people served on the Task Force, and 27 people participated in the field work. In total around 20 agencies served on the Task Force. See Annex 1 for the acknowledgement and the list of Task Force and field mission participants. Refer to Annex 2 for the assessment terms of reference. The success of the mission was due to the close collaboration of these agencies and individuals.

Methodology

The technical component of the Task Force developed sector specific guidelines and tools to be used in the field assessment. Based on existing reports of where the Tsunami had the most impact, as well as limitations in access due to security concerns, the field mission encompassed the areas between Hafun and Gara'ad¹. The field work was conducted from 28th January to 8th February 2005 with two days of training in Garowe prior to the field work and two days of field analysis after the field work. Three teams covered the areas from Hafun to Bender Beyla, Bender Beyla to Eyl and Eyl to Gara'ad. In total 25 villages were visited. Each team had sector specialists covering food, nutrition and livelihood security, fisheries, health and nutrition, water and sanitation, shelter and infrastructure and education. Governance, gender, HIV/AIDS, protection and environment were identified as cross-cutting issues to be considered by all sectors. After the analysis process, including the final Nairobi-based analysis, findings per sector were presented to the Task Force for endorsement and general consensus.

General Findings

- Based on the assessment team findings and triangulation with other sources, the total coastal population in the area between Hafun and Gara'ad is estimated to be 44,000 people, roughly 7,300 households.
- The reported deaths and missing persons totalled 289, although this was not certified by the assessment mission.

¹ Please refer to the TFG assessment report (Jan 14th 05) for details of the impact of the Tsunami south of Gara'ad

- Estimates of the overall impact of the Tsunami in terms of infrastructure damage, number of people affected, and overall severity are generally less than previously reported by earlier rapid assessments.
- The areas most affected by the Tsunami are Hafun, Bender Beyla, Dharin Raqas and Kulub (11,520 people in total), where substantial damage to housing and infrastructure occurred (of these towns, Hafun stands out as being the most devastated, with the majority of infrastructure destroyed by the Tsunami).
- Existing emergency responses in the form of health, water, shelter, non food items and food have largely met immediate humanitarian needs.²
- 5% of the total population (around 2,300 people) were in a state of humanitarian emergency and 40% of the total population (17,000 people) were facing livelihood crisis. This is based on the Food and Livelihood Security Classification developed for the Tsunami context.
- In addition to strategic inputs for livelihood recovery (see specific sectors), an estimated 50% of the assessed population (i.e. 22,000 people), based on the wealth group shift, will require sustained resource transfer in the form of food and/or cash assistance until the next fishing season in October 2005. This is necessary in order for households to access basic food needs and alleviate severe financial pressures due to reduced fishing incomes. This is based on the contingency that fishermen have access to fishing equipment for this fishing season (Oct 05).
- Contextually, the northeast region as a whole has been affected by six different shocks over the past year (drought, floods, freezing temperatures, continued livestock ban, civil tension, and the Tsunami), straining social support mechanisms and dampening the regional economy.

Sector Findings

Food, nutrition & livelihood security

- The resident communities occupying the coastal areas stretching from Hafun peninsula to Gara'ad mainly depend on commercial fishing of lobster, shark and kingfish for export. There is limited livestock husbandry and minimal small-scale shallow-well and spring-fed farming of vegetables and rain-fed cowpeas, mostly in Eyl.
- Except for the main towns, the settlements primarily subsist on fishing for their livelihood.
- Pre Tsunami, all households purchased 90-95% of their food needs using income from fishing (75% of income sources from fishing related income generation).
- The effect of the Tsunami was on the households' income rather than on food production, thus the resultant food insecurity is due to lack of food access rather than lack of food availability. Traders have been and will continue to be able to provide necessary food stuffs, assuming local populations have adequate purchasing power.
- Coping strategies employed by the assessed communities after the Tsunami vary per population category and wealth group. Residents employed activities to maintain food security after the Tsunami 'shock', whilst seasonal migrants and to some extent recent migrants (20 – 30% of the total population), migrated inland to their original homes or relatives.
- Residents' coping strategies include reducing expenditure on food (buying less food/less meals and less expensive food); dependence on gifts and remittance within the community and externally; seeking credit in the form of food, cash and/or fishing equipment; sell assets; and migrating in search of employment opportunities to urban centres or villages less affected by the Tsunami.

² For more details please refer to the attached response matrix.

- Due to the strained overall economy of these communities and the abrupt end to the fishing season, it is necessary to promote livelihood recovery and support the fishing livelihood before the next season starts (October 2005).
- The Tsunami caused a shift in wealth groups. A proportion of the middle became poor as a result of the impact. The poor wealth group made up 30 - 40% of the population before Tsunami. This became 45 – 55% after the Tsunami. Therefore, if we look at supporting the poor households until the next fishing season, approximately 50% of the population (22,000 people) are in need of sustained resource transfer for the next 8 months (on the contingency that resource transfer in regards to fishing equipment is in place).
- In these most affected areas (Hafun, Bender Beyla, Kulub and Dharin Raqas) roughly 20% of the population (2,300 people) are facing a Humanitarian Emergency and 30 - 40% are facing a livelihood crisis (around 4,000 people). In all other localities, no one was in a state of humanitarian emergency and roughly 40% of the total population are facing a Livelihood Crisis (12,888). Therefore, of the total assessed population (from Hafun to Gara'ad), 2,300 people are in a state of humanitarian emergency and 17,000 people are facing a livelihood crisis.

Fisheries

- Somalia has some of the richest fishing grounds of Africa in terms of abundance and diversity of marine life³. In the 1980s the government operated a fishing fleet that employed over 30,000 people and contributed about 2% to GNP⁴. During the civil war the fishing fleet was broken up and the industry became dispersed.
- The evolution of the fishing industry has recently been revitalised due to the realized value and strained economy elsewhere.
- The fishing industry is by far the most important in terms of household income for the coastal population. This sector has been the worst hit by the Tsunami, not only in terms of equipment losses, but also by the fact that the disaster occurred in the middle of the peak fishing season.
- Fishermen are either individual fishermen operating alone in the shallow waters with nets and lobster pots, or skilled fishermen who are employed on the boats or boat owners.
- An estimated number of just over 600 boats were lost or destroyed by the Tsunami. An estimated 75% of the fishing gear has been lost or damaged beyond repair.
- Due to poor resource management, the fishing industry is following an unsustainable trajectory. Additionally, the exploitation of Somalia's rich coastal fisheries by foreign trawlers means that Somalia is left with few benefits from this important resource.
- Considering the key role of fisheries in the livelihood of the coastal communities, a quick response to address the identified needs is essential. However, it is not realistic to expect that such assistance will be in place in time to salvage the present fishing season. Every effort should be made though to ensure that the benefits of proposed interventions (support fishermen to replace fishing equipment) are in place prior to the start of the new season in October 2005.
- Proposed interventions should take into account existing actors in the area, including private traders, when designing project modalities.
- In order to optimize the output of the fishing sector, the whole industry requires an overhaul. It is estimated that at present only 30% of the marine resources available are actually utilized.

³ UNDP Human Development Report 2001

⁴ IUCN 1997

- A professionalisation of the industry is required, including the establishment of pertinent institutions in centrally located areas (Hafun, Bender Beyla, Eyl and Gara'ad), to assume the responsibility for the management and distribution of the inputs.
- The formation of fishermen associations (not co-operations) – with voluntary membership – in the four major centres is recommended, serving all satellite villages in their catchment area.

Health

- Even prior to the Tsunami there were very minimal health facilities, expertise and medicine supplies available.
- The Tsunami has not posed any major additional health risks so far. However, in the current context and if water, health and nutritional concerns are not addressed, there is a serious risk of disease outbreak.
- Immediately following the Tsunami, there was an increase in diarrhoea occurrences throughout the affected area. In some places where medication was available and applied, the situation quickly went back to normal. However, in places where no ORS (oral rehydration salts) and appropriate health education was (and is) available, this remains a problem.
- The response should ensure that adequate health services and programs are in place to address the health needs of the affected areas, including the prevention and response plans and resources to address any potential disease outbreaks in a timely and effective manner.

Water and sanitation

- The water sources throughout the area, with the exception of Eyl where there is a functioning drinking water system, have been badly affected. Even in places where water quality was already questionable pre-Tsunami, the situation has now further deteriorated.
- Poor water quality has a distinct negative effect on the livelihood of people: unclean water affects the health status of people; poor health affects their productivity; low productivity in turn has an adverse effect on their livelihood and as a result increases their vulnerability.
- Water trucking should continue in the most affected areas, until alternatives are put in place.
- At the same time, agencies should prioritise the rehabilitation and/or new construction of more sustainable and reliable new water sources. This by far being the priority area of intervention, agencies with already existing resources should strongly consider addressing the water needs in the Tsunami affected coastal areas.
- Improving the understanding of hygienic procedures, including garbage disposal and putting these into practice, is strongly encouraged by capacity building as a means of addressing the high level of hygiene-related health problems noticed.

Shelter and infrastructure

- With the exception of Hafun, Bender Beyla, Dharin Raqas and Kulub, there was no major long term impact on the housing and building infrastructure. This is largely due to the fact that most people normally live in huts made from local materials. Those huts that were damaged or destroyed were quickly replaced and rebuilt, either with external assistance or by the communities.
- The main findings of the mission indicate that about 2,000 concrete structures were destroyed and/or damaged of which 1400 were houses.
- Road infrastructure, except for the access road to Hafun immediately after the Tsunami, was not affected. However, the existing road network is poor. This disaster

has highlighted again the critical importance of road construction and improvement to ensure quick access during a disaster response as well as market access for inputs and export of the areas main source of income, the fishing industry. There is a high potential here for improvement through resource transfer activities, improving the infrastructure while creating temporary employment for those who lost their income as a result of the disaster.

- While recognizing that Hafun, Bender Beyla, Darin Ragas and Kulub have been badly affected in terms of damage to permanent infrastructure, the need for immediate reconstruction is highest and most critical in Hafun due to its location, exposing it to strong winds.

Education

- The education infrastructure along the coast was already very weak prior to the Tsunami. With the exception of Hafun, Bender Beyla, Eyl, Kulub, Gara'ad and Dhinowda, no formal schools existed.
- Education is considered as a critical sector as each child has the right to go to school.
- In villages where people reported that their children were going to school elsewhere, they indicated that they would prefer to educate children within the villages if the facilities were available.
- Availability of teachers and sustainability of salary payments is a major challenge.
- Future curriculum development should better reflect a practical application to the daily lives of the youths.
- The improvements in this sector requires comprehensive discussions between donors, implementing agencies and the authorities to identify sustainable ways of rehabilitating the damaged infrastructure and expand the education services to the more inaccessible areas. In places where rehabilitation work has to be implemented, an increase of capacity should be planned.
- Special consideration should be given to the creation of an enabling environment to the increase in girls' enrolment.
- The fact that children are engaged in the fishing industry should be taken into consideration in the type of school system to be adopted. Flexibility in school hours, concentrating on the slack fishing season and daily hours that youth are not engaged would benefit the enrolment.

Governance

- The recovery plans should be integrated across sector and geographically to ensure gaps and overlaps in the response are minimized. A workshop engaging the Task Force, funding agencies, and implementing agencies should be introduced into the process to provide an opportunity for multi-sectoral integration within the aid community prior to mobilizing the region. Once the implementation actors and resources have been identified and committed, a second workshop should be convened in the Puntland region (ideally in Garowe, away from the immediate impact areas).
- While time is already against effective immediate response, it is important not to dismiss the recommendations above simply because of the lack of time. While the recommendations will prolong the actual distribution of recovery resources, the negative impact of dismissing the volatile threat inherent in the distribution of resources, or dismissing the importance of engaging both local mechanisms and regional governance could lead to far greater damage to the region than the Tsunami.
- This process could serve as a foundation for additional development work in the region. Actors can be identified, roles defined and structures established to allow for stronger mechanisms to be called upon in the future both for integrated disaster

response and for development purposes. In other words, instead of this being a “one-off” approach, this process can lay the foundation for future development efforts throughout the region.

Conclusion

The Tsunami has attracted significant amount of international attention with generous amounts of funding available. This report is intended to give direction to the appropriate use of resources to meet the humanitarian and livelihood recovery need of the assessed population between Hafun and Gara'ad.

In the wider context of serious food insecurity in Somalia (affecting over 1 million people), it is important that the Tsunami response be proportionate to and take into consideration other needs in Somalia for both ethical and security reasons. This factor was made very apparent when one of the assessment teams met a nomadic pastoralist on the road who complained of the suffering he had gone through during the last 4 years of drought in the areas. He stated that “the only thing they get to eat is the dust left behind by your trucks”. As highlighted in the 2005 CAP, livelihood insecurity and overall vulnerability persist in numerous regions of Somalia in addition to the Tsunami-affected areas of the Indian Ocean coast. In its post-Deyr assessment released in early 2005, FSAU highlighted areas of continuing need resulting from the compounded impact of environmental natural shocks, civil insecurity, and ongoing barriers to trade throughout the country. International actors should take care not to allow the emerging needs from the Tsunami to eclipse these continuing areas of need, some of which carry the status of Humanitarian Emergency and Livelihood Crisis.

International attention on the affected areas of the Tsunami does present an opportunity for investment in the under developed marine resources along the Somali coastline. The humanitarian and rehabilitation response should aim for long-term, durable solutions to the disasters, to break the cycle of vulnerability. At the same time, attention should be given to the establishment of disaster preparedness systems at regional and local levels that will enable the authorities and local communities to better prepare and respond to any future natural calamities.

The Tsunami disaster, while having a disastrous impact on the livelihood of the coastal communities, also presents an opportunity for coordination and cooperation between the various players, first and foremost the Puntland authorities, the affected communities, the donor community and implementing agencies.

In particular, it is critical for the Puntland authorities in Garowe and the Humanitarian Response Group (HRG) in Nairobi to coordinate the efforts of the various implementing agencies, taking into account existing operations and plans, in order to avoid overlap in assistance as well as to ensure that all affected areas are receiving assistance proportionate to the needs and funds available. In this regard, consideration should be given to strengthening the existing co-ordination mechanisms in Garowe.⁵

Any response to the Tsunami disaster should take into consideration the fragile environmental situation to ensure that the most appropriate and sustainable interventions are implemented and put in place.

⁵ This report was shared with the Puntland Authorities and Task Force on 9 March 2005. Please find in annex written comments from the Puntland Authorities.

2. Introduction

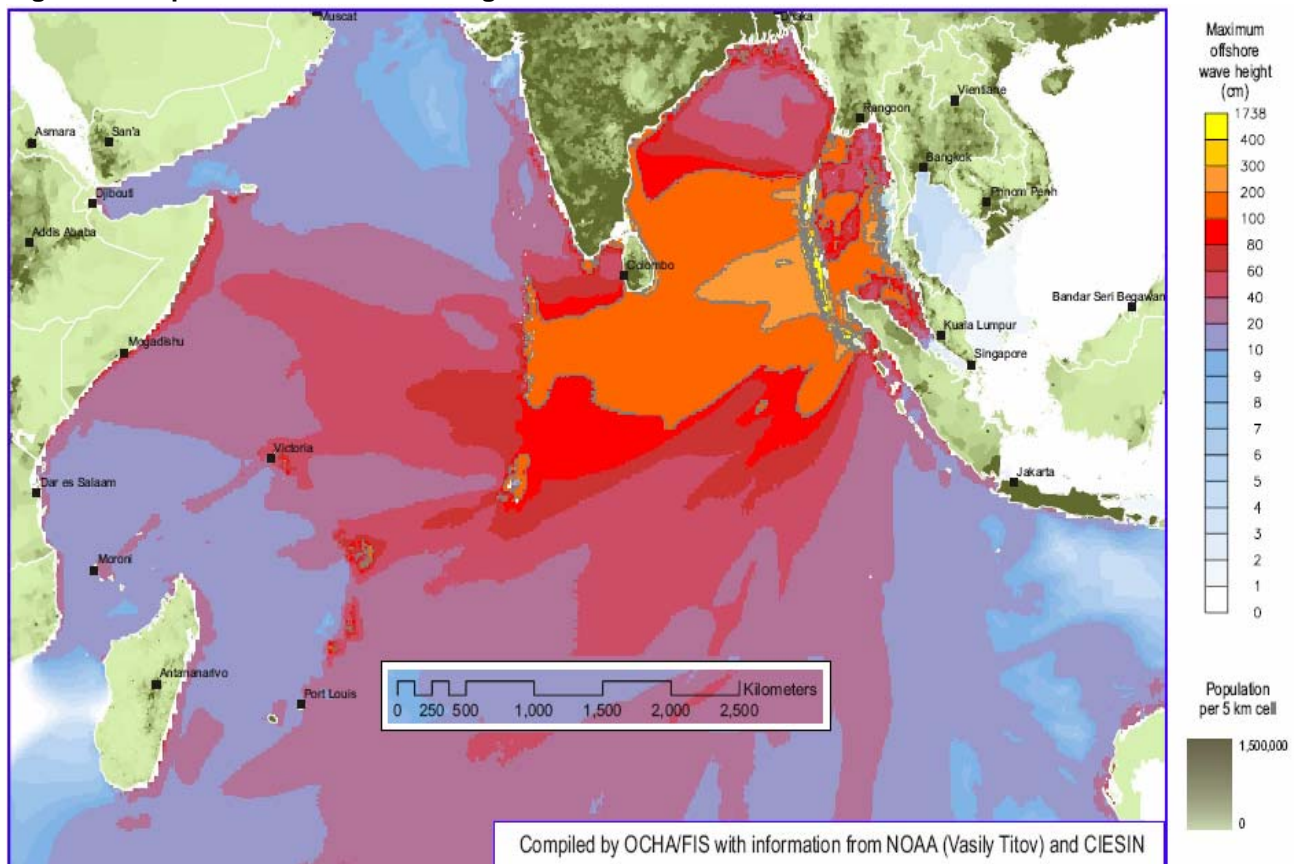
2.1 Description of the Tsunami

On the 26th of December 2004 the world's most powerful earthquake in 40 years, measuring 9.1 on the Richter scale, struck off the coast of Sumatra in Indonesia at approximately 0800 local time. The earthquake set off a series of large Tsunami waves across the Indian Ocean, reaching as far as the east African coastline and leaving devastation and destruction in its path.

Somalia was the main African country affected by the Tsunami, particularly the stretch of about 650 km between Hafun (Bari region) and Gara'ad (Mudug region) in Puntland. The worst hit towns and villages along the northeast coastline included Hafun, Bender Beyla, Kulub and Dharin Raqas. The Tsunami resulted in the death of some 289 people reported dead and missing and destruction of shelters and water sources in some settlements. All communities lost fishing equipment including boats, nets and lobster pots/traps.

The communities described the Tsunami wave as a sudden recession of the shoreline by about 500 meters. The seabed was exposed revealing the marine species including lobsters. Many people including women dashed towards the sea to scoop the lobsters within reach, but no sooner had they collected lobsters than the waves started charging back. The first wave did not exceed the usual tide line. Seeing the second larger wave approaching, people ran inland dropping their precious catch. It was fortunate that it was broad daylight so that people were able to get a warning of the incoming waves and moved to higher grounds. Three to four more waves followed, the second and the third were the largest. They surged 200 - 800 meters inland according to the nature of barriers and topography of the terrain.

Figure 1 - Map to demonstrate the magnitude of the Tsunami wave



The Tsunami followed the October/November peak fishing period. The majority of the individual fishermen were not at sea at the time the Tsunami hit, although their nets and traps were at sea. An estimated 70% of fishing equipment was being used at the time of the Tsunami. Out of this, 80% of all fishing equipment being used was damaged. Out of all fishing equipment damaged, approximately 30% can be repaired⁶.

The Tsunami followed five major shocks (drought, freezing temperatures, flooding, civil insecurity & market disruption⁷) that have impacted the same regions affected by the Tsunami in Puntland (Bari, Nugal and Mudug regions). In response to these first two shocks, pastoralists relocated to rural villages, cities, and coastal settlements in search of alternative livelihoods. When the tsunami hit, coastal villages were still struggling to absorb the additional population and economic need produced by these two earlier trends. Despite the situation and influx of migrants, before the Tsunami, the population were managing to subsist on the coastal fishing sector.

2.2 Description of the Northeast Coastline

In the NE coastal area of Puntland, the people are mainly of the Isse Mahamud clan of the Darood: Majarteen. The flora and fauna of the coastal strip are well-adapted to an environment where the highly erratic and unreliable annual rainfall is typically around 100 mm, soils are sandy and free draining and evapo-transpiration rates are high. In Somali language the coastal strip is known as the *guban* (literally “burnt”), a reference to the harsh environment, which burns off the vegetation during the hot, dry summer months of June, July and August, when temperatures often exceed 35°C.

The resident communities occupying the coastal areas stretching from Hafun peninsula to Gara’ad mainly depend on commercial fishing of lobster, shark and kingfish for export. Little subsistence fishing for own consumption is practiced in these coastal communities. Minimal livestock husbandry (shoats and few camels) occurs along the coastal strip, although there is evidence that over 80% of the residents do own herds of shoats and camels (commonly 30 – 70 shoats and 0 – 4 camels). These herds are grazed in the low scrublands of the coastal hinterland and strong social and economic links are made with the pastoral communities in that area. To a minor extent, there exists small-scale shallow-well and spring-fed farming of vegetables and rain-fed cowpeas.

The livelihood zone, as shown as the yellow strip following the coastline from the Horn to Mogadishu⁸ is known as the Coastal Deeh: sheep livelihood zone. There has been very little baseline information collected on this zone.

Small semi-permanent fishing communities have lived along the coast of Puntland for centuries. These small fishing communities (known as *Jaaji*) were not well regarded by their pastoralist neighbours who despised fish. Traditionally, the nomadic pastoralists seasonally visited this area to access permanent water sources (shallow wells and springs) and graze their livestock during the dry seasons (*Hagaa* & *Jilaal* seasons – 3 months each). Following the dry periods, the pastoralists would return inland during the *Gu* and *Deyr* wet seasons to access rejuvenated pastures.

Following the 1974 drought and the Somali Government response of mass relocation of pastoralists in the northeast area, some pastoralists were relocated along the coast and provided with fishing inputs and training. Since this time, fishing for lobster, shark fin, and to some extent kingfish, has been strongly stimulated by an increase in international demand. This has been stimulated by small fishing companies & traders, who give fishermen equipment as a loan which they pay back over time in the form of their catch. This means that many fishermen working for companies, especially recent

6 Refer to fisheries section

7 Sited in the FSAU Technical Series February 2005 ‘2005 Post Deyr Analysis’

8 See the Map at the beginning of the report

migrants, have outstanding loans. The catch is preserved in refrigerated trucks (provided by the companies) and then shipped to Dubai by air first for processing⁹ and then to the Far East and Asia.

This lucrative fishing business has attracted pastoralists looking for alternative or additional sources of income during the peak fishing season. It has also attracted people from urban centres looking for opportunities to access cash and to trade merchandise from the urban centres to the fishing communities. This movement of people towards the coast has increased during the last couple of years as inland pastoral livelihood zones have suffered from four years of consecutive drought resulting in upwards to 60% shoat deaths in the worst affected areas and 80% camel deaths¹⁰. This has been compounded by heavy rain and hail storms in November 2004 during which many of the already weak livestock did not survive¹¹.

Pastoralists and people from urban centres come seasonally for the 8/9-month fishing season from late September to April/May and are categorised as seasonal migrants. Some have even settled along the coastline and are within the recent migrant population category¹². As a result, a number of new semi-permanent and permanent coastal settlements have developed. Therefore the population along the Puntland coast line is made up of 3 categories including the residents, recent migrants and seasonal migrants.

2.3 Seasonal Calendar

The seasonal calendar below demonstrates the seasonal differences of population movements, fishing related activities as well as water availability/price and livestock production/sales. There are 4 seasons – two dry seasons *Jilaal* lasting from January to March and *Hagaai* lasting from July to September. The wet seasons, *Gu* and *Deyr*, last from April to June and October to December respectively. Generally, the main fishing season runs from late September to mid April. Normally this is also the period when people move to the coast to access fishing income generating activities, either through own fishing or labour for others. They come from pastoral areas in the hinterland and as far inland as Ethiopia. They also come from urban centres such as Garowe, Bossaso, Qardho and Galkayo as well as from some areas in the South. The man of the household usually comes alone to fish and leaves his family at home. The migrant men form household units known as a *gole* which is made up of 4 – 6 men and either one of the men's wife to cook for them or they hire a woman.

Lobster availability peaks during the months of November to January. Although lobsters are available from February to August, as the winds increase from the North-east monsoon from December and the South-west monsoon from May to September, few fishermen set their nets and traps due to the rough seas at this time of year. Shark fishing peak times vary from Gara'ad to Hafun. The coastline towards Hafun has peak shark fishing from October to December, whereby the coastline moving towards Gara'ad peaks during the months of March to May and August and September. Fishing related labour activities are carried out from September to May with varied number of days available per month per fishermen. For example, in December and January, when the seas are rough, only 10 working days are available to a fisherman.

9 In Eyl town they have started to process their own catch which will enable them to send directly to the Far East and Asia.

10 Sited in the FSAU Technical Series Report No IV. 2 September '2004 Post Gu Analysis,

3 SC UK Post Tsunami Assessment of Puntland Coastal Areas

12 Residents who have arrived in the area in the last two years are considered as recent migrants.

Figure 2 - Seasonal calendar

	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Season	DRY	Jilaal		WET	Gu	Long rains	DRY	Hagaai	windy	WET	Deyr	Short rains
Fishing season												
Seasonal migration												
Lobster	PEAK	LOWER							Diving	Diving /Nets	PEAK	PEAK
Shark	LOW		PEAK						PEAK			
Kingfish	Rough sea		PEAK							PEAK		Rough sea
Fishing labour	10 days	20 days	30 days	30 days	20 days			20-30 days	20-30 days	20-30 days	20-30 days	10 days
Water prices	HIGH			LOW			MED			LOW		
Livestock Prod/Sale				HIGH						HIGH		

2.4 Governance Structures

The typical governance structure in the areas visited is different for the main towns and villages. In the main towns visited, a Mayor and District Commissioner are in charge. In many cases these two positions are filled by one and the same person. While both report at the regional level to the Regional Governor, in the national Puntland context, the Mayor would fall under the Minister of Interior, while the District Commissioner would fall under the Minister of Local Government.

At village level, the Committee of Village Elders, headed by the Village Chairman, report to the Mayor/District Commissioner. No “real” elections are held to elect the representatives into the Village Elders Committee. Elders are typically nominated/selected by their own clan or sub-clan members. Once selected, there is no time limit to their tenure in office. Those selected stay in office until death or until their health fails them to implement their duties. It is interesting to note that in Dhanane village (Eyl district) the Village Elders Committee also consists of two women members. Although the interaction with the committee was limited during the visit, the impression is that the two women are active members.

In terms of law enforcement, all communities visited reported that customary law is applied, with cases being brought to the attention of the Village Elders Committee. In events of rape or serious crime, cases may be brought to the attention of the Mayor/District Commissioner.

The capacity of the local governance structures is generally weak. The resources available to office holders to implement their duties is very limited and often a constraint to efficiency. At the same time, the capacity and ability of individuals to effectively execute their responsibilities is hampered by a lack of education and training in the relevant skills required for the job. It is therefore clear that all officials in towns and villages visited would benefit from appropriate capacity building training and exercises. If disaster preparedness is to be considered as one of the measures to better deal with future disasters, it is critical that this is combined, if not preceded by efforts to build the overall capacity of the local officials and community representatives.

2.5 Market Prices

Pre and post Tsunami market prices were collected from key informants to capture any significant change in market prices of different commodities as an impact of the Tsunami. Overall, the market prices had not varied following the Tsunami. The explanation for this finding was that most goods do not originate from the coastal areas, but from the larger trading centers such as Bossaso and Galkayo. The following points outline any changes:

- In Hafun food and non-food prices went up initially due to the inaccessibility of the peninsula as a result of the Tsunami. While access by road had always been possible only during the low tide period, this access road had also been cut off due to damage caused by the Tsunami. Following the re-opening of the road, prices returned to normal.
- At the same time in Hafun, WFP had started distribution of emergency food relief within days following the Tsunami. Considering the extent of the damage caused by the Tsunami, this was a critical and timely intervention. It however had the side effect of reducing the prices of commodities distributed by international agencies in the local markets.
- As a general trend, only the price of clean drinking water went up between Hafun and Gara'ad. This is due to the fact that the Tsunami had contaminated the shallow water wells along the entire coastal strip. Clean drinking water has to be trucked in from inland sources. The reason for the price increase is therefore that most places did not import water in the past (using their own wells), but have to do so now if they want to have clean drinking water.

2.6 UN Agencies and NGOs (local and international) on ground

Despite the challenging operational context in this area of Somalia, the humanitarian community responded quickly to the Tsunami in affected areas. In addition to local community initiatives, UN agencies and INGOs (either directly or through local implementing partners including SRCS/IFRC, BMA, GECPD, TAAKULO, SOREDO, SWV, Rahmo, UNISOP, MRO) have been proactive in mobilising assistance and responding to the identified needs. WFP, CARE, UNICEF, UNHCR, WHO, *Médecins Sans Frontières* (MSF)-Holland, SHILCON, Diakonia and VSF-Suisse have either pre-positioned or distributed relief items to some of the affected areas including food, medicine, non food items (including shelter materials, cooking utensils, and blankets) and clean drinking water (see the response matrix in Annex 7 for further details).

3. Methodology

Following the Tsunami incident on 26 December 2004, the Humanitarian Response Group (HRG) including UN agencies, donors and international NGOs convened in a meeting on 28th December 2004 in Nairobi. The HRG identified that the lack of reliable or adequate baseline and impact information about the area affected by the Tsunami posed difficulties in designing appropriate and targeted humanitarian responses to a defined 'affected' population.

To initially assess the magnitude of the impact of the Tsunami, an interagency reconnaissance aerial mission was facilitated by the Task Force on 30 December 2004. The mission, including representatives from ECHO, OCHA, UNICEF, WFP, WHO and the Associated Press Television Network, flew over the three areas considered most 'affected' – Hafun, Bender Beyla and later Gara'ad. The mission could not fly further south to Hobyo for a further assessment due to security concerns.

Despite the timely response to the identified needs and the ongoing emergency assistance, a lack of reliable information on the impact of the Tsunami compounded by a lack of baseline information prior to the Tsunami, highlighted the need for additional assessments. As a result, the Humanitarian Response Group meeting chaired by the Humanitarian Coordinator decided on 11 January 2005 to form a Tsunami Assessment Task Force composed of technical and managerial components to facilitate the organisation of an interagency joint assessment to be conducted in Somalia to assess the Tsunami impact.

The process that the Task Force followed is captured below:

Step 1: Assessment Terms of Reference

A TOR was developed by the technical component of the Task Force and endorsed by the whole Task Force. The TOR stated that joint UN/NGO teams would conduct a multi-sector assessment in areas previously identified through the Garowe Puntland/UN/NGO Tsunami Emergency Task Force in order to identify:

- 1) **any gaps in the present humanitarian response and**
- 2) **specific mid/long-term recovery needs of affected communities.**

The geographical scope identified was the coastal strip between Hafun and Gara'ad. Although reports had been received of other affected communities along the Somalia coast, the teams concentrated on 1) present areas of Tsunami humanitarian response and 2) locations identified as in need of humanitarian response but so far inadequately assisted.

Step 2: Composition of the Task Force

The Chairpersons for each of the corresponding SACB sectors nominated the managerial and technical components of the Task force. The Task Force was co-chaired by FSAU (technical lead) and OCHA (managerial lead). The Task Force consisted of **managerial** representation from the Transitional Federal Government, the donor community and International NGOs. The Task Force also had a **technical** component consisting of technical specialists, field team specialists and observers.

The technical component of the Task Force comprised of sector specialists for the following sectors:

- | | |
|--|-----------------------|
| 1. Food, Nutrition & Livelihood Security | 5. Water & Sanitation |
| 2. Fisheries | 6. Shelter |
| 3. Health & Nutrition | 7. Infrastructure |
| 4. Education | 8. Governance |

Cross-cutting sectors included gender, protection and child rights, demographics, environment, HIV/AIDS and security.

Three team leaders were selected (from OCHA, CARE and WFP) to coordinate the assessment mission, covering the region from Hafun to Gara'ad. Three field team members per sector (see Annex 1) were also nominated from various UN agencies and NGOs and endorsed by the Task Force. The mission was set-up and dispatched to Garowe on 28th January 2005. A co-leader per team was nominated from the Puntland Task Force.

Field team consisted of:

- 1 team leader (responsible for generic enquiry)
- 1 co leader – nominated by the Puntland Task Force
- 1 specialist per sector (Fisheries, Health & Nutrition, Education, Water & Sanitation, Shelter & Infrastructure) – nominated by the Technical Specialists with at least one from Puntland with local knowledge and language
- 1 UN security officer, drivers & guards

Step 3: Development of field tools and guidelines

The technical sector specialists were charged with the responsibility of designing tools and guidelines for the assessment. The tools were developed, reviewed and agreed upon by the Task Force.

Step 4: Logistical planning

Logistical planning included flights, car transport, security, accommodation, communications, food and medical kits.

Step 5: Briefing in Garowe and tool refinement

The team leaders met with the Puntland Task Force to share the assessment strategy, team composition and field tools. The team members reviewed their sector tools and guidelines and produced a refined version for the context of the field. Sector field specialists identified the analysis process.

Step 5: Field Assessment

Three teams set out for the field work. The first group assessed from Hafun moving towards Bender Beyla; the second from Bender Beyla to Eyl; and the third group from Gara'ad to Eyl. In total 25 villages were visited (see map). By the 31st January 2005, all the groups left to their respective starting points.

Participants from each sector administered their guiding questions outlined in the tools in every village with different target groups including key informants, focus group and/or households. For demographic counting, each sector participant was required to provide an estimate of the number of households in each village; either by directly asking their interviewee or through observations. At the end of the assessment of each village, all the sector participants and the team leaders triangulated a unified number of households for each village. This number was multiplied by six to give an estimate of the total population from Hafun to Gara'ad living along the coast. The teams returned back from the field assessment to Garowe on 6th February 2005.

Step 6: Garowe analysis

Participants for each sector from the three different groups came together to analyse their data for the whole coverage area and presented main initial findings to the rest of the mission members. The team leaders then shared with the Puntland Task Force information of the assessment process and demography. Before the group departed, members of each sector group appointed sector focal points. These focal points were charged with the responsibility of drafting a sector report, which was used by the three team leaders and FSAU to compile this final report.

Step 7: Further refining and triangulation of the information

Step 8: Task Force endorsement on sector findings and report

4. Food, Livelihood & Nutrition Security Sector

4.1 Summary of Key Findings

- *The Tsunami caused a shift in wealth groups. A proportion of the middle became poor as a result of the impact. The poor wealth group made up 30 - 40% of the population before the Tsunami. This became 45 – 55% after the Tsunami. Therefore, if we look at supporting the poor households until the next fishing season, approximately 50% of the population (22,000 people) are in need of sustained resource transfer for the next 8 months (on the contingency that resource transfer in regards to fishing equipment is in place).*
- *In these most affected areas (Hafun, Bender Beyla, Kulub and Dharin Raqas) roughly 20% of the population (2,300 people) are facing a Humanitarian Emergency and 30 - 40% in Livelihood Crisis (around 4,000 people). In all other localities, no one was in a state of Humanitarian Emergency and roughly 40% of the total population are facing a Livelihood Crisis (12,888). Therefore, for the total assessed population (from Hafun to Gara'ad), 2% of the population (2,300 people) are in a state of Humanitarian Emergency and 40% of the total population (around 17,000 people) are facing a Livelihood Crisis.*
- *Provision of resource transfer in the form of food and/or cash assistance is needed due to the abrupt end to the fishing season and resultant loss of income and savings. See the other sector recommendations for other forms of livelihood support e.g. fishing equipment, water & health.*
- *The effect of the Tsunami was on household's income (70-80% of which normally comes from fishing activities) rather than on food production, thus the resultant food insecurity is due to lack of food access rather than lack of food availability. Traders have been and will continue to be able to provide necessary food stuffs, assuming local populations have adequate purchasing power (under normal circumstances households typically purchase upwards to 95% of their food).*
- *Households in all wealth groups were regularly consuming three or more food groups. Although the Tsunami had influenced the households' income and access to food for some wealth groups, the typical food consumption patterns had not changed significantly after the Tsunami. The health sector re-confirmed this with no reported or observed cases of malnutrition.*
- *There are strong social and economic linkages between the fishing communities and the surrounding pastoralists to the extent that there is co-dependence in times of stress. The Tsunami struck at a time when there were 5 other significant livelihood shocks in the northeast area which compounded the coping stress.*

4.2 Food, Nutrition & Livelihood Security Sector Methodology

Food, nutrition and livelihood security sector specialists (in consultation with task force members) developed guidelines and a field tool with guiding questions (see FSAU for sector tools and guidelines). The tool was reviewed and revised by field team members within this sector. The tool was then used by the three field team member specialists within this sector to collect information from the villages visited. The toolkit covered information including:

- Description of the Tsunami 'shock'
- Demographic breakdown – size of villages/household size & category
- Food & Livelihood Security Phase Classification of each village
- Details of population movements

- Description of wealth groups & possible shifts due to Tsunami
- Coping strategies employed by households due to the Tsunami ‘shock’
- Livelihood strategy including details of food & cash income and expenditure
- Effects of the Tsunami on livelihood assets
- Food consumption patterns

This information was gathered from village key informants in team focus group discussions. The information was also collected from individual key informants. More specific information regarding food sources, income sources and expenditure patterns was collected from households (where time allowed) from the different identified wealth groups.

The information was summarised on the toolkit forms. Each team member presented their findings from each village and these findings were aggregated to reflect the situation of all areas from Hafun to Gara’ad. Any differences between the areas were recorded. The information was checked for consistency and triangulated during the analysis process.

4.3 Main Findings - Food, Livelihood & Nutrition Security Sector

The impact of the Tsunami ‘shock’

The Tsunami followed the October-November peak fishing period. The majority of the individual fishermen were not at sea at this time, although their nets and traps were in the sea. An estimated 70% of fishing equipment was being used at the time of the Tsunami. Out of this, 80% of all fishing equipment was damaged. Approximately 30% of this fishing equipment can be repaired¹³.

Although the communities along the northeast coastline are relatively food secure due to income generated from fishing activities, 60 – 70 % of the population became food insecure immediately after the Tsunami. The initial impact of the Tsunami on the population’s food security and livelihoods included:

- Loss of assets – homes, fishing equipment, other assets
- Halted fishing related income generation
- Limited access to cash and therefore reduced expenses on staple foods and non-staples, household items, water, fuel, medicine and fishing equipment
- General phobia and fear of returning to the sea
- Traumatized household members, especially for those who lost someone and/or material possessions
- Splitting of families amongst recent migrants and residents – children sent to relatives (where possible)
- Early migration of the seasonal dwellers back to their respective homes. Usually they would move in May. 80% of the seasonal migrants moved home after the Tsunami in December. Some migrated to urban centres in search of employment
- Limited access to credit - all wealth groups were affected, including those that give loans e.g. traders, the availability of loans and credit has reduced.

¹³ Refer to fisheries section

Post Tsunami – current situation

Change in Demographic Breakdown

Key question - What are the estimated numbers of people in a state of humanitarian emergency following the Tsunami crisis?

Estimated population figures per district

Through a process of interviewing various key informants within each village and observation per team sector specialist, the estimated population figures were triangulated with other sources and are presented below. These are the current population figures (residents & some recent migrants) and therefore do not reflect the seasonal migrants. These figures do not capture the temporary villages and fishing camps which are common during the fishing season (reflected in the village sizes) since after the Tsunami the majority of these migrants moved home.

Table 1 - District population figures and size of settlements

District	Coastal Households	Coastal Population	<30 HH	30-75 HH	75-150 HH	150-300	> 300
Hafun	1290	7740	0	2	5	0	1
Bender Beyla	1800	10800	0	1	4	1	1
Dangoryo	440	2640	0	1	3	0	0
Eyl	1950	11700	4	5	1	4	1
Jeriban	1910	11460	2	4	4	0	3
Total	7390	44340	6	13	17	5	6

Villages were also categorised into different sizes. The most common village size is from 75 – 150 households. Almost 50% of the population along the coastline are found in the districts' 5 main coastal towns. During the normal fishing season, one would expect to find a greater number of smaller temporary villages and camps used by the seasonal fishermen. These are more common in Jeriban and Eyl districts as compared to Bender Beyla and Hafun.

Population categories

Resident communities between Hafun and Bender Beyla have had a longer history of fishing activities, whereas it was only in the 1980s when coastal semi-permanent and fishing camps emerged along the coastline in Eyl and Jeriban Districts. There are numerous small coastal fishing settlements, many of which do not appear on maps and have only been settled in the past 14 years. Access to most of these villages is difficult.

Table 2 - Percentage of the total population in each category

Population Category	Larger villages Before Tsunami	Larger villages Current	Smaller villages Before Tsunami	Smaller villages Current
Residents	45 - 50%	70 - 90%	20 - 30%	75 - 80%
Recent Migrants	30 - 45%	5 - 10%	5 - 15%	5 - 10%
Seasonal Migrants	10 - 20%	5 - 20%	60 -70%	10 - 20%
Total	100%	100%	100%	100%

Within the larger permanent villages, the proportion of residents and recent migrants (80-90%) are greater than in the smaller semi-permanent/temporary villages (25-45%). The seasonal migrants are

less in the more permanent settlements (10-20%) than in the smaller semi-permanent settlements (60-70%). After the Tsunami, the general trend showed that the total populations per village were made up of residents (70 – 90%). After the Tsunami, seasonal migrants only constituted 5 – 20% of the population in all villages as of the mission date, the majority of seasonal migrants had moved back to their homes. This movement was possibly linked to the pull factor that the northeast had received adequate rainfall from the unexpectedly above normal Deyr rains¹⁴.

The household size for the resident households varies per wealth group. Poor households have around 6-7, middle 7-8 and better-off 8-10 household members. The mode for all of these was reported to be 6. The household size for a recent migrant was similar to the residents with about 6-8 members with a mode of 6. The majority of seasonal migrants formed *goles* of 4-6 men, with a mode of 6. The composition of these households of residents and recent migrants are described in the wealth group profile table. The *goles* are households of male seasonal migrants who join to form a household unit and either employs a woman to cook for them or one man brings his wife to do the domestic chores. The majority of these seasonal fishermen are in the age group between 15 and 30 years old.

Beside the fishermen, some women come to the fishing resorts during the season where they engage in petty trade, mainly teashops. These women are from poor households, often female-headed from pastoral or urban areas. They often bring the youngest children who still need motherly care and the oldest daughter to assist her.

The household size used to estimate population numbers was 6 as this was the mode for all wealth groups and population categories as described above.

Population classification

The Food and Livelihood Security Phase Classification is a tool developed by FSAU to integrate multiple facets of food, nutrition and livelihood security information into a simple statement indicating levels of severity and general implications for humanitarian response. For the tsunami joint mission, the food, nutrition and livelihood security sector developed a Tsunami appropriate tool to measure the percentage of the population who are in the different classifications. The specific characteristics and indicators for each classification are outlined in the below table. This table also includes the implications of each level.

The phase classification was established through information from key informants and the impression of the team members. In the most affected areas (Hafun, Bender Beyla, Kulub and Dharin Raqas) roughly 20% of the population (2,300 people) are in a state of Humanitarian Emergency and 30 - 40% are facing a Livelihood Crisis (4,000 people). In all other localities, no one was in a state of Humanitarian Emergency and roughly 40% of the total population are facing a Livelihood Crisis (12,888). Therefore, for the total assessed population (from Hafun to Gara'ad), 2% (2,300 people) are in a state of humanitarian emergency and 40% of the total population (around 17,000 people) are facing a livelihood crisis.

¹⁴ FSAU Post Deyr Assessment Report

Table 3 - Tsunami Food, Nutrition & Livelihood Security Phase Classification

Phase	Tsunami Specific Characteristics and Key Indicators	Implications
Humanitarian Emergency	<ul style="list-style-type: none"> • Complete asset depletion e.g. no assets to work with to convert into or generate cash to access internationally recognized standards of food and non food requirements within the immediate future. • With minimal access to sustainable social support • Death of economic active family member • Likelihood of exposure to human disease 	<ul style="list-style-type: none"> • Direct resource transfer to provide minimally acceptable internationally recognized standards of food and non food requirements
Livelihood Crisis	<ul style="list-style-type: none"> • Near complete asset depletion with minimal probability of rebuilding those assets and minimal probability of recovery to 'before Tsunami' livelihood [25% probability of recovery] within roughly the next two years • With minimal access to sustainable social support 	<ul style="list-style-type: none"> • Strategic cash or physical asset inputs to enable recovery to 'before Tsunami' livelihood
Alert	<ul style="list-style-type: none"> • Severe asset depletion but with residual assets that are adequate to access food and non-food requirements and can rebuild their 'before tsunami' livelihood within 2-3 normal fishing seasons. 	<ul style="list-style-type: none"> • Careful monitoring
Non-Alert	<ul style="list-style-type: none"> • People who were not physically 'affected' by the Tsunami [i.e. no loss of shelter or assets by the Tsunami] although they may be experiencing psychological trauma and financial strain due to social support 	<ul style="list-style-type: none"> • Monitoring

Shift in wealth groups

Key Question - What are the 'before Tsunami' livelihood strategies (food income, cash income and expenditure patterns) and how have they been affected by the Tsunami?

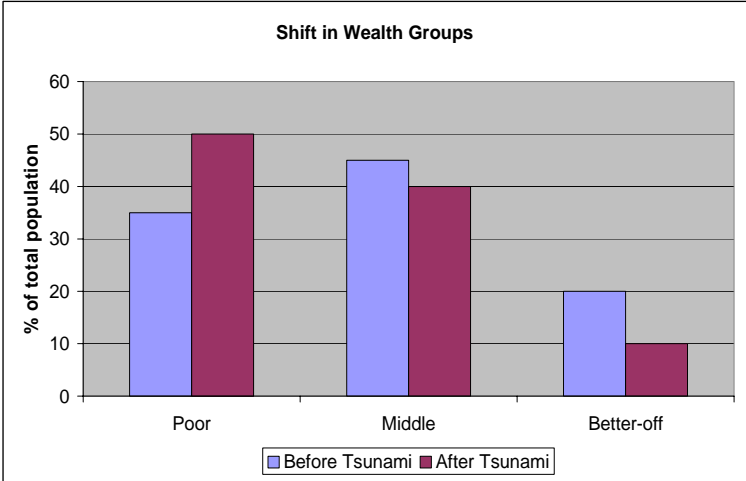
During the assessment, information was collected regarding the different wealth groups existing along the northeast coastline. The three main groups, contributing to the majority of the population, were identified and are profiled in the table below.

Table 4 - Wealth group breakdown and characteristics

Wealth Groups	POOR		MIDDLE		BETTER-OFF	
	'Before Tsunami'	'After Tsunami'	'Before Tsunami'	'After Tsunami'	'Before Tsunami'	'After Tsunami'
% of total village/town pop	30 – 40%	45 – 55%	35 - 45%	15 – 25%	15 - 25%	5 – 15%
Household Composition	1 man, 1 wife 3-4 children <i>Gole</i> 4 - 7 individual fishermen + some with one woman to cook	HH size may reduce as children might be sent to relatives <i>Gole</i> members move back home	1 man, 1 wife 3-4 children + one or two relative <i>Gole</i> 4 - 7 crew men + some with one woman to cook	HH size may reduce as children might be sent to relatives <i>Gole</i> members move back home	1 man, 1 wife 4-6 children + one or two relative/ dependents Family composition – 1 -4 wives	Increased # of dependents after Tsunami. Decrease if they send children to relatives or urban homes
Fishing activity	Unskilled 'mobile' fishermen – mainly lobster	Idle or migrated home	Skilled crew members – get a proportion of boat catch	Idle if boat and equipment lost	Boat owners – own 1-2 boats with diving equipment & nets	Idle if boat and equipment lost
Fishing equipment	<i>Gargor</i> lobster pot 10 – 20 <i>Shamag</i> trap nets for lobsters 3-7 1 flippers 1 snorkel ½ have masks 30 – 40 lines & hooks	Nothing 0-6 nets lost 80% of fishing gear was lost. 10% of poor access credit for nets	<i>Lash</i> fishing boat 6-8 skilled sea fishermen per boat 15–20 nets for lobster 20 nets for shark <i>Gargor</i> 40–50 <i>Shamag</i> 20 <i>Jikbo</i> 100–200 (hooks) Flipper snorkel	80% of fishing equipment was lost. As skilled fishermen have access to credit from boat owners.	<i>Lash</i> fishing boat 7–9 fishermen 12-30 diving tanks 5-9 diving accessories 7–9 flippers & snorkels 1 compressor motor 20-30 fish nets 10-15 lobster traps	Buy new equipment themselves or get on credit from traders
Livestock – residents & mobile past	20 - 40 shoats 0-2 camel	No change	60 – 70 shoat 3-4 camel	No change	100-120 shoats 4-10 camels	No change

Due to the nature of these fishing communities, the relationships between the different wealth groups are strong. The poorer individual fishermen either fish alone or ask the better-off boat owners to take their nets and lobster pot/traps to sea. This is usually based on strong blood relation or friendship ties. The poorer households also seek loans and credit from the better-off. The middle wealth group, comprising of mainly skilled fishermen, depend on the boat owners for employment. This is a two-way beneficial relationship, as the boat owners need skilled fishermen to successfully operate their boats to ensure full potential of the catch and skilled fishermen need employment. The better-off provide credit and loan facilities to the poor and middle, as well as providing the poor with *zaka* in the form of staple food. Additionally, the better-off own the larger food and non-food stores and provide credit facilities at these stores for the other wealth groups. The better-off households also have the capacity to invest in urban areas.

Figure 3 - Bar graph demonstrating shift in wealth group



After the Tsunami, these relationships helped facilitate some of the coping strategies employed by the poor and middle households. It is unclear as to what extent the dependence on remittance, gifts, loans and credit can be expanded during the post Tsunami context, but there is evidence that these relationships are still active.

There is a general shift in wealth groups after the Tsunami, mostly based on fishing equipment depletion. It is important to note the increase of the poor wealth group post Tsunami (from 30-40% to 45-55%).

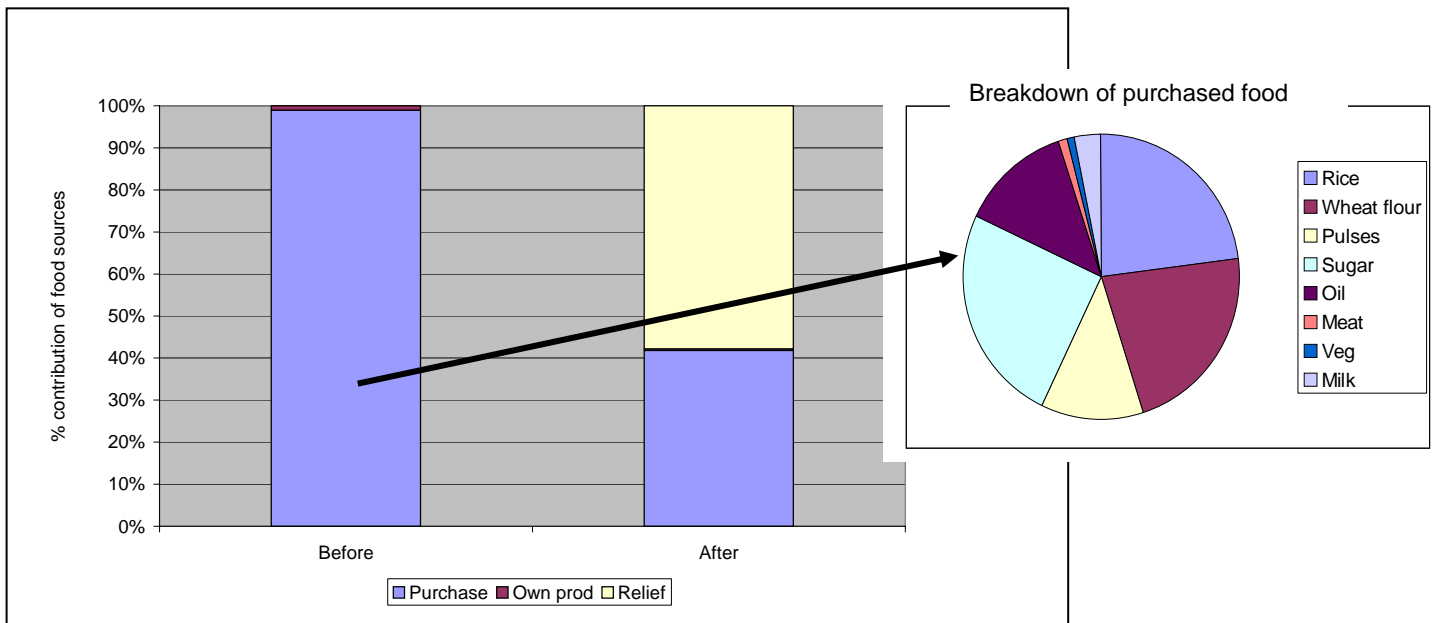
Effects on Livelihood Strategy

Food Sources

The majority of households living in this area purchase a significant proportion of their food. In all wealth groups the amount of food purchased can range from 90 – 95% of their food sources. They purchase a mixture of staple and non-staple foods and normally consume up to five of the nutritional food groups. Approximately 5 – 10 % of food sources normally come from own production – livestock production and fish consumption. The Somali's fish consumption per capita is 6 kg per year compared to somewhere like Mozambique where it is around 40 kg per year.

After the Tsunami, all households had reduced access to income sources due to the disruption of fishing activities. Due to the loss of fishing income, households could only afford to purchase just over 40% of their food requirements. Own production reduced from 5 – 10% to almost insignificant. The remaining annual contribution of calorific needs was replaced by food aid. Most households interviewed were receiving food aid. Foods distributed included rice (25% of food sources), maize (12% of food sources), pulses (7% of food sources) and oil (14% of food sources). There were minimal differences between the poor and middle wealth groups except that the middle sold half their maize.

Figure 4 - Bar graph showing food sources



Income Sources

UNDP¹⁵ estimate that the annual turnover from fishing in this area is 8-9 million US dollars. The Fisheries sector reported that it could reach up to \$11 million per year. In a normal year, poor households can earn over \$1000 (elsewhere in Somalia this ranges from \$200-400 per year) and in a good year, up to US\$2500 from fishing. The lobster harvest is currently exported to UAE which, in turn, is re-exported to other destinations. The buyer processes and packs the lobster and controls the

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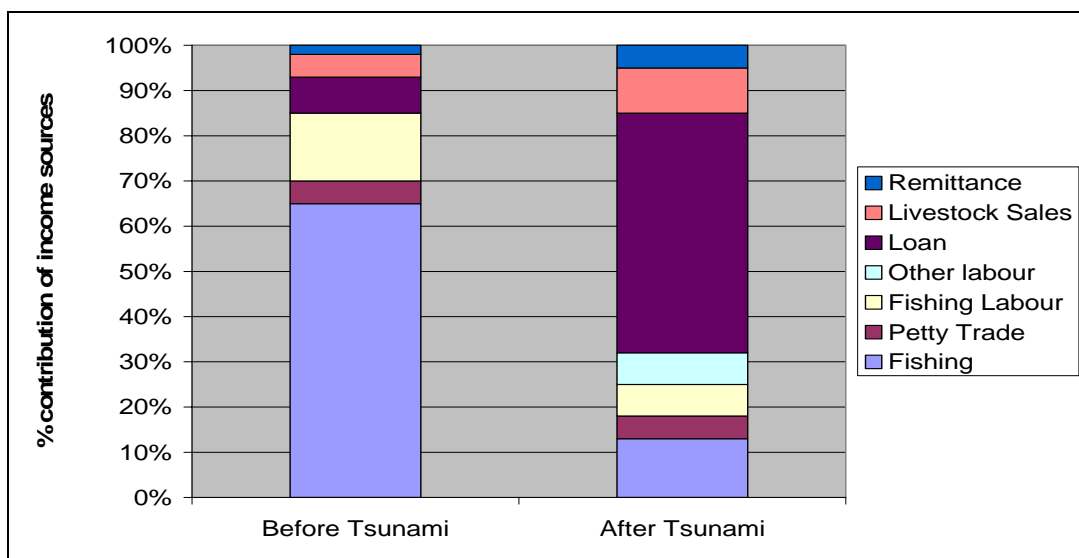
retail price. 1 kg of lobster tails fetches about US\$14-27 according to the size and age of the individual animal.

Before the impact of the Tsunami, all wealth groups were accessing up to 70 - 80% of their income through fishing related activities. Individual fishermen, depending on their fishing equipment asset level, get this proportion of their income from sales of catch, whilst skilled fishermen will get a majority of their income from paid fishing labour.

The proportion of income from petty trade increases through the wealth groups, depending on their investment scales. The poorer households may engage in tea shops and small kiosks, usually run by the women. The middle wealth group run slightly better stocked kiosk and the better-off generate income from larger stores providing food and non food items, as well as fishing equipment. For middle and better-off households, petty trade can contribute to 20% of income sources, whereas the poor and middle households get about 5% of their income from petty trade.

Before the Tsunami, the poor relied on remittance and loans to contribute to approximately 10% of income sources. This was relatively minimal in the better-off wealth groups. Livestock sales were uncommon in all wealth groups but would be only relevant to those households who own livestock and keep them nearby.

Figure 5 - Bar graph showing income sources



After the impact of the Tsunami, the majority of income generation from fishing related activities stopped. This was due to the 80% of fishing equipment that was reported to have been lost during the Tsunami wave, as well as the communities' current phobia of the sea. The initial proportion of income sources lost was around 70 – 80%. To cope with this loss, households looked to other income opportunities and areas of expansion. Men were mainly engaged in the fishing activities and as a result of the Tsunami most remain idle with little self esteem and fear of the sea. As reported in the fishing section, around 25-30% of the population had resumed fishing at the time of the assessment.

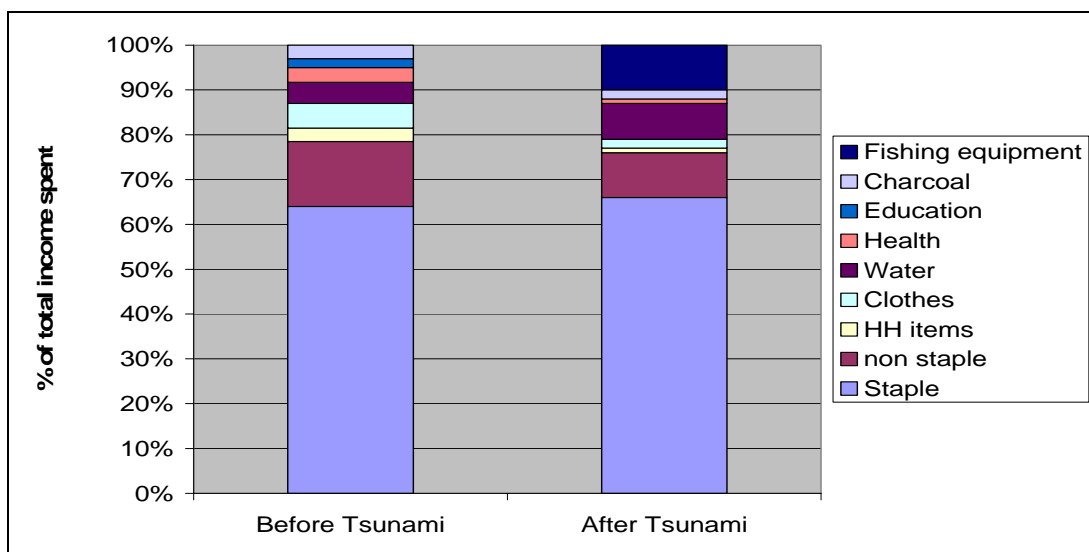
All households, to a greater and lesser extent, increased their dependence on remittance requests, loans and credit. The level of debt per wealth group changed after the Tsunami. Debt values of poor households increased from \$250 to \$300 with the main sources of debt being food, water, shelter and fishing equipment (10% of the poor accessed credit for nets/pots). The middle wealth group who usually have minimal debts have incurred debts to \$500 per year.

Those with livestock increased their sales, including female shoats, which is a rare action at this time of year as the females are pregnant. Some household members, especially men, went to urban centres or nearby villages to seek other employment such as construction, portering, fishing equipment repair etc.

Expenditure

The proportion of income spent on staple and non-staple foods did not vary significantly from before and after Tsunami. There was a slight reduction in expenditure on non-staple foods as households reduced purchases of more expensive luxury foods, especially in the poor households. The poorer wealth group, with lower income levels, reduced expenditure on staples, primarily due to the provision of these foods as relief but also reduced the amount of food or meals consumed. Households reduced expenditure on non essentials such as household items and clothes after the Tsunami.

Figure 6 - Bar graph showing expenditure patterns



In most villages, except those who are being supported by the trucking of drinking water by International agencies, expenditure on drinking water has increased since the Tsunami. This is due to the contamination of shallow wells and other water sources by salt water and sand. Although the health status of these communities after the Tsunami is fragile, to date there have been no major outbreaks of disease. Most poor and middle households reported a reduction in expenditure on health care and medicines due to affordability and availability rather than need. Education expenses have also reduced although this was reported not to have resulted in an increase in school drop-outs.

Access to fuel (charcoal and firewood) has become a major constraint for poor and middle households. The average price of charcoal is 150,000 S.Sh (approximately \$10)¹⁶ per 50 kg sack which is expensive as it can not be produced locally but is sourced in the hinterland (200 km inland). The women reported that up to 4 sacks of charcoal are used per month, equivalent to \$40. People are still using charcoal but many families reduced the consumption by 30%. Households have also shifted to using firewood which is relatively cheaper but not easily available.

Those households that can afford to, have increased expenditure on fishing equipment to replace nets and traps that were destroyed. This would only be possible for approximately 25 – 35% of the total population. Others may seek to replace fishing equipment through credit mechanisms.

¹⁶ The price of charcoal in Bossaso is 80-90,000 S.Sh per 50 kg sack

Effects on Livelihood Assets

Natural Capital

Prior to the Tsunami, poor natural resource management of marine resources was leading to unsustainable fishing of lobster, shark, and Kingfish. In addition, it is widely reported that international trawlers illegally exploit marine resources within Somalia's marine territory. Direct impact of the Tsunami on marine resources is not evidential, although perceptual reports state that the wave could have disrupted the sea bed and lobster beds.

Somalia's territorial waters are illegally used as a toxic dumping ground. UNEP recently released a report indicating that the Tsunami has likely caused the wide dispersal of these toxics, and as such could pose a tragic environmental disaster leading to decline in natural capital and direct damage to human health.

Natural water resources such as shallow wells and possibly the water table have been contaminated by the Tsunami. The extent of this effect has not yet been ascertained.

Woodland resources are limited in this area which has significant implication on the access of households to cooking fuel. Women complained of the high price of charcoal per sack and their expenditure per month (up to \$40).

Physical Capital

Many households lost fishing assets during the Tsunami. This ranges from nets and traps to boats (for the better-off). Household livestock sales have increased since the Tsunami, depleting the pre-Tsunami asset base. Some households in the worst affected areas lost their shelter and other possessions.

The infrastructure and communication systems are under-developed in these settlements. Accessing some of the villages is difficult and at times impossible. Existing industries are focused around the fishing industry and salt production. Recently investors have begun developing processing plants in the bigger urban centres e.g. Eyl.

Social Capital

The social networks within this community and their links externally are very strong. Internally, there is evidence of strong social ties through remittance, especially between the wealth groups (see wealth group table). Key informants from the mosques did not report a significant increase in the number of people seeking assistance, but there were new cases of informal begging. There is enormous response from local organizations and individuals to support those directly affected by the Tsunami. Local resources have been mobilized to aid these households, particularly in provision of food and shelter. Local organizations, such as the Galkayo Education Centre for Peace and Development (GECPD) and the Somali Red Crescent, have supported households throughout the affected area.

Traders (who are within the better-off) give credit to the other wealth groups in the form of cash, food and fishing equipment. Due to the high income levels compared to the rest of Somalia, remittance is typically sent from this area to other areas throughout the north. Post Tsunami, these communities have increased their dependence on remittance within the community and from external social networks. The sustainability of this support is questionable.

The link between the residents and recent migrants along the coast line and the pastoralists in the hinterland is strong. Recent migrants have extended families in the pastoral communities and residents have ties in terms of livestock husbandry. Additionally, key informants stated that the better-off invest outside the area.

Human Capital

There were no serious outbreaks of disease as a result of the Tsunami. Some areas reported incidents of diarrhoea and respiratory infections. There were no observed or reported cases of rising malnutrition due to the Tsunami.

Other than the direct loss of 289 lives (representing 0.5% of the assessed population), the Tsunami did not have a significant impact on the available labour force. There were minimal changes in the skills available or educational aspects. Some fishermen remain idle due to the loss of equipment in the Tsunami and they are lacking self-esteem. The psychological effects of the Tsunami are still widely felt among the assessed population. This is hindering people's willingness to live nearby and work within the sea,

Financial Capital

There is evidence of traders and business men investing in this area due to the growing fishing industry and realised potential. The assessment reported high income levels for all wealth groups in a normal year and yet there was very little evidence of financial systems (vendors). After the Tsunami, the majority of the poor and middle households increased their debts to access food and non-food items, shelter materials and fishing equipment. The increase for the poor was from about \$250 to \$300 and the middle up to \$500. In comparison to pastoralists' debts (up to \$1000¹⁷) incurred during the prolonged drought, these are relatively low.

Coping Strategies

Coping strategies are ways in which households try to expand on certain activities to make up for a loss. Understanding coping strategies helps determine an appropriate response. Most coping strategies involve intensifying activities which people already do or reducing access to certain resources. Coping strategies change as stress continues. Early coping strategies are highly reversible (e.g. short-term dietary change), while at the other end of the spectrum there are coping strategies that are irreversible and may have a negative impact in the mid/long term (e.g. selling livestock herds).

Coping strategies employed by the people living along the coastline when Tsunami hit, vary per population category and wealth group. Residents employed activities to maintain food security after the Tsunami 'shock', whilst seasonal migrants and to some extent recent migrants (20 – 30% of the total), migrated inland to their original homes or relatives.

Key Question - Which livelihood coping strategies have they employed due to the 'shock'? Are these strategies negative or positive in the mid/long term? How sustainable are these strategies?

Residents employed the following coping strategies after the Tsunami in the following order:

- Poorer resident households reduce number of meals per day from 3 to 1-2 so that they could reduce expenditure on staples and non staples.
- Some households in the poor and middle wealth groups change the content and quality of their diet by reducing meat, sugar and other relatively expensive staples and buy cheaper calorie-rich cereals. This may have an impact on the nutritional adequacy of their diet.
- Poorer households depend on meals from neighbours in the form of gifts which is unsustainable.
- To some extent, about one third of all households can increase their dependence on remittance. It is not clear how long this social support mechanism could continue into the future.

- Increase seeking of credit either in the form of food, cash or fishing equipment¹⁸. Poor households usually access around \$250 of credit per year. This can be increased to \$300 per year. The sustainability of the credit givers is uncertain as they may also have been affected by Tsunami and their credit capacities reduced. Credit is negative as it puts households into a vicious cycle of debt.
- Reduce expenditure on water. This is a negative coping strategy as most water sources have been contaminated. Therefore if households do not buy drinking water and use contaminated water for drinking without treating, this could cause diarrhoea and other water borne diseases.
- Poor look for labour opportunities at a reduced rate locally and in the neighbouring urban centres. In the long term this could be negative as it causes rural-urban migration which results in high concentrations of population in urban centres with limited resources.
- Households sell assets (jewellery & livestock). Households with livestock will sell abnormal numbers including some females, to access cash for food, and fishing equipment. This is negative as it causes asset depletion and reduction in own livestock production.
- Move to villages less affected e.g. skilled fishermen move to villages with less damage to their boats to access employment opportunities
- Move to relatives in the hinterland to get assistance. This assistance is short term and not indefinitely sustainable.

A significant amount of households are accessing relief food (e.g. 70 – 90% of the poor in Hafun). This poses a number questions related to the negative (relief dependence and disruption to normal trading systems) and positive (short term solution to food insecurity) impacts of food relief. The other question is whether these communities can meet their basic food needs without relief and how sustainable food relief is within this context.

Seasonal Migrants

- Out migration – the seasonal migrants move back to their homes. Normally around 10 – 20% of the pastoralists (local pastoralists) would move back at this time of year due to rough waters and return in late February to continue fishing activities. Other seasonal migrants from further a field would normally stay until April. After the Tsunami, an increased number of seasonal migrants (over 60%) moved home

Recent migrants

- If recent migrants still have links through relatives with family members from their origin, they will either move there or send a proportion of their family e.g. children
- Otherwise recent migrants will employ in similar coping strategies as the residents.

Response so far

Operation agencies including WFP, UNICEF and CARE, responded immediately after the Tsunami 'shock' affected towns and villages along the northeast coastline from Hafun to Gara'ad. Agencies evaluated the situation and identified needs including food, shelter, household items, water and emergency medical kits. The first relief reached Hafun, the most affected town, on December 28th, 2004, two days after the disaster. There were logistical constraints and challenges to reach some of the inaccessible villages.

On Dec 30th 2004, WFP relief distribution started in Hafun and then the other affected towns and villages in the coastline of Indian Ocean for about 650 km. The area covered is Iskushuban, Bender Beyla, Eyl and Jeriban districts of Bari, Nugal and Mudug Regions in the northeast. In the first round (Dec 30th 2004 to Feb 1st 2005), WFP distributed 432 metric tonnes of assorted food of cereals, pulses and vegetable oil to 30,500 beneficiaries in 38 different locations (towns/villages).

¹⁸ Before the Tsunami, households were taking fishing equipment from traders as a loan. It is unclear whether traders are still willing to do this after the Tsunami.

CARE International has worked with local partners to distribute different food stuff including sugar, wheat flour, milk powder, cooking oil, dates and pasta. They have also distributed utensils, fuel for water tankering and materials for constructing latrines. SOREDO has distributed this food in Hafun District to 1500 beneficiaries. TAAKULO has distributed food in Bender Beyla District to households. SWV has distributed food in Eyl District to 900 beneficiaries. Rahmo have distributed food and non food stuff to 1237 beneficiaries.

UNICEF is currently assisting 12,000 people in the villages of Hafun, Gara'ad, Bender Beyla and Eyl. UNICEF distribution includes clean water, shelter materials, cooking sets, and mosquito nets. UNICEF also supported the restarting of schools and in collaboration with WHO, provided emergency medical care. Other livelihood assistance from other different sources of either individual group, NGOs both local and international and even from the local authority are underway.

The South African NGO 'Gift of the Givers' sent a consignment containing 20 tons of food (maize, rice, beans, Soya, salt ,sugar, oil, soap, tea, milk powder) to cover the needs of 500 families; 4 tons of very high energy protein supplement; 500,000 water purification tablets; 400 tents; rubber flooring for the tents; 1000 blankets and 4 tons of medicine. The food stuffs were distributed through local NGOs in Bossaso and Hafun. Medicines were given to Bossaso Hospital and the Puntland Authorities.

The Galkayo Education Centre for Peace and Development (GECPD) has also reported¹⁹ on additional response by the Transitional Federal Government, the civil society organisations and Mudug community groups (business and pastoral communities). The district authorities in Jeriban District provided fuel and food including 5 drums of fuel, 5 sacks of flour (50 kg each), 5 sacks of rice (50 kg each) and 5 sacks of sugar (50 kg each). GECPD has completed two distributions targeting 610 families in four affected towns and settlements in Jeriban District including Gara'ad, Dhinowda, Kulub and Ilfooshe. They distributed clothes (adult & children/female & male), blankets and plastic tarpaulins.

4.4 Constraints & Challenges - Food, Livelihood & Nutrition Security Sector

The teams faced the challenge of collecting a standard set of detailed information for each village in a limited amount of time. The time was limited due to the number of villages that needed to be visited to cover the study's geographical scope and due to the long distances and rough roads to access some coastal villages. In fact, not all villages could be visited due to inaccessibility or bad road conditions.

The northeast coastline has been relatively neglected in terms of baseline information. Therefore, the assessment had to collect information of the situation pre Tsunami in terms of food sources, income sources and expenditure patterns. This information takes time to collect and was necessary to compare the pre Tsunami situation with the post Tsunami. This was necessary to ascertain the impact and whether these households could cope. One of the main constraints was that one of the teams was not given the latest tool and therefore missed out some information.

¹⁹ GECPD Emergency Intervention Report on the Relief Interventions by GECPD to Tsunami Affected Communities in Gara'ad, Kulub, Dhinowda and Il-Fooshe Fishing Settlements and Villages of Jeriban District, Mudug Region

4.5 Food, Livelihood & Nutrition Security Sector Conclusion & Recommendations

In the past, these communities have been food secure. A poor household in a good year can make up to \$2500 from selling marine resources to traders and companies. However, since the Tsunami and the reduced access to fishing related income, households' access to food has been limited although availability of food has not been a problem. This has caused an increased dependence of some households on food relief. This poses an interesting question linked to possible response options:

Is resource transfer necessary for vulnerable households between now and the next fishing season?

To access their minimal food basket, a poor household of 6 requires just under \$1000²⁰ for a year (around \$80 per month). A poor household can expand on credit from \$250 per year up to \$300 per year. They could also sell assets to access cash (although these options are limited and only relevant to those households with livestock). A household could raise approximately \$200 to \$300 if they sold one third of their shoat herd (10 – 15 shoats). As mentioned above, some households seek other labour opportunities or expand on existing petty trade income generating activities. This could generate up to \$300. Although it is unclear to what extent remittance can support these households and for how long, there is evidence that it is common in this area. Although before Tsunami, these communities were mainly remittance givers, key informants reported that households were accessing remittance up to \$200. These areas of expansion could provide all households with up to \$1000 to access their food basket for the following 8 months.

However, this is based on many assumptions that these options are available to everyone, which is probably not the case. This also does not address the main issue here – to support households' livelihood recovery. Therefore the response options identified in this report are crucial for livelihood recovery; not only ensuring that households are meeting their basic food needs but also that they have enough resources to recover fishing equipment.

The underlying long-term effects of the Tsunami on the livelihood structures along the northeast coastline include the following:

- If households are unable to recover their fishing livelihoods due to lack of fishing equipment, they will be dependent on relief as coping strategies are stretched
- These households will continue to deplete their asset base
- Households will increase debts with unfavourable terms
- Households will migrate to pastoral areas with fewer resources

Short Term²¹ Recommendations

Priority 1 – Revitalise the fishing livelihood

Due to the strained overall economy of these communities and the abrupt end to the fishing season, it is necessary to promote livelihood recovery so that communities can resume fishing related activities to generate income to access basic needs. Refer to the fisheries section recommendations for details of how communities need to be supported to resume their fishing livelihood.

²⁰ This figure is based on the poor household's access to food 'before' Tsunami calculating the acceptable minimal food required to meet annual calorific food needs. This also takes into account an acceptable nutritional quality of the diet.

²¹ Short Term is defined as the period from now until the next fishing season (8 months).

Priority 2 – Maintain minimum access to food until the next fishing season

The Task Force fisheries specialists do not feel that it is possible to support the fishing livelihood until the next fishing season starts (October 2005). It is therefore necessary to support these households through resource transfer to access their food needs until the next fishing season for the following 8 months. As described above, this is possible for some households through social support and expansion on certain income generating activities. However, this is not the case for all households.

- To maintain minimum food access until the next fishing season (October 2005), resource transfer in the form of food and/or cash assistance is necessary and can not be targeted only at the directly affected households in a state of humanitarian emergency.
- The effect of the Tsunami was on household's income (70-80% of which normally comes from fishing activities) rather than on food production, thus the resultant food insecurity is due to lack of food **access** rather than lack of food **availability**. Traders have been and will continue to be able to provide necessary food stuffs, assuming local populations have adequate purchasing power (under normal circumstances households typically purchase upwards to 95% of their food).
- The option of addressing the food needs of the poor within the community and those in livelihood crisis, through cash-based or food-based interventions has the added benefit of allowing households to divert some resources towards purchases for livelihood recovery e.g. fishing equipment.
- For cash-for-work and food-for-work projects, the community themselves should identify what their priority needs are – examples could include rebuilding the destroyed houses; building a boat repair workshop, de-silting of shallow wells & construction of improved water services; construction of latrines; construction of health and education facilities and improvement of roads. The cash for work is likely to attract those households that really need the money and have few relatives to rely on. It will also give households a choice of how to spend this income – either on fishing equipment, restocking, or set up of small businesses.

The option of addressing food needs through cash-based interventions has the added benefit of allowing households to divert some resources towards direct purchases for livelihood recovery.

The resource dynamics for the seasonal migrants should also be considered.

3 targeting options:

- Target the percentage of households that fall within the humanitarian emergency and livelihood crisis Food and Livelihood Security Phase Classification (40% of the assessed population with a range of 20 – 60% of the total assessed population depending on the severity of the impact of the Tsunami).
- Social-economic based targeting e.g. the poor²² (shift in wealth groups due to the Tsunami left 45 – 55% of the population poor).
- Due to the differential impact on different groups in the population, targeting is complex. It is important to take into consideration that unbalanced targeting could create social tensions.

For the purpose of this report, an average percentage range was taken to encompass the 'before Tsunami' poor and new poor 'after Tsunami' as well as the percentage of all the village populations falling in a state of humanitarian emergency and facing livelihood crisis. An average of the correlation

²² See defined characteristics in wealth breakdown table

between the two sets of percentages, gave the percentage of the population needing humanitarian assistance at 50%.

Long Term Recommendations

- Promote the revitalisation and development of the fishing livelihood – refer to recommendations presented in the fisheries section.
- Further baseline and monitoring assessments need to be conducted in this area to fully understand:
 - a) the livelihood strategies of these coastal communities and the livelihood zone
 - b) the links between the fishing communities and the neighbouring livelihood zones – rural & urban

5. Fisheries Sector

5.1 Summary of Key Findings

- *The devastation of the Tsunami seismic wave has left the fishing along the northeast coast of Puntland in disarray with most of the population still in a state of shock.*
- *The fishing industry is by far the most important in terms of household income for the coastal population. This sector has been the worst hit by the Tsunami, not only in terms of equipment losses, but also by the fact that the disaster took place in the middle of the peak fishing season.*
- *Fishermen are either individual fishermen operating alone in the shallow waters with nets and lobster pots, or skilled fishermen who are employed on the boats or boat owners.*
- *An estimated number of just over 600 boats were lost or destroyed by the Tsunami. An estimated 75% of the fishing gear has been lost or damaged beyond repair.*
- *Due to poor resource management, the fishing industry is following an unsustainable trajectory. Additionally, the exploitation of Somalia's rich coastal fisheries by foreign trawlers means that Somalia is left with few benefits from this important resource.*
- *Considering the key role of fisheries in the livelihood of the coastal communities, a quick response to address the identified needs is essential. However, it is not realistic to expect that such assistance will be in place in time to salvage the present fishing season. Every effort should be made though to ensure that the benefits of proposed interventions (support fishermen to replace fishing equipment) are in place prior to the start of the new season in October 2005.*
- *Proposed interventions should take into account existing actors in the area, including private traders, when designing project modalities.*
- *In order to optimize the output of the fishing sector, the whole industry requires an overhaul. It is estimated that at present only 30% of the marine resources available are actually utilized.*
- *A professionalisation of the industry is required, including the establishment of pertinent institutions in centrally located areas (Hafun, Bender Beyla, Eyl and Gara'ad), to assume the responsibility for the management and distribution of the inputs.*
- *The formation of fishermen associations (not co-operations) – with voluntary membership – in the four major centres is recommended, serving all satellite villages in their catchment area.*

5.2 Methodology

In every village, a general meeting was held with village representatives including the Mayors, the elders, fishermen's representatives, and different government representatives. Also, interviews were carried out with several individual fishermen in every villages as well as household members.

Further to the above, observation of the visual damages and the remaining boats and fishing gear, was carried out. This was fundamental in estimating the overall picture of the damages caused by the Tsunami.

5.3 Main Findings

Pre-Tsunami context

The Puntland coastal strip between Gara'ad and Hafun is 650 km long with a narrow continental shelf varying between 15 and 24 km, except for a 135 km stretch in the Hafun area where its width averages to 80 km.

Abundance of phytoplankton and zooplankton suggest that this part of the Somali coast has some of the world's best fishing ground. Past surveys in Somalia indicated high potential for fishing development, especially in the northeast where vast concentrations of fish stocks exist.

Between 1973 and 1990, all fishermen (except in Eyl) joined Fishing Cooperatives and received intensive assistance from the previous Government. During the past decade, due to civil strife, all the cooperatives ceased to function, but with the ban of the livestock exports to the Arab States, various traders moved to the coast and organised operating groups of fishermen. They supplied a limited number of boats, fishing gear, and financial loans, as well as establishing new markets in the Arab Emirates and in Mukalla in the Yemen South. These were not official markets and therefore did not require certification of the products.

The fishing season runs from the beginning of October to the end of April, a total effective period of 7 months, after which all fishing activities stop. Most of the mobile individual fishermen (seasonal migrants) go back to the hinterland after the fishing season and only residents and recent migrants remain in the villages. These households practice subsistence fishing in the off season near the shoreline.

The coastal areas from Gara'ad to Hafun comprising of many villages (although remote and at times even inaccessible) have been, prior to the Tsunami, self-sufficient and economically affluent. Prices of the main marine resources range from:

\$11 – \$27 x kg	of lobster tails (<i>Palinurus vulagaris</i>)
\$1 x kg	of Kingfish (<i>Sgombermorus commersome</i>)
\$95 x kg	of shark fins large (Any species)
\$35 x kg	of shark fins small (Any species)
\$70c x kg	of dry shark

It has been reported that the average annually income for a fishermen can range from US\$1000 (as an individual), US\$ 4200 (skilled labour) and for a boat owner up to US\$ 10,000 per year. These figures would be consistent with the reported sharing system of the catch value adopted and applied by the fishing communities. The total seasonal turn-over in the region is reported to be US\$ 11 million.

The traders, including the Yemeni buyers, are adamant about what species they are prepared to buy. They only accept lobsters and Kingfish. They refuse to buy all other species of fish, and this would indicate that only 25-30% of the available resources are presently being harvested. Other species include many species of sharks, tuna, grouper, snapper, prawns and shrimps and many others.

A unanimous complaint by all communities has been the poaching activities carried out by foreign fishing vessels which, against all maritime international laws and practice, still carry out frequent trawling operations well inside the continental shelf, sometime within 1 km from the shore, with the obvious subsequent extensive destruction of the coral reefs and depletion of the fish stocks.

No fishermen's associations were present in any of the villages visited. Instead, supported by the traders, fishermen have formed the so called 'Companies' which engage a number of fishermen and their boats to work exclusively for a given trader who ties them with loans and provision of basic food.

Even though the traders have supported the fisheries sector in the area, simply by selling boats and fishing gear to the fishermen, they completely ignored their needs in terms of providing the means to repair and maintain the fleet and fishing gear; to provide buffer storage cold-rooms; spare-parts; social services; accident insurance scheme; first-aid facilities and reasonable interest on micro-lending.

Also, the complete lack of buffer common cold-rooms makes the fishermen very vulnerable to price fluctuations and pressure due to the perishable nature of the commodity. They are therefore obliged to sell the catch immediately upon landing. However, the other side of the coin is that with the advent of opportunistic small traders without overheads or suitable equipment, but offering higher prices, the fishermen are now able to negotiate the price with the main traders. It seems that in the last 4 to 6 months the prices of the large lobster tails have jumped from US\$22 to US\$27 per kg. While this situation is highly desirable for the fishermen in the short term, speculative traders who have no infrastructure in the area may drive out more established traders, with negative long term consequences.

Impact of the Tsunami

During the assessment, the 3 teams began meetings with the various local authorities, elders, and head fishermen. All provided their version of how the Tsunami wave occurred, the death toll and the extent of the damages. Main centres and satellite fishing villages, where the damages to boats and fishing gear occurred, were visited and it is without doubt that it can be stated that fishing gear and boats suffered extensive damages.

The mission observed vast amount of fishing gear and some boats buried in sand. However, it must be mentioned that +/- 25% of the fishing gear could be untangled and recuperated.

Lobster pots and nets are placed in relatively shallow waters from anything between 3 m and 10 m from the shoreline. Fishing gear was damaged at the time of the impact by the intensification of the wave forces when approaching the shore.

Regarding the loss of boats, the mission is of the opinion that the initial figures were vastly inflated (refer to table below). Particularly in the Hafun area, no concrete physical evidence was observed to justify the 162 boats reported lost i.e. no damaged hulls, no debris, no boat left stranded behind blocked by trees or bushes, nor was any sunken boat washed ashore as would be the case for semi-buoyant objects. Therefore, regarding the figures that were reported to the mission, a lot of triangulation and adjusting had to be done considering the vastly different estimates given by various sources. See table below for more details.

Table 5 - Estimated boats lost per settlement

LOCATIONS	REPORTED DATA			ESTIMATED		
	No. of boats	No. of boats	No. of boats	(By calculations)	Actually counted	Information by other sources
	BEFORE	AFTER	LOST	BEFORE	AFTER	LOST
Hafun	294	132	162	122	82	40
Hurdiya	32	12	20	22	12	10
Handa	36	19	17	24	19	5
Fo'ar	101	66	35	81	66	15
Garan	70	25	45	45	25	20
Barmadobe	180	60	120	85	60	25
Lamiya	42	19	23	31	19	12
Fundhudule	190	10	180	36	10	26
Hul Anod	257	47	210	67	47	20
Aris	30	25	5	30	25	5
Totals Hafun	1232	415	817	543	365	178
Bender Beyla	265	105	160	120	80	40
Eil Dheeda	30	23	7	30	23	7
Durdura	200	165	35	80	60	20
Darinba	50	29	21	50	35	15
Qundheed	49	4	45	30	15	15
Kulule	500	144	356	80	50	30
Suj	66	27	39	46	29	17
Garmale	80	73	7	60	53	7
Kabal	38	31	7	38	31	7
Maraya	124	80	44	70	50	20
Garba'e	100	55	45	50	30	20
Dharin Raqas	70	20	50	50	25	25
Falfalax	30	20	10	25	17	8
Totals Bender Beyla	1602	776	826	729	498	231
Dhinowda	80	45	35	35	24	11
Gara'ad	450	270	180	110	50	60
Kulub	180	80	100	76	32	44
Ilfooshe	80	55	25	43	12	31
Dhanane	146	91	55	50	43	7
Ilig	70	50	20	30	3	27
Bedey/Eyl	450	350	100	170	133	37
Totals Gara'ad	1456	941	515	514	297	217
TOTAL				BOATS LOST		626

Response so far

There was no visible response by humanitarian actors in providing inputs to the fisheries, although the private sector and the Diaspora have made some limited assistance.

5.4 Conclusions and Recommendations - Post Tsunami Needs

It is felt that between 70 to 80% of the fishermen are now idle for 2 main reasons:

- the psychological fear of the sea
- the actual unavailability of fishing equipment.

Efforts should be applied to make sure that the proposed inputs reach the beneficiaries in the shortest possible time. The 2 months left before the fishing season ends, combined with the 6 months off-season period, offer an 8 months period before the beginning of the new fishing season in October. During this period, fishermen should be supported with the rebuilding of their fishing assets to resume fishing for the next season.

Targeting Options

It is recommended that proper modalities of targeting and distribution should be explored when distributing the fishing gear, being a consumable material in demand. In order to support local efforts, a possible solution would be to initiate fishermen association to coordinate appropriate targeting.

It is strongly suggested that all the fishing equipment and boats be distributed in a way that does not adversely affect other actors in the sector, including private traders, but taking into consideration the suffering caused by the Tsunami disaster.

Short term humanitarian emergency response

- Considering the key role of fisheries in the livelihood of the coastal communities, a quick response to address the identified needs is essential. However, it is not realistic to expect that such assistance will be in place in time to salvage the present fishing season. Every effort should be made though to ensure that the benefits of proposed interventions (support fishermen to replace fishing equipment) are in place prior to the start of the new season in October 2005.
- Proposed interventions should take into account existing actors in the area, including private traders, when designing project modalities.

Mid/long term Livelihood recovery

- In order to optimize the output of the fishing sector, the whole industry requires an overhaul. It is estimated that at present only 30% of the marine resources available are actually utilized.
- The formation of fishermen associations (not co-operations) – with voluntary membership – in the four major centres is recommended, serving all satellite villages in their catchment area.
- A professionalisation of the industry is required, including the establishment of pertinent institutions in centrally located areas (Hafun, Bender Beyla, Eyl and Gara'ad), to assume the responsibility for the management and distribution of the inputs.

6. Health & Nutrition

6.1 Summary of Key Findings

- *After the Tsunami, health facilities recorded increasing cases of diarrhoea which soon decreased*
- *No Meningitis, cholera or malaria cases were reported or seen during the assessment*
- *No cases of malnutrition were observed by any of the three teams during the assessment*
- *There are no immediate major health problems in the villages visited. In Hafun, 19 unconfirmed cases of death were reported and are associated with the Tsunami. No cases of death have been reported after the Tsunami incident, with the exception of some unconfirmed deaths attributed to diarrhoea reported by the community in Gara'ad.*
- *Risks factors for potential outbreaks remain mainly due to presence of vectors (flies, mites, mosquitoes, lice, scabies, and rats), poor sanitation, hygiene and poor quality of the water.*
- *Main individual risks remain related to poor quality and coverage of health services and programs and inadequate referral system (existing pre Tsunami).*
- *Main Diseases and illnesses (reported by health workers or community) remain similar to pre-Tsunami situation*
 - *Diarrhoea (increase reported first 2 weeks in some areas, clear decrease afterwards)*
 - *ARI (upper track respiratory infections)*
 - *Skin diseases (Scabies and fungal infections)*
 - *Conjunctivitis*
 - *Arthritis*
 - *Anaemia*

6.2 Methodology

Tools were developed by the health sector specialists in Nairobi and were reviewed by the group representing the MOH and the experts from the mission. The guidelines and questionnaire was adopted and endorsed by the group. Methods of information collection included questionnaires, semi-structured interviews, looking at records and registers where available and observation.

The three health sector experts met senior health staff from MOH. The group reviewed the tools and made slight changes. They recommended that it will be useful if WHO could provide some essential drugs for the teams just in case they face any emergency cases in the field.

Where functioning health facilities existed, information was gathered from health staff and registers using the assessment tools. In the majority of villages the information was obtained through focus groups and interviews with the community or available staff (e.g. most of the time untrained staff from private shops selling medical drugs). The health sector presented their findings to the Task Force in Garowe and Nairobi.

At the end of the assessment, the health focal point met with the DG Dr Abdi Awad and briefed him on the findings. He agreed on all findings and recommendations and asked to add certain recommendations as follows:

- Referral Hospitals in Garowe and Galkayo to be well equipped to deal with the needs

- Course on hospital management is needed
- Training of TBAs and auxiliary nurses should be conducted

6.3 Main Findings

The number of villages visited was approximately 25. Out of these villages there were only 4 MCH/OPD (3 functioning in Hafun, Bender Beyla and Gara'ad and 1 not functioning in Bedey, Eyl). There were 36 villages without any functioning health facility.

The problems observed in most facilities included:

- Inadequate MCH services serving the three districts at Hafun, Eyl, Gara'ad and Bender Beyla
- No laboratory services for basic tests
- Staff not paid, working as volunteers since 1991 in Hafun, 2002 in Bender Beyla and their morale is low
- Referral hospitals very far 400-600 km, the cost of transport is also very high about US\$20 with unreliable road transport network
- Vital services like mother and child vaccinations are unavailable (with exception of polio vaccination campaigns)

Problems in the Health Service existing before Tsunami

- 1) With the exception of the three main urban areas, basic health services are missing i.e. both curative and preventive (EPI, sanitation). Where available, services were of poor quality (see above).
- 2) Referral hospitals (Bossaso, Garowe and Galkayo) are too far away for all coastal areas.
- 3) No capacity (structural and technical) in the existing facilities to address surgical, medical and obstetrical emergencies.
- 4) Low capacity of staff with no regular training opportunities
- 5) People have little faith in the quality of existing OPD/MCH services, as they said quote "No laboratory, drugs and trained staff".
- 6) Drug stores are run on purely commercial basis with staff who have no medical training. The quality of the drugs being sold is questionable and further abuse of drugs used, especially with antibiotics under-dosing/overdosing could create drug resistance to most of the antibiotics in the near future.
- 7) Outreach vaccination activities (EPI) not extended to the mothers and children except polio eradication program.
- 8) Absence of outbreak preparedness, monitoring and response plans in the area/regions
- 9) Poor sanitation condition in all the villages visited with no toilet facilities. Approximately 95% of the people are using open space around the sea for bush toilets.
- 10) No rubbish collection activities in all the villages by the community.
- 11) Absence of health education activities in the community reflected in the health seeking behaviour, FGM, skin cutting and burning and poor personal hygiene.

Table 6 - Key health findings summarised

<i>District</i>	<i>Location</i>	<i>Health Facility</i>	<i>Private Pharmacy</i>	<i>Health Staff</i>	<i>Supporting Agency</i>	<i>Nearest Facility</i>	<i>Nearest Referral</i>	<i>HIV/AIDS Knowledge (Yes/No)</i>	<i>Women involvement in Health</i>	
Hafun	Hafun	MCH	None	Midwife - 1 Aux. Nurse - 3 CHW - 2	UNICEF WHO SRCS	Bossaso	Bossaso	Good	Yes	
	Fo'ar	None	None	Aux. Nurse - 1 TBA - 1	None	Hafun	Bossaso	No	Limited	
	Garan	None	None	None	None	Hafun	Bossaso	No	Limited	
	Barmadobe	None	Yes (1)	None	None	Hafun	Bossaso	No	Limited	
	Fundhudule	None	None	None	None	Hafun	Bossaso	No	Limited	
	Hul Anod	None	None	None	None	Hafun	Bossaso	No	Limited	
	Lamiya	None	None	None	None	Hafun	Bossaso	No	Limited	
	Aris	None	None	None	None	Hafun	Bossaso	No	Limited	
	Bender Beyla	Bender Beyla	OPD/MCH	Yes (6)	Nurse - 1 Aux. Nurse - 4 CHW - 6 TBA - 5	UNICEF	Bossaso	Bossaso	Limited	Limited
		Eil Dheeda	No	Yes (1)		None	BB	Bossaso	Limited	Limited
		Kulule	No	Yes (1)	TBA - 2	VSF	BB	Bossaso	Limited	Limited
		Durdura	No	Yes (1)		None	BB	Bossaso	Limited	Limited
Dangorayo	Darinba	No	Yes (3)	TBA - 3	None	BB	Bossaso	Limited	Limited	
	Qundheed	No	No	TBA - 3 CHW - 6 Trad Healer - 4	None	Dangoryo	Garowe	Limited	Limited	
	Falfalax	No	No	TBA - 3	None	Dangoryo	Garowe	Limited	Limited	
	Suj	No	Yes (2)	TBA - 4 CHW - 5 Trad healer - 5	None	Dangoryo	Garowe	Limited	Limited	
Eyl	Garmale	No	Yes (1)	TBA - 2 Trad Healer - 2	None	Dangoryo	Garowe	Limited	Limited	
	Kabal	No	Yes (1)	TBA - 2	None	Eyl	Garowe	Limited	Limited	
	Maraya	No	Yes (2)	Nurse - 1 TBA - 7 CHW - 4	None	Eyl	Garowe	Limited	Limited	
	Dhinowda Dik Dik	No	No	None	None	Eyl	Garowe	Limited	Limited	
	Jifle	No	No	None	None	Eyl	Garowe	Limited	Limited	
	Dhanane	No	No	CHW - 1 TBA - 2	None	Eyl	Garowe	Limited	Limited	
	Ilig	No	No	None	None	Eyl	Garowe	Limited	Limited	
	Garbahar	No	No	None	None	Eyl	Garowe	Limited	Limited	
	Dibudeged	No	No	None	None	Eyl	Garowe	Limited	Limited	
	Qulule	No	No	None	None	Eyl	Garowe	Limited	Limited	
Jeriban	Bedey	No	Yes (2)	Nurse - 2 CHW - 1 TBA - 3	None	Eyl	Garowe	Limited	Limited	
	Dhinowda - Qoryoweyn	No	Yes (1)	CHW - 1 TBA - 1	None	Gara'ad	Galkayo	Limited	Limited	
	Eil Dhanane	No	No	None	None	Gara'ad	Galkayo	Limited	Limited	
	Gara'ad	Health post	Yes (2)	CHW - 2 TBA - 3	None	Jeriban	Galkayo	Limited	Yes	
	Kulub	No	Yes (1)	CHW - 1 TBA - 1	None	Gara'ad	Galkayo	Limited	Limited	
	Ilfooshe	No	No	None	None	Gara'ad	Galkayo	Limited	Limited	
	Gaarad	No	No	None	None	Gara'ad	Galkayo	Limited	Limited	
	Ooman	No	No	None	None	Gara'ad	Galkayo	Limited	Limited	
Buq	No	No	None	None	Gara'ad	Galkayo	Limited	Limited		

Post Tsunami emergency needs

- Dressing of wounds
- Provision of basic essential drugs to address common illnesses (including initial peak of diarrhoea cases)
- Outbreak prevention measures
- Vector control, water, sanitation and hygiene to be improved
- Vaccination coverage improved
- Support people affected by psychological trauma, in particular women and children

Post Tsunami livelihood recovery needs

- Clear need to expand coverage of basic health services (management, supplies, & training) with adequate referral system.
- Need to expand coverage of health programmes (e.g. malaria, polio, measles, MNT, TB control, HIV/AIDS)
- Establish a robust emergency preparedness, monitoring and response. Medical, surgical and obstetric emergencies are some of the reported leading causes of death and will continue to pose a challenge as referral hospitals are not easily accessible.

Response so far – emergency & livelihood response

Main emergency needs created by the Tsunami were responded promptly by health partners (UNICEF, SRCS, MSF-H and WHO) as outlined in the annex table of response (Annex 7). In terms of health, minor wounds were addressed, basic essential drugs provided (including 2 basic emergency kits from WHO sufficient each to cover the needs for 10,000 people for three months which was provided to local health authorities), vaccination, cholera kits, ORS and chlorine for disinfection of water and ITNs (impregnated mosquito bed nets). However, the assessment team found no evidence of presence of the drugs reported to have been delivered by WHO through MOH in the assessed area. In Hafun, the initial increase in diarrhoea cases subsided clearly after 2 weeks while it persisted in Jeriban district, where some unconfirmed deaths were reported by the community. Risk factors for potential outbreaks remain mainly due to presence of vectors (flies, mites, mosquitoes, lice, scabies, and rats), poor sanitation, hygiene and poor quality of the water.

6.4 Constraints & Challenges

- The health expert nominated by World Vision in the planning phase was withdrawn 24 hours prior to the mission, being replaced by Dr. Abdelnassir (focal person for MOH).
- Only three locations had functioning health facilities and health staff, so in most villages the information was obtained from the community.
- Answers provided by community informants were in general not consistent with epidemiological analysis (e.g. reported seasonality of malaria in the dry season, or seasonality attributed to anaemia). Reported deaths were not checked through grave counting.
- The assessment questionnaires were not always filled in a systematic way (observation from the health sector specialist) although incomplete questionnaires could be used with the summary table for future planning purposes (recovery).

6.5 Conclusion & Recommendations

With the exception of an increase in cases of watery diarrhoea (which lasted 2 weeks in Hafun and persisted in some villages of the Jeriban district), there were no major health problems seen as a consequence of the Tsunami. However, there is serious concern related to poor quality of health

services, poor access to basic and referral services along the coastal area, which should be addressed in the recovery phase.

A small quantity and poor quality of water, with lack of sanitation and poor hygienic practices, represent a big hazard for the public health.

Despite the need to identify and account for what happened to the 2 emergency kits provided by WHO, no major gaps were identified by the assessment team in terms of the emergency response. Main issues are mostly related to maintaining the access to safe water and to improve hygiene and sanitation while ensuring provision of ORS and health education. In terms of recovery, efforts should be made to improve and maintain the quality and coverage of basic health services and health programs.

Response options:

Short term humanitarian emergency response

- Mostly covered - need to continue training of the existing health staff in order to properly use the resources provided.
- Urgent refresher training for existing health personnel on basic skills and protocols. Prioritise making clean drinking water available
- Health education to the community
- Improve sanitation by addressing availability of toilets and waste disposal.
- Incentives for staff from health facilities should be addressed.

Mid/long term livelihood recovery

- Solicit funding for existing health services
- Advocacy amongst implementing partners to strengthen (upgrading)* and expanding coverage of health facilities and services.
- Design integrated interventions (e.g. measles and MNT vaccination campaigns) to cover the area.

***Recommendations from the team on the main areas to be addressed in recovery:**

1. Upgrade the existing health facilities in Gara'ad, Hafun and Bender Beyla and Eyl to health centre level (basic laboratory, delivery services, EPI, and 3-4 beds for stabilization of patients)
2. Selection of community health workers from each village to attend a course in Bossaso Nursing School
3. Continuous training of medical staff with supportive supervision
4. SACB to encourage international partners to work along the coastline
5. Mobile health clinics (EPI, curative, health education) to be established so as to extend the coverage of health services and programs
6. Improving the understanding of hygienic procedures and putting these into practice, is strongly encouraged as a means of addressing the high level of hygiene-related health problems noticed.

Way forward

Design the health care system integrating the primary health care components within the districts to enable each centre to offer the basic health services for its catchments area. This should be part of an integrated project including others sectors.

7. Water and Sanitation

7.1 Summary of Key Findings

- *Coastal communities between the island of Hafun in the Bari region and the village of Gara'ad and Kulub in Mudug, and Eyl in Nugal region (a 650-kilometre stretch of coastline) were badly affected by the Tsunami. All towns, villages and settlements along the coast between Hafun and Gara'ad have suffered major damages to their water sources. Water wells, typically situated in the sandy dunes close to the seashore, have been washed out by the Tsunami waves, filled with sand and inundated with salty water.*
- *It is hard to quantify how many such traditional water sources (dug wells) have been damaged by the Tsunami waves. Some reports (Diakonia) reveal that more than 120 shallow wells and 250 ground tanks (Berkads) have been destroyed. Bender Beyla water supply scheme has been partially damaged. Most dug wells were fully filled up with sand brought in with the Tsunami waves.*
- *The poor drinking water situation is probably the most critical effect of the Tsunami, having an adverse impact on the sanitary and health situation of the affected population. The reported incidences of diarrhoea had gone up since the Tsunami, probably due to no proper treatment (medical services and medication) available in most places, but at the time of the survey it was reported that incidence of diarrhoea had reduced after the intervention of international agencies.*
- *The use of toilets is almost non-existent, except in some of the larger centres along the coast (Bender Beyla, Eyl and Gara'ad had some toilets). There are no systems of keeping drinking water and water for other household purposes (cleaning, cooking etc.) in separate storage places. All water is kept in either jerry cans (old cooking oil containers) or oil drums. Soap is generally not used, especially before meals or after cleaning babies, due to availability and affordability.*
- *Garbage collection and disposal does not exist in any organized manner. It is typically left to the individual to dispose their waste. In a few rare cases it was reported that occasionally the garbage would be collected centrally and then disposed.*
- *There is no doubt that the collection of fuel wood for cooking purposes is putting a major constraint on the already vastly depleted natural resources. The coastal area visited has a real scarcity of brushes, apart from trees that can be used for fuel wood or charcoal production. It is therefore essential that this environmental constraint is taken into consideration by agencies distributing food resources to the affected communities.*

7.2 Methodology

Unfortunately, 2 teams did not have a sector specialist from water and sanitation and therefore team leaders collected this information. In this regard, the tool was not used as designed as the team leaders were not specialised in this sector. Therefore many of the findings are based on the team leaders' reports and the report from the water specialist from UNICEF who was with the Hafun – Bender Beyla team in Hafun.

7.3 Main Findings

Pre Tsunami Context

The main sources of drinking water in the affected areas are traditional dug wells. The structural quality of these wells varies widely, from simple holes dug in the sand, to “oil drum barrel” lined holes to stone masonry lined wells. Deep bore wells are very rare in the area because of the geo-hydrological nature of the area. There are however, some springs along the coast which produce reasonably good quality water (Bender Beyla). Sanitation situation is reported to be poor and traditional pit latrines (drop holes) have been the main facilities (if any) among the fishing communities. Open defecation (bush toilet) is common in a few communities. Knowledge of hygiene in regard to water at household level is poor.

Garbage collection and disposal does not exist in any organized manner. It is typically left to the individual to expose of their waste. In a few rare cases it was reported that sometimes the garbage would be collected centrally and then disposed of. This was never systematically done though. The three methods mostly reported to expose of garbage are burning, burying and simply tucking it away just outside of the village or even in the sea. Garbage strewn outside the village perimeter was quite evident in most places.

For significant socio-economic development of a community, adequate supply of safe water is a prerequisite. Water and sanitation needs are inter-related, each has a significant bearing on the other, and together they are the most important single element in determining the well being of the community. Personal, domestic and environmental hygiene is essential to protect public health. Health promotion and education relating to water is often a neglected area. Yet however good the quality of water at source, it will be contaminated if not handled and stored properly, or if personal hygiene is not observed appropriately. The poor water situation has a distinct negative effect on the livelihood of the people: Unclean water affects the health of people; their poor health affects their productivity; low productivity in turn has an adverse effect on their livelihood and as a result increases their vulnerability.

Post Tsunami emergency needs

- Clean water supply, new wells, water trucking
- Water storage containers and HH storage containers
- Sanitation facilities, latrines
- Garbage disposal

Response so far

Right from the beginning, international agencies e.g. UNICEF, local authorities, NGOs and local elders have been involved in various fields of humanitarian assistance. Since the beginning of January, both food and non-food items have been distributed to the most affected.

Many international agencies, local authorities, local NGOs and local elders have been involved in the response appropriate assistance to the most affected population in the Tsunami hit areas. Despite the difficult terrain to access some of the affected areas, agencies and partners have put maximum efforts to relieve the suffering of the affected people at various levels. Access to most of the affected areas are limited both by air and land transport. Use of four-wheel pick up instead of tanker truck has used to truck water from a distance of over 80 km to Hafun is one such example on how difficult the terrain is in the area.

Bladder tanks have been distributed to Hafun, Gara’ad and Kulub and agencies are engaged in water trucking in Hafun and in Gara’ad district. Supporting activities like chlorination of drinking water,

hygiene promotion at household level and construction of 30 pit latrines for the most affected in Hafun has also been undertaken.

Restoration of Bender Beyla water scheme is under way. International agencies are carrying out the work. Similarly, two new shallow wells have been dug six kilometres from Hafun where water is trucked into at the moment. Further 10 shallow wells have been rehabilitated in the area.

Post Tsunami livelihood recovery needs

- Restoration or construction of water sources
- Construction of latrines
- Construction of solid waste disposal area
- Hygiene and sanitation social mobilization and awareness campaigns.

There is no doubt that some of the water sources along the coast were already suffering from salinity due to their proximity to the sea. However, the mission report states that the salt level for these sources has increased considerably due to the Tsunami impact, rendering them even more unsuitable for human and animal consumption.

Mid/ long term livelihood recovery

UNICEF has secured funds to continue supporting (over six month period) the digging of latrines in Hafun, carrying out hygiene and sanitation promotion in Hafun and Gara'ad areas, and rehabilitation of 15 more shallow wells in affected villages around Hafun and Gara'ad.

Other agencies have also carried out similar long-term intervention plans in the affected areas. Africa-70 has carried out detailed assessment on the Hafun village water schemes (6 km pipe line from a spring water source). Diakonia has also carried out assessment in Gara'ad and Kulub villages in Jeriban district and is planning the construction of 10 shallow wells and 30 latrines over the next six months.

The European Commission has awarded the contract on rural water and sanitation for Puntland for a three-year period to CEFA/COOPIE Consortia and this is also expected to cover some parts of the affected areas.

7.4 Constraints & Challenges

As mentioned in the methodology, 2 assessment teams did not have a sector specialist from water and sanitation and therefore team leaders collected this information. In this regard, the tool was not used as designed as the team leaders were not specialised in this sector. Therefore many of the findings are based on the team leaders' reports and the report from the water specialist from UNICEF who was with the Hafun – Bender Beyla team in Hafun.

7.5 Conclusions & Recommendations

As mentioned in earlier, it is hard to quantify the exact amount of damage to water sources in the Tsunami affected areas. Therefore it would be very useful to carry out detailed assessment and propose recovery plan that can easily be linked to longer-term development approach which would remain sustained. The quality of water in terms of salinity can not easily be remedied but needs further research and appropriate solutions sought. At this point of time, the main challenge ahead of all response teams is to at least restore the damaged water schemes, dug wells and other water points to the pre-Tsunami level. The SPHERE guidelines could be adopted on how many water and sanitation facilities would be needed although it might be quite difficult to adhere to such standards.

All water interventions must include components of hygiene and sanitation promotion and institutional capacity building for the sustainability of water sources.

As mentioned before, some agencies have already received funding for the rural water and sanitation in Puntland while some agencies have been seeking funds for specific areas such as Hafun, Gara'ad. A well-coordinated approach is crucial in such interventions in order to avoid duplications.

8. Shelter & Infrastructure

8.1 Summary of Key findings

- *The main findings of the mission indicate that about 2,000 concrete structures, of which 1,400 are houses, were destroyed and/or damaged.*
- *Given the temporary nature of most of the settlements on the coast, there are only five main settlements on the assessed coastline where most of the buildings had been built with permanent materials.*
- *Most of the villages assessed serve only partially as permanent settlements with a large number of temporary inhabitants (seasonal migrants). The majority of the shelters damaged were built with tree branches, sticks, and plastic sheets. Most of these have been rebuilt.*
- *Hafun was the worst hit. Most of the houses built on the seafront (600) were either destroyed or severely damaged. No repair works may be envisaged as the quality of the original building work had been very poor and the settlement site – a few meters below sea level - had clearly been selected with the only criterion of providing shelter. A comprehensive reconstruction of Hafun involving urban planning is necessary.*
- *Bender Beyla shows some damage to the permanent structures, with 189 houses damaged, partially due to the heavy rains that struck before the Tsunami but also due to the Tsunami wave. Other villages that had evident damages from the Tsunami included Kulub in Jeriban district where 200 houses have been damaged and Dharin Raqas in Eyl district where 30 houses have been damaged.*
- *Road infrastructure, except for the access road to Hafun immediately after the Tsunami, was not affected. However, the existing road network is poor. This disaster has highlighted again the critical importance of road construction and improvement to ensure quick access during a disaster response as well as market access for inputs and export of the areas main source of income, the fishing industry. There is a high potential here for improvement through resource transfer activities, improving the infrastructure while creating temporary employment for those who lost their income as a result of the disaster.*

8.2 Methodology

UN-HABITAT and UNHCR were responsible for the shelter sector, while ILO was responsible for the infrastructure component of the assessment. A three team mission surveyed 25 villages along 650 km of coastline; out of these, five had the majority of permanent structures: Hafun, Bender Beyla, Eyl, Kulub and Gara'ad. Most villages were informal settlements serving mainly as fishing camps, populated scarcely outside the main fishing season between October to April.

At the Nairobi level, prior to departure for Puntland, a questionnaire tool for the sector was developed. Along with other sectors, this tool was discussed in Garowe with relevant representatives of the Puntland Task Force.

For the three areas covered, Hafun to Bender Beyla; Bender Beyla to Eyl and Eyl to Gara'ad, key information was collected from the local authorities (Mayor, Elders, village committees) in the main towns. It was important to get an overview of the situation along the coastal area covered, including those places that could not be visited by the teams due to inaccessibility and/or time constraints.

8.3 Main Findings

Pre Tsunami context

Only five of the assessed settlements had permanent structures. The other settlements had very few concrete/stone buildings and those mainly served for communal/public purposes. The main centres are Hafun, Bender Beyla, Eyl, Kulub and Gara'ad.

Hafun was a major salt production centre during the colonial days. Ruins of a major salt plant and jetty for loading vessels are still standing. Therefore it was the biggest settlement existing on the coast, with a number of permanent structures both for private and public use. However, the quality of construction work was very poor and there was no planning involved in the design of the town.

Bender Beyla had been hit by two consecutive disastrous rains before the Tsunami when 46 houses had been washed away while 21 collapsed because of the rains.

Eyl is divided into two settlements. Eyl Bedey is believed to have been built by the Russians, perhaps as a fishing area along the shoreline while Eyl Dawab is an inland settlement used as a seat of local government. A substantial number of buildings exist in both of these settlements as well as schools and health centres. There is a good water supply system from a fresh water stream. Most buildings have pit latrines and some have flushing facilities with septic tanks. Access by road and sea is open during most seasons. Generators provide electricity supply to most buildings and there are even cool-room facilities in the area.

Gara'ad is some distance away from the shoreline, with more than 200 permanent stone buildings and about 300 hut-like dwellings. Along the beach, there is a natural reef that drops vertically down. This natural reef probably protected the village from the direct impact of the wave, since Gara'ad suffered no damage in terms of destroyed houses, while Kulub in the same district was severely hit.

General issues:

Individual land ownership is non-existent in the assessed areas. Land belongs to the community/clan. Unless this issue is addressed by the Government and the local authorities, most residents state that they will continue building semi-permanent dwellings. Infrastructure and services are not available, as all settlements visited, including the permanent ones, are spontaneous and unplanned.

Access is difficult almost everywhere and there are no means of communication between the coastal settlements and the major towns in Puntland. Internal road network is very basic.

Post Tsunami emergency needs

In Hafun, a few of the permanent buildings that were relatively far from the seafront (500-600 meters) are still standing, while a total of 600 dwellings have been destroyed in addition to shops, offices and mosques. The water sources (water pipe and shallow wells) were also substantially damaged. In Hafun, the reconstruction of dwellings and the provision of sanitation system are required and must be regarded as a priority action.

In Bender Beyla, 122 houses have been partially damaged by the Tsunami. In addition to those damaged by the torrential rains, a total 189 houses are considered lost.

In Eyl, none of the permanent buildings were subjected to any Tsunami damage. There is a stretch of beach (over 100 m wide) which lies in a bay, that took the brunt on the Tsunami and it flowed up the river stream. As a consequence, 48 'hut-type' dwellings along the beach have been destroyed.

In Gara'ad, little evidence of the Tsunami is visible, especially in the town. Although it was reported that both the stone built government offices and the police station were destroyed, no evidence of these structures could be found. However, Kulub in the same district reported 200 houses damaged.

As regards to infrastructure, the internal road network and the other facilities (e.g. salt fields in Hafun), should be assessed. Improvements could be made to the road network and facilities to provide communities with alternative opportunities for local economic sustainable development.

Response so far – emergency & livelihood response

The humanitarian emergency response has provided plastic sheets as temporary shelter solution and non-food items such as blankets, sleeping mats, and kitchen sets (see attached response matrix in Annex 7). This is, however, not an adequate response in the long term as it does not address the needs of the permanent population who lost their houses. Likewise, the reconstruction of the public buildings such as shops, offices, mosques, etc. can only be addressed by mid or longer term reconstruction efforts.

8.4 Constraints and Challenges

The potential reconstruction of the most affected Hafun town will require a comprehensive urban planning, especially since the town will have to be rebuilt at a new location more distant from the sea. Constraining issues around land ownership will have to be clarified before construction.

8.5 Conclusion & Recommendations

The Tsunami has caused damage to the shelter and infrastructure varying from severe, particularly in case of Hafun, to very slight for the most part of the assessed area. The extent of the damage depended on the seabed configuration and the coastal physical characteristics of each area.

Prior to the Tsunami, settlements had been very basic and services were virtually non-existent with very few exceptions. Even where those existed, they were inadequate and below acceptable standards, with the only exception of Eyl. The absence of land management and tenure are the main causes of this trend together with poor local governance. These issues have to be addressed especially in Hafun before the necessary reconstruction of the town can begin. It is proposed to start making town plans for resettlement of Tsunami affected and displaced people, followed by the provision of education, health and commercial facilities in each of the main coastal settlements - Hafun, Bender Beyla and Gara'ad. Hafun is in need of a complete reconstruction and the new town should be located on a safer site a short distance from the present location.

Response options: short term humanitarian response

Short-term shelter interventions are necessary to improve the residents' living conditions. The minimum relief and rehabilitation requirements would entail the supply of building materials for self-help housing projects in Hafun in sufficient quantities to restore the pre Tsunami levels. Plastic sheeting should still be provided to households where needed.

Households should be encouraged to dig pit latrines and set up garbage collection points and/or refuge pits in all villages. This would help improve the sanitation situation.

In addition, employment intensive infrastructure projects for immediate livelihood support should be implemented to:

- i. Bridge the gap between current income needs and future (medium term) investment and returns in the fishing sector
- ii. Provide cash-for work opportunities
- iii. Permit a modality to address issues of access/roads to the affected communities in addition to those in the interior.

Mid/long term livelihood recovery

As a general approach to solving the problem in a sustainable manner, the possibility of converting a relief operation into the first phase of a multi-sector development programme aimed at developing the living and working conditions of the coastal communities needs to be explored. It could be envisaged to design a programme centred on the integrated development of the four main coastal centres: Hafun, Bender Beyla, Eyl and Gara'ad, such that they would become hubs for fishing activities and planned as major human settlements along the coast. The minor fishing settlements/camps would then refer to these centres for services and major needs in a longer-term development perspective.

In connection with the provision of shelter and infrastructure, the reconstruction/ rehabilitation process would rely on developing labour-intensive production of local construction materials. This can be done through well managed effective brick and blocks production, quarrying and stone harvesting as well as the production of building components (doors, windows, etc.), by training residents and IDPs/returnees willing to move to the coastal areas and providing them with job opportunities. It would also be necessary to develop community settlement governance and management techniques, including land tenure, to ensure sustainability and maintenance of community facilities.

An integrated approach to the problem entailing a long-term development programme for the Somali coastal areas would be the best way to achieve better and sustainable living conditions. The longer-term plan for the coastal development could contribute to solving the IDPs and returnees problem.

9. Education Sector

9.1 Summary of Key Findings

- *The pre Tsunami education infrastructure was limited to major towns along the affected coastal area (Hafun, Bender Beyla, Eyl and Gara'ad).*
- *The schools in Kulub (Jeriban district) and Hafun (Hafun district) were totally destroyed by the Tsunami.*
- *With the loss of their main source of income (the fishing industry), most families are no longer able to pay for the tuition fees. As a result teachers have not been paid or are at risk of no longer being paid, putting the sustainability of the remaining infrastructure in doubt.*
- *Overall, the education infrastructure along the coast is very weak. This already existing situation has now been exacerbated by the effects of the Tsunami on children's access to education.*

9.2 Methodology

Prior to the departure for Puntland, the questionnaire tool for the education sector was developed by the sector specialists in Nairobi. Along with the other sectors, this tool was discussed in Garowe with relevant representatives of the Puntland authorities. However, the detailed feedback promised, was not received and the questionnaire tool had to be applied as originally developed, without inputs from the authorities.

For the three areas covered, Hafun to Bender Beyla; Bender Beyla to Eyl and Gara'ad to Eyl, information was collected from the local authorities (Mayor, District Commissioner and Elders) in the main town. This step was in particular important to get an overview of the education situation along the whole coastal area covered, including those places that could not be visited by the teams due to inaccessibility and/or time constraints.

In those places visited, key informant group discussions were held with elders, parents and teachers. The information obtained was used to fine-tune the data already collected in the main towns. As far as applicable, existing infrastructure was visited and an assessment made of the level of damage incurred due to the Tsunami.

Considering the importance of education in general, the team made an effort to also assess the overall educational needs in the area covered, considering that the available infrastructure before the Tsunami was already far from adequate to cover the needs.

9.3 Main Findings

Pre Tsunami context

The Pre Tsunami situation shows that only a few places (Hafun, Bender Beyla, Eyl, Kulub, Gara'ad and Dhinowda), had an educational infrastructure in place. The other estimated 36 coastal villages and settlements had no education infrastructure. It should be noted that although children may not be able to access education in these villages, some children are educated. Parents send their children away to stay with relatives in the main towns or other inland villages, where education facilities are

available. From the interviews with key informants it is clear though that most parents would prefer to keep their children at home if the education facilities would be available.

The drop-out rates of students in the existing schools was reported as traditionally high during the peak fishing season (October – April), when students are required to participate in the fishing industry to boost family income.

Post Tsunami situation

The existing schools in Hafun and Kulub were completely destroyed by the Tsunami waves. Other existing schools along the coastline escaped this fate and continued to function. However, there is a substantial need for additional education infrastructure in the area if children who did not go to school before the Tsunami are to be enrolled and accommodated.

School attendance in Bender Beyla primary school reportedly decreased to 25% of the pre-Tsunami enrolment. The reason given for this decrease is that the children from parents whose houses were destroyed by the Tsunami have either been sent to their relatives in pastoral/urban areas or are still suffering from trauma, along with a lack of money to pay the school fees.

In Gara'ad and Dhinowda, an increase in enrolment was reported due to students from surrounding villages joining the schools. The reason for this is that they can not be engaged in the fishing industry due to the loss of equipment. The increase in Gara'ad can also be attributed to the enrolment of students from Kulub, whose school was completely destroyed. Kulub is only a short distance from Gara'ad.

It was also reported that the number of students in Gara'ad had already increased pre Tsunami due to an influx of students from pastoral families affected by other natural disasters that have been plaguing Puntland, such as the persistent drought, torrential rains and unusually cold temperatures that especially affected the pastoral population.

The CECs (Community Education Committee) that were in place prior to the Tsunami are still functioning where the schools are still operational.

It is interesting to note, that in the schools visited, the ratio between girls and boys enrolment was around 45% girls and 55% boys. The average for Puntland lies around 38% girls and 62% boys (based on 2003/04 data).

Response so far

In Hafun, UNICEF has built a temporary tented school. This has resulted in an increase in student enrolment from about 70 children (pre Tsunami) to 153 children during the assessment. The reasons given for this increase were the increased capacity of the temporary school compared to the original structure, as well as the fact that the children/students are presently not participating in fishing.

In Kulub, no activities have been undertaken to date to restore the possibility for students to go back to school.

The main findings have been summarised in the table below.

Table 7 - Education findings summarised

Location	Pre Tsunami	Post Tsunami	Options/Hardware	Options/Software
Hafun	1 primary school (5 grades) Building with 2 class rooms	Completely destroyed by tsunami waves. Increase in number of students due to installation of school shelter with greater capacity & temporary latrines 158 students, 3 teachers 530 children out of school	More school buildings (at least 5 more classes) More teachers & salary	Teacher training programs Installation of vocational training (fishing, tailoring, building, etc.)
Bender Beyla	One Primary School (8 grades/ classrooms) 8 teachers (4 qualified) Damage because of territorial rains 200 students in school Textbooks distributed by UNICEF	Extensive damage of the school construction 25% of the students left the school 160 students in school 300 school age children are not going to school	Distribution of textbooks, stationary, etc. Restoration of the school building and furniture Increase size & school facilities to cater for children not in school	Qualification of teachers through teacher training Increasing the curriculum to vocational training in fishery, tailoring, building, etc.
Eyl Bedey	1 Primary school (4 grades) 5 teachers	School fees not paid No teacher salary 199 children in school 101 children out of school No interventions	Help teachers and CEC to have money until the fishing industry recovers	Increase teachers and classrooms to encourage more children to come to school
Kulub	1 primary school (5 grades) 120 Students 4 Teachers No toilets	All school facilities were destroyed by Tsunami School fees not paid No money for teachers 1 teacher (as volunteer) remaining 30 students (75% decrease) UNICEF built a CEC and distributed textbooks	Need more teachers Reconstruction of at least 3 class rooms and toilets Supply textbooks Teacher salary	Teacher training programs Overview of the situation for longer term by visitations.
Gara'ad	1 Primary school (5 grades) 2 class rooms Lack teachers and space 1 teacher and 1 volunteer are teaching 5 grades and 2 adult grades Few text books & stationary	No damage from Tsunami Increase of students Distribution of textbooks by UNICEF CEC is functional but is not able to pay much to maintain the school Teachers have too much work for too small income	Need more teachers Construction of at least 3 more class rooms More organized textbook supply	Teacher training programs Overview of the situation for longer term by visitations.
Dhinowda	1 Primary school (2 grades) 2 tiny classes without furniture 1 teacher No text books Not enough capacity	Increase of drop out children up to about 200 88 children in school No school fee because of reduced income No interventions	Need more teachers Construction of at least 3 more classrooms & toilets Supply textbooks Teacher salary Organisation of the CEC	Teacher training programs Overview of the situation for longer term by visitations.
Other villages	No education facility 2100 school age children out of school Community want to have education but they can not afford	No change	Construction of schools in these villages with at least 3 class rooms and furniture Distribution of textbooks and stationeries	Teacher training programs Overview of the situation for longer term by visitations. Establish CEC groups to maintain the schools
In general	Many places have no school facilities (about 38 villages) 5 schools did not have the capacity Not enough teachers/teacher salaries No enough furniture Text books and stationary was rarely distributed Many children of school-	Schools damaged in Hafun & Kulub Increased drop outs No school fees paid No salary for teachers UNICEF one off distribution of textbooks Teaching methods poor	Construction of schools in 38 villages with at least 3-5 grades All existing schools need at least 3 more classrooms & furniture Regular distribution of textbooks and stationary Financial support of CEC's / teachers until the economical situation	Teacher training programs Installation of vocational training (fishery, tailoring, building, etc.) to expand job qualifications

going age out of school		recovers	
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9.4 Constraints and Challenges

A major concern and possible constraint in the education sector is the longer-term sustainability of the schools that are still functioning. Due to the households' reduced income, families may no longer be able to pay for the school fees. As a result, it is likely to become more difficult to pay teachers salaries, who in turn may have to look for alternative sources of income to sustain their own families. The scale and speed of the recovery of the people's livelihood will therefore have a great influence on the future of the education sector.

The number of teachers in the existing and functioning schools is in general inadequate for the number of students enrolled. While this was already an issue pre-Tsunami, the situation has worsened after the Tsunami due to the increased enrolment of students in the remaining schools. In the same vein, the structural capacity of the running schools (with the exception of Hafun) in terms of classrooms is highly inadequate for the number of students.

Increasing the overall educational infrastructure to offer a better coverage of the coastal communities where presently no education infrastructure is available will be a major challenge. Even if the aid community has the resources available to set up the necessary infrastructure, the Puntland authorities will face a major challenge to staff such additional schools with competent, committed and trained teachers. This is not only a challenge in the numbers required – the international community may be able to assist the authorities in the training of aspirant teachers – but also the longer-term commitment to pay for salaries for those newly recruited.

Conclusion & Recommendations

Identified gaps

School in Hafun and Kulub require full reconstruction to enable the affected students to continue their education. While some have been enrolled in the Gara'ad school, this is not a sustainable solution because the capacity of the Gara'ad school can not maintain this additional student load.

The (regular) payment of teachers has been affected by the Tsunami, mainly due to the fact that families, as a result of the impact of the disaster on their livelihood, are no longer able to pay for the school fees. If this situation is not addressed in the short term, possibly through interim measures, there is a serious risk that the still functioning education infrastructure will also collapse.

The overall lack of education infrastructure in the Tsunami-affected area also represents a serious gap, though not caused by the Tsunami that should be addressed as part of the overall assistance to increase the quality of human capital for sustainable development.

Response options

The rehabilitation and recommended expansion of the education sector will require the repair and reconstruction of the pre-Tsunami education infrastructure as well as the construction of new schools and additional classrooms.

Further, in close coordination and collaboration with the Puntland authorities, additional candidate teachers will have to be identified and trained.

While the longer term sustainability of the education system in the affected areas will depend on the speed and level of livelihood recovery, it is recommended that the international aid community

consider an initial period of teacher salary support. This support should gradually be phased out, with the responsibility for the teacher salaries gradually to be assumed in full by the Puntland authorities. Before such type of support is put in place, a firm commitment from the authorities towards the future payment of all teachers is required.

It is further recommended that for the rehabilitation and expansion of the education sector, special attention is given to the creation of an enabling learning environment that strongly supports the enrolment of girls and enhances the number of female students who will actually complete their studies (reduction of drop-outs in the higher classes). Such measures should include, but are not limited to, the provision of appropriate and separate sanitary facilities for boys and girls, including the supply of water to maintain these facilities, good class room equipment with sufficient desks and chairs for all students, and internationally acceptable levels of students per class room. In this context the recruitment of female teachers should also be prioritized, while separate classes for girls and boys should be considered (experience from CARE International shows that separate classes can truly enhance girls' enrolment and study completion).

10. Overall Conclusion & Recommendations

The Tsunami disaster, while having a very negative impact on the livelihood of the coastal communities, also presents an opportunity for coordination and cooperation between the various players, first and foremost the Puntland authorities, the affected communities, the donor community and implementing agencies.

In particular, it is critical for the Puntland authorities in Garowe and the Humanitarian Response Group (HRG) in Nairobi to coordinate the efforts of the various implementing agencies, taking into account existing operations and plans, in order to avoid overlap in assistance as well as to ensure that all affected areas are receiving assistance proportional to the needs and funds available. In this regard, consideration should be given to strengthening the existing co-ordination mechanisms in Garowe.

The assessment team also considers it essential that the needs of other vulnerable communities, affected by livelihood shocks (insecurity, drought, flooding, freezing temperature etc.) are not ignored. Failure to address the needs of these communities could create security risks and potential challenges to the overall stability in the region.

The humanitarian and rehabilitation response should aim for long-term, durable solutions to the disasters, to break the cycle of vulnerability. At the same time attention should be given to the establishment of disaster preparedness systems at regional and local levels that will enable the authorities and local communities to better prepare and respond to any future natural calamities.

Any response to the Tsunami disaster should take into consideration the fragile environmental situation to ensure that the most appropriate and sustainable interventions are implemented and put in place.

Sector specific recommendations

Food, nutrition & livelihood security: Due to the strained overall economy of these communities and the abrupt end to the fishing season, it is necessary to promote livelihood recovery and support the fishing livelihood until the next fishing season starts (October 2005). It is therefore necessary to support households through resource transfer to access their food needs for the following 8 months. In relation to the Phase Classification and wealth group shift, approximately 50% of the total population of the assessed area (this equates to approximately 22,000 people) are in need of sustained resource transfer until October 2005 (on the contingency that resource transfer in regards to fishing equipment is in place).

Fisheries: Considering the key role of fisheries in the livelihood of the coastal communities, a quick response to address the identified needs is essential. However, it is not realistic to expect that such assistance will be in place in time to salvage the present fishing season. Every effort should be made though to ensure that the proposed interventions (replacement of fishing gear) are in place prior to the start of the new season in October 2005. The overall proposed professionalisation of the fishing industry by enhancing the exploitation of the potential marine resources (presently estimated to be only 30%) and the establishment of processing centres in key places like Hafun, Bender Beyla, Eyl and Gara'ad/Kulub are strongly recommended. The exploitation of Somalia's rich coastal fisheries by foreign trawlers needs to be addressed and regulations put in place.

Health and nutrition: There are no immediate major health problems in the villages visited. However, risks factors for potential outbreaks remain mainly due to presence of vectors (flies, mites, mosquitoes, lice, scabies, and rats), poor sanitation, hygiene and poor quality of the water. Therefore

response should ensure that adequate health services and programs are in place to address the health needs of the affected areas, including the prevention and response plans to address the potential disease outbreaks in a timely and effective manner. Improvement of hygiene practises and provision of good quality drinking water should be prioritised to minimise the risk of a disease outbreak.

Water and sanitation: With the exception of Eyl, all areas have been negatively affected by the destruction of the local water sources. Water trucking should continue in the most affected areas, until alternatives are put in place. At the same time, agencies should prioritise the rehabilitation and/or new construction of more sustainable and reliable new water sources. This by far being the priority area of intervention, agencies with already existing resources should strongly consider addressing the water needs in the Tsunami affected coastal areas. Improving the understanding of hygienic procedures, including garbage disposal and putting these into practice, is strongly encouraged as a means of addressing the high level of hygiene-related health problems noticed.

Shelter and infrastructure: While recognizing that Hafun, Bender Beyla, Dharin Raqas and Kulub have been badly affected in terms of damage to permanent infrastructure, the need for immediate reconstruction is highest and most critical in Hafun due to its location, exposing it to strong winds. Road infrastructure was already weak before the Tsunami, with possibly the exception of the road between Hafun and Bossaso. No other roads were reported to have been affected by the Tsunami. This disaster has highlighted again the critical importance of road construction and improvement to ensure quick access during a disaster response as well as market access for inputs and export of the areas main source of income, the fishing industry.

Education: The education infrastructure was already weak before the Tsunami. The improvements in this sector requires comprehensive discussions between donors, implementing agencies and the authorities to identify sustainable ways of rehabilitating the damaged infrastructure and expand the education services to the more inaccessible areas. In places where rehabilitation work has to be implemented, an increase of capacity should be planned. Special consideration should be given to the creation of an enabling environment for the increase in girls' enrolment. At the same time, it is recommended that special consideration is given in the curriculum to the special needs of the coastal communities, where the majority of people are involved in the fishing industry.

Governance: The recovery plan should be integrated across sectoral and geographic assessments to ensure gaps and overlaps in the response are minimized. A workshop engaging the assessment Task Force, funding agencies, and implementing agencies should be introduced into the process to provide an opportunity for multi-sectoral integration within the aid community prior to mobilizing to the region. Once the implementation actors and the resources have been identified and committed, a second workshop should be convened in the Puntland region (ideally in Garowe, away from the immediate impact areas).

While time is already against effective immediate response, it is important not to dismiss the recommendations above simply because of the lack of time. While the recommendations will prolong the actual distribution of recovery resources, the negative impact of dismissing the volatile threat inherent in the distribution of resources, or dismissing the importance of engaging both local mechanisms and regional governance could lead to far greater damage to the region than the Tsunami.

This process could also serve as a foundation for additional development work in the region. Actors can be identified, roles defined and structures established to allow for stronger mechanisms to be called upon in the future both for integrated disaster response and for development purposes. In other words, instead of this being a "one-off" approach, this process can lay the foundation for future development efforts throughout the region.

Annex Content

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3. Task Force TOR
4. Demographic Figures per district and villages
5. People killed and missing per district
6. Lesson learnt
7. Food distribution by WFP (first round) & CARE International (through partners)
8. Response Matrix (OCHA)
9. WFP Estimated Population figures
10. Tsunami Assessment Documents/Reports