

**Fisheries Sector**  
**Damage and needs assessment and programmes for**  
**Recovery and Rehabilitation**

**1. Introduction**

***1.1 Fishing Industry of Sri Lanka – an Overview***

Sri Lanka is an island situated in the Indian Ocean to the south of India between latitudes 6 – 10 north and longitudes 80 - 82 east. The island has a land area of approximately 66,000 sq km and a coastline of around 1700 km in length. Since the declaration of the EEZ in 1978 Sri Lanka has sovereign rights over 517,000 sq km of the ocean, which is almost 7.8 times the size of the land area of the country.

Fisheries sector of Sri Lanka is of considerable social and economic importance to the country due to following reasons:

1. The sector contributes a substantial portion of the animal protein consumed by the population of the country. According to the Food Balance Sheet compiled by the Department of Census and Statistics fish contributed 65% of the animal protein consumed in Sri Lanka. This was largely contributed by the coastal and off-shore Fishing Industry which produced 284,960 tons of fish in 2003 and was thus responsible for providing 83% of the total quantity of fish consumed in the country.
2. From time immemorial fishing has been the major economic activity of the inhabitants of the coastal zone. The sector currently provides direct employment to about 250,000 people and sustenance to at least a million dependents in the fishing households throughout the country.
3. In 2003 the industry contributed 2.6 % to the gross domestic production of Sri Lanka.
4. In the recent past, the fishing industry has also emerged as a dynamic export oriented sector providing the country with substantial foreign exchange earnings so vital to the country. In 2003, foreign exchange earned through export of fish and marine products amounted to Rs. 9,542 million.

**1.2. Marine Fisheries of Sri Lanka**

Marine and brackish water fisheries of Sri Lanka are based in the coastal areas of the island, which were so adversely damaged and devastated by the Tsunami disaster, which struck the island on the 26<sup>th</sup> of December. Fishing activities take place all round the coast using 12 fishery harbours and several large and small fishery anchorages and as many as 700 village level fish landing places.

Within the fisheries sector of Sri Lanka that comprises the marine and brackish and freshwater sub-sectors, it is the marine and brackish water sub-sectors, which is most dominant in respect of contribution to fish production, generation of employment as well as exports. In 2003 the fishing fleet of the country was 29,694 fishing craft of various types the more important being:

- **Multi-day boats** (ranging from 34 - 50 ft in length), powered by inboard engines, manned by 4 - 5 fishers and having crew accommodation, built-in insulated fish holds and facilities to carrying large quantities of water and fuel to enable continuous fishing ( generally 7 –days to 15/20 days)
- **3 ½ ton boats** powered inboard engines, manned by 3-4 fishers. These boats normally carry out single days fishing.
- **Fiberglass Reinforced Plastic (FRP) boats** of 18-23 ft long, powered by outboard engines manned by 2-3 fishers and confined to day fishing.
- **Traditional craft** –  
*Dug Outs* -“ORU” outrigger canoe on the southern and western coasts, or “thoni” or “vallam” largely on the northern and eastern coasts. Some of these are powered by outboard engines but the bulk of these are non-motorized. Initially these were dug out from logs but these craft are now turned out of fiberglass.  
*Log craft* such as “Teppam” (mainly on the north west coast) or “Kattumaram” on the northern coasts.

The marine fisheries also support a series of fishery associated industries and activities ranging from manufacture of boats, nets and gear, fish processing, transport and marketing, production of ice, curing/drying of fish etc.

Marine fisheries are also supported by a network of production oriented infrastructure including 12 fishery harbours, about 15 anchorages and about 700 village level fish landing centers, ice plants and cold rooms, boat yards, boat and engine repair workshops and facilities, fish curing yards and processing facilities

A network of social infrastructure that included fishery feeder roads, search and rescue radio station network, drinking water and sanitation facilities, schools and pre-school nurseries and crèches, community centers, fisheries co-operative societies and banks, centers for distribution of fisheries inputs, beacon lights etc have also been set up by the government.

Fishers’ houses, most of them in planned fishermen’s housing schemes, are located in close proximity to their base of operations/fish landing centers and thus on or close to the seafront.

Through the Coast Conservation programme implemented by the Department of Coast Conservation the erosion prone areas have been protected with the help of coastal structures such as groynes, revetments, and retention walls or through artificial sand nourishment.

### 3. Overview of the damage inflicted by the Tsunami

The disaster which struck the coastal areas of the island on the 26<sup>th</sup> of December 2004 has destroyed the marine fishing industry of Sri Lanka by adversely damaging and devastating the fishing fleet and the physical and social infrastructure supporting the industry. Therefore from the standpoint of food security of the country, the social and economic well being of the hundreds of thousands dependent on the marine fisheries either directly or indirectly for their very sustenance, and the continuation of the export of marine products so vital at this stage for bringing in valuable foreign exchange for the

country, it is imperative that the rehabilitation of the industry be launched on an urgent and a planned manner.

In this massive and challenging task Sri Lanka is badly in need of the support of the international community. The United Nation System is in the forefront of assisting the country to garner the needed support and the Food and Agriculture Organization (FAO) as the UN agency with the mandate for the development of fisheries is closely working with the Ministry of Fisheries and Aquatic Resources of Sri Lanka in formulating urgent programmes to facilitate the flow of assistance from the international donor community. The paragraphs that follow attempt to indicate the key areas which suffered damage, the extent of the damage and the needs in regard to rehabilitation of the industry.

The unprecedented natural calamity “Tsunami” 2004 caused severe damage to the fisheries sector in twelve<sup>1</sup> of the fourteen coastal districts of Sri Lanka. The other two districts viz. Puttalam & Mannar had minimum damage. Preliminary assessments carried out by the Department of Fisheries and the other agencies of the Ministry of Fisheries and Aquatic Resources estimate the damages as follows:

Fishing vessels and fisherman housing represents by far the most valuable personal assets lost. These are the ones that Sri Lanka fishermen need to repossess to begin the process of rebuilding their lives.

### 3.1 Fishing boats, engine and gear

In 2003 Sri Lanka fishing fleet consisted of 29,964 fishing craft of varying types and sizes including the larger multi-day boats. According to the updated and revised estimates of the Ministry (as at 18/1/2005) the details of boats destroyed and damaged are as follows: These figures are provisional and would be updated when all field assessments are completed.

District	No of Vessels		MDB		3 ½ T		17-23 FRP		Traditional : Craft		Beach Seine	
	Pre-Tsunami	Affected by Tsunami	DS	DM	DS	DM	DS	DM	DS	DM	DS	DM
Ampara	1,571*	1,673	08	-	25	Na	260	Na	1,150	Na	88	Na
Batticaloa	2,952	2,510	-	-	75	24	200	219	1,150	622	105	42
Colombo	419	270	Na	An	02	21	01	72	52	122	An	Na
Galle	1,213*	1,253	66	106	66	15	199	148	371	282	75	02
Gampaha	3,111	289	08	53	01	23	03	61	26	114	An	Na
Hambantota	1,733	1,597	83	55	21	08	463	180	537	250	45	15
	3,667	2,172	-	-		Na	1,13	Na	956	Na	10	Na

<sup>1</sup> Hambantota, Matara, Galle, Kalutara, Colombo, Gampaha, Kilinochchi, Jaffna, Mullaitivu, Trincomalee, Batticaloa and Ampara.

Jaffna					89		7				7	
Kalutara	1,028	592	15	56	01	Na	98	86	281	51	24	11
Kilinochchi	725	Na	-	-	Na	Na	Na	Na	Na	Na	na	Na
Mannar	1,693	109	-	-	-	-	41	-	68	-		
Matara	1,489	1,367	13	118	44	53	174	00	488	277	09	-
Mullaitivu**	813*	1,775	-	-	-	-	1,533	-	242	Na	108	Na
Puttalam	6,573	42	Na	Na	Na	Na	27	Na	15	Na	na	Na
Trincomalee	2,707	1,929	1	11	03	32	50	500	700	632	80	10
<b>Total</b>	<b>29,694</b>	<b>15,578</b>	<b>194</b>	<b>399</b>	<b>557</b>	<b>396</b>	<b>4,186</b>	<b>1,466</b>	<b>6,026</b>	<b>2,354</b>	<b>641</b>	<b>80</b>

Abbrev: FRP - Fiber Glass Reinforced Plastic

an - not available

DS - Destroyed

DM - Damaged

Notes: \* excess due to addition of boats to the fleet and migrant boats after Dec 2003

\*\* information provided by the District Secretary

### 3.2 Fishing Gear and Outboard Motors

The damages to fishing gear and outboard motors are as follows:

District	Fishing Gear Units	Outboard Missing
Ampara	Na	65
Batticaloa	600	Na
Colombo	2906	90
Galle	Na	Na
Gampaha	Na	Na
Hambantota	Na	03
Jaffna	Na	Na
Kalutara	Na	Na
Kilinochchi	Na	Na
Mannar	1823	Na
Matara	Na	-
Mullaitivu**	4500	1627
Puttalam	265	02
Trincomalee	900	900
<b>Total</b>	<b>10,994</b>	<b>2,687</b>

### 3.3 Fisher families affected

Nearly 71,000 persons in fishing households have got directly affected through death, or displacement due to damage to their dwellings. Nearly 33,000 houses are either destroyed or damaged. Estimates of members of fisher families so affected and the houses destroyed or damaged in the coastal districts are estimated as follows:

District	Dead	Missing	No: Displaced	Houses DS	Houses DM
Ampara	2,475	-	16,150	2,750	Na
Batticaloa	1,500	500	15,200	11,000	2,500
Colombo	01	Na	Na	335	271
Galle	61	11	Na	1163	590
Hambantota	365	-	Na	614	Na
Jaffna	849	Na	8,411	Na	Na
Kalutara	13	-	-	614	183
Kilinochchi	300	1000	4,000	Na	Na
Mannar	-	-	3,154	-	450
Matara	331	-	1,435	739	498
Mullaitivu**	1081	1060	3,306	3400	600
Puttalam	-	Na	06	Na	Na
Trincomalee	725	Na	7,823	3500	3325
<b>Total</b>	<b>7,705</b>	<b>2,571</b>	<b>60,287</b>	<b>24,572</b>	<b>8,417</b>

Above estimates are preliminary and are being updated by the Ministry.

### **3.4 Fishery Harbours**

Ten out of the 12 fishing harbours (named below) have been destroyed in varying degrees. Damage has been caused to marine structures including displacement of breakwater rock boulders, shore structures and buildings, fuel tanks, pumps and distributor systems, water tanks and supply systems, internal roads, slipways, boat repair yards. Almost all harbours require cleaning up and dredging of the basins and the channels. A preliminary cost of rehabilitation of the ten fishery harbours and the heavy machinery is as follows:

Harbour	Estimates (Rs. Million)
1. Kirinda	210
2. Tangalle	130
3. Kudawella	117

4.	Puranawella	102
5.	Mirissa	105
6.	Galle	107
7.	Hikkaduwa	122
8.	Beruwala	142
9.	Panadura	108
10.	Cod Bay (Trincomalee)	<u>40</u>
	Total	<u>1183</u>
11.	Repairs to machinery/dredgers	<u>150</u>
	<b>Grand Total</b>	<b><u>1,333</u></b>

### **3.5 Ice plants, Cold storages, fuel and water supply systems**

Damages to these facilities are being assessed. In the south five ice plants are badly damaged and require major repairs to civil works including insulation as well as refrigeration equipment. All fuel and water tanks and their delivery systems located in the fishery harbours have been damaged. The cost of replacement/repairs is yet to be estimated.

### **3.6 Damage to other facilities in the fisheries sector :**

3.6.1 CEYNOR Foundation: Repair and replacement of boats, provision of nets as replacement for damage Office equipment, chemical etc. at Mattakkuliya, Beruwala, Galle, Tangalle and Kirinda	Rs. 6.6
3.6.2 National Aquatic Resources and Research Agency (NARA) :Repairs to damage buildings and equipment, fisheries museum, laboratories, auditorium and Stores etc. (excluding <i>Damages to Hydrographic Survey boats</i> )	385.0
3.6.3 Coast protection and conservative division:  Loaders etc.	
3.6.4 National Institute of Fisheries & Nautical Engineering: Repairs to buildings and training boats and Demonstration equipment	110.00
3.6.5 Ceylon Fisheries Corporation: Repairs to ice Plants, Cool rooms, freezer containers and various equipment etc.	85.00
3.6.6 Monitoring Control and Surveillance System: Repairs to buildings, replacement or repairs to equipment and radio communication system and replacement for the surveillance boat	<u>63.00</u>

*Note : Damages to social infrastructure such community centers, recreation facilities and damage to internal roads have not been estimated.*

The reports of rapid field assessments carried out by the FAO in 5 districts in the north (Jaffna, Mullaitivu) and east (Ampara, Batticaloa and Trincomalee and one in the south (Hambantota) are attached – Attachments A, B and C.

#### **4. Reconstruction and Recovery Needs**

##### ***4.1 Short-Term Priorities***

Considering that nearly 71,000 members of fisher families are displaced are living in temporary camps or with friends and relatives due to destruction of, or damage inflicted on nearly 33,000 houses the most urgent priority is The most urgent priority is the provision of suitable housing. While the FAO wishes to highlight the provision of housing and resettlement of the displaced as an important pre-requisite for the resumption of it may be noted that this does not come within the direct mandate of the FAO.

It has been agreed with the Ministry of Fisheries that the immediate priorities for resumption of fishing are

- i. the repair of boats and engines;
- ii. provision of fishing gear, and
- iii. the clearing of harbours for the anchorage and servicing of multi-day boats and 3 ½ ton boats and clearing debris/other matter on the beaches that may be obstructing the landing/parking of FRP boats and traditional craft.

##### ***4.2 Medium and Long-Term Priorities***

The medium and long term priorities include the following:

- i. Determination of the types and numbers of boats to be replaced taking due cognizance of the resources/carrying capacities etc
- ii. Replacement of damaged boats with better designs taking into consideration the need to reduce post-harvest losses and fuel efficiency,
- iii. Introducing offshore fishing and new techniques to areas lacking in these fishing methods/techniques
- iv. Improving/rehabilitating the infrastructure particularly the harbours and anchorages, ice plants and cold rooms and connected vehicles, workshops and slipways etc, and
- v. Improving the community/social infrastructure including fishery feeder roads, auction halls, fishers rest rooms, community centers, beacon/guiding lights near boat landing centers and water and

sanitation facilities.

## **5. Proposed Assistance Programme**

The FAO at the request of the government is facilitating and coordinating inflow of donor assistance for the recovery and rehabilitation of the Tsunami affected fisheries sector. It participates in a joint working-group with the Ministry of Fisheries which identifies and agrees on the immediate, medium and long-term priorities and determines the operational mechanisms within the framework of the FAO and government procedural arrangements. FAO also provides technical assistance in preparing proposals for submission to donors and will be providing assistance to the Ministry and the other agencies in implementing donor funded project by providing transportation and communication facilities, logistical support and monitoring.

The FAO has participated in the UN actions and appeals in mobilizing efforts to respond to the urgent recovery needs in the fisheries sectors which is one of the worst affected sectors. It has submitted a Flash Appeal requesting a sum of US \$ 9.5 m out of which US \$ 7.6 m is for meeting the urgent assistance for repairing damaged vessels and engines, cleaning of harbours and carrying out urgently required repairs to damaged infrastructure. Some of the project proposals prepared at the request of donors include the following:

- GTZ: For the construction and operation of two boat repair yards to support the boat repair program (US\$ 150,000)
- Japanese Govt.: Project for the repair of damaged boats, provision of engines and fishing gear, and repairs to ice plants (US\$ 2.5 million)
- Italian Govt.: Repair and replacement of boats affected by Tsunami, repair to damaged community infrastructure at selected locations (US\$ 5.4 million) Project area – Hambantota, Ampara & Batticaloa
- European Union  
(Echo): Three project modules for the repair of damaged boats, replacement of totally damaged boats, repairs to damaged ice plants and establishment of new ice plants.

Module 1 - US\$ 2.3 million

Module 2 - US\$ 3.3 million

Module 3 - US\$ 4.4 million

**Attachments :** Reports of rapid field assessments carried out by the FAO in 5 districts in the north (Jaffna, Mullaitivu) – Attachment A, and east (Ampara, Batticaloa and Trincomalee – Attachment B

the south (Hambantota) Attachment C.

## Visit to the Districts in the North

1. The Mission comprising FAO National Consultants M.H. (Henry) Gunawardene, K.Thayaparan and Claude Fernando visited the northern districts of Jaffna, Mullaitivu and Kilinochchi between 13<sup>th</sup> and 18<sup>th</sup> of January in order to make a rapid assessment of the damage caused to the Fisheries and Agricultural sectors in the above areas consequent to the Tsunami. Due to the time constraints, non-availability of the fisheries field officials and the poor road communications it was necessary to leave out the few fishing centers in the district of Kilinochchi, as well as some fishing centers in the districts of Jaffna and Mullaitivu. There were no records of any assessment made by local authorities or the district fisheries staff.

### 2. District of Jaffna (14<sup>th</sup> and 15<sup>th</sup> January)

- 2.1 We were informed by the Assistant Director Fisheries in Jaffna that the stretch of the coastline between Thondamanaru and Kattakadu were the most adversely affected areas. These areas (shown in the map in Attachment 1) are in the Divisional Secretary Divisions of Karainagar, and Vadamarachchi North and East. The centers visited by the Mission in Vadamarachchi DS Division N were as follows: *Thondamanaru Periya Kadakkaray, Krudavil, Athi Kovil Adi, Velvetturai, Polihandy West, Polihandy East, Sakkoda, Tikkam, Imparidy, Vyaparamoolai, Supparamadu.* The centres visited in Karainagar DS Division were *Mathagalthurai/Sambaththurai and Sambal Oddayar.* The other places visited in the Vadamarachchy East Division were *Thalayadi, Maruthenkerney, vathirayan, Uduthurai, Aliawalay, Veththilakerny and Kattakadu.* The team was accompanied during its visits by the District Fisheries Extension officers of the Department of Fisheries. Discussions were held with the fisheries officials, Fisheries Co-operative Societies officials (FCS), fisher groups, service personnel etc during the course of these visits. A list of those consulted is in Attachment 2.
- 2.2 Between Thondamanaru and Sakkoda (see Map 1) almost all the fishermen's houses originally located along the beach have got badly damaged. While the hillock/dune at Thondamanaru had prevented greater damage there, the lack of such protection has led to considerable damage to houses in Athi Kovil Adi and Velvetturai. The retention wall as well as the intermittent coral reef in the stretch between Sakkoda and Suparamadu had somewhat minimized the damage to houses on that stretch. However except for a very few all the buildings on this stretch, including residences, Fisheries Department's rest rooms, auction sheds, co-operative society buildings and fish *wadiyas* had got damaged. Mathagalthurai/Sambaththurai and Sambal Oddayar are situated in close proximity to the Army Camp and these being in High Security Zones there were no houses on the beach front. All the boats in these centers however suffered heavy damage. See para 2.3.

The 14 km stretch of coastline between Thalayadi and Kattakadu to the east of Point Pedro was also badly devastated. The worst affected areas as far as fishers housing is concerned are Thalayadi and Kattakadu which had the largest number of houses on the seafront. At present there are several large camps run by various NGOs for displaced fisher families. Approximately 1241 houses have been damaged and need replacement.

### **Boats**

- 2.3 In all these places the boats which were either anchored or beached had got washed away into the hinterland and most of them were seen scattered within 300 - 400 metres from the beach, sometimes lodged in houses and even on trees. We were able to estimate very roughly the damage to boats at a minimum of 80% in the district with only about 20% being amenable for repairs. FRP smaller boats were the most affected. Detailed information collected at the centers visited with the help of fisheries officers and/or fishers in the area are given in Attachment 3. Approximately 2180 boats have been damaged or destroyed in this area.

### **Nets**

- 2.4 As in the other districts, fishing nets were found torn and strewn all over the place. We saw groups of fishermen trying to retrieve some of these nets and we were told that it is an exercise in futility and these nets are not usable. We are of the view that the repaired or replaced boats need to be provided with the full compliment of nets, hand lines and associated accessories.

### **Engines**

- 2.5 Very few fishermen admitted that they were able to retrieve the engines. Most of them said that they were washed away. Unlike on the eastern coast we did not come across any engines being repaired. While such facilities appeared to be available in the Thondamanaru area, they are lacking in the Maruthenkerny area.

### **Boatyards**

- 2.6 In Point Pedro one FRP boat yard (Ajasmin) and a teppam/kattumaram production unit had got badly damaged. Both were in the process of constructing craft under UNDP/NECORD project funded boat issue programmes. This boatyard was also producing FRP fish boxes, a programme funded by the GTZ pilot project to promote the carrying of ice in FRP boats to maintain the quality of fish. The damage suffered by these two yards is a crucial blow to the industry unless assistance is provided immediately to enable them to resume production. This boatyard has been subjected to very severe damage, some of their equipment and construction material have been washed away by the waves. Three of their moulds have suffered similar damage. New boats under construction have also been damaged. Around 60 plastic fish boxes constructed under the GT2 project also have been damaged or taken away by the pressure of the waves. Assistance has to be provided immediately for complete rehabilitation of the yard as it is the main supplier of fibre glass boats in the region.

2.7 Immediate setting up of temporary boat and engine repair yard at critical locations equipped with essential tools and material needed for repair is considered an essential early step to rehabilitate the slightly damaged and put them to sea.

The other alternative for an accelerated boat rehabilitation programme, is to provide funds to the registered owners of their boat to undertake the repairs of boats engines by themselves to their satisfaction.

Attachment 1

**Map of the fishing areas most adversely affected by the  
Tsunami area**

**List of Persons met – District of Jaffna**

1. Tharmalingam AD, Jaffna
2. Joseph, GTZ/FAO Project Coordinator
3. Maheswaran FI, Pt. Pedro West
4. Aliston FI, Velanai
5. N. Ganeshamoorthy FI, Maruthankerny
6. Jayaseelan, FI, Mathagal
7. Suriya Kumaran, Secretary, FCSU Pt Pedro
8. Rajaram, former GM, MPCS Union
9. President Maruthenkerney, FCS Union
10. AD Agriculture, Jaffna
11. Proprietor, Ajasmin Boatyard
12. Rama Vadiwel, Fishing Boat owner
13. R. Ravindran, FI, Pt. Pedro East

## Attachment 3

**Statement of estimated damage to the Fisheries Sector – in Fish  
Landing Centers visited in the Jaffna District**

Fish Landing Center	MDB	31/2 T IEDB	FRP OB Craft	Trad: Craft	Madel	Deaths	Houses Damaged/ Destroyed	Diplaced Families
Thondamanaru Periya karakadai	-	-	20	10	-	2	10	
Karudavil	-							
Athi Kovil Adi	-	04	125	40		9+1	143+21	400
Velvetturai	-	59	25	10		135#	150+150	300
Polihandy West	-	-	50	20		12	30+75	375
Polihandy East	-	-	100	30		08#	50+75	125
Sakkoda	-	01	65	-				
Tikkam	Na	Na	Na	Na	Na	Na	Na	Na
Imparidy	-	20	60	20		08	125	125
Vyaparamoolai	-	-	85	20		07	150	150
Supparamadam	-	4	65	20	05	07		
Mathagalthurai/ Sambaththurai	-		70	69	69	-	-	
Sambal Oddayar/Ambal	-	-	25	100	-	01	-	
Thalayadi	-	-	25			47	100	100
Maruthenkerney			35	30				
Vathirayan			111	140		131	241	241
Uduthurai			90					
Aliawalay			35					
Veththilakerney			41					
Kattakadu			44			41	250	250
Total	-	108	1071	545	74	289	1249 +321	3,315

*(Note: The above compares with 89 3 ½ T boats, 1137 FRP boats, 1052 traditional boats and 107 madels reported by AD as having been damaged).*

# Includes 130 who are reported to have migrated temporarily for prawn fishing to the Mullaitivu area.

### **3. District of Mullaitivu (16 and 17<sup>th</sup> January)**

Places visited in this district were the fish landing centers of Vanniakulam, Kallapadu, Kovil Kudirippu, Manalkudi, Selvapuram, Watuvagal and Nandi Kadal all of which are located in close proximity to the township of Mullaitivu.

There was total destruction in all these areas with only few buildings still standing and there was debris and rubble everywhere. Clearing of this is going to be a massive task and the work was underway in certain sites, at the time of our visit. This area had experienced high waves said to have been 30-40 ft high. Water had run off to a distance of over 500 meters over the coastline stretching around 3-4 mile long and we were able to drive through and destroy everything in its way. The damage caused to the area included hundreds of residential buildings, several churches, schools, government buildings, several new buildings under construction, fishermen's rest rooms, co-operative society buildings and the only fibre glass boat yard in the area.

Our visit to the above mentioned landing centers were preceded by a meeting arranged by the Government Agent, Mullaitivu at which the representatives of the LTTE, the representatives of the Fishermen's Co-operative Societies and the Union and other stakeholders were present. The GA handed over to us a copy of a memorandum she had sent to the Ministry of Fisheries. It estimates the damage to the fisheries sector in the district as follows:

Total number of displaced fisher families	: 3,306
Total number of fisher family members affected	: 16,033
Number of deaths among fisher families	: 1,081
Number of FRP boats damaged	: 1,573
Number of traditional boats damaged	: 242
Number of madels (beach seine units) damaged	: 108
Number of fishing nets damaged	: 4,509 sets

In addition it has also reported the damages to the office of the AD Fisheries (at Rs.15 m and Fishermen's Co-operative Society Union at Rs. 25 m.

The GA on behalf of the fishing communities indicated the priorities of fisheries rehabilitation of the district as follows :

1. Issue of suitably improved FRP and traditional boats
2. Issue of multi-day boats
3. Improvement/upgrading of boat yards and boat repair facilities with training to develop such skills, locally
4. Making nets available particularly by setting up net making facilities
5. Establishment of ice plants and cold room facilities
6. Development of harbours and anchorages
7. Provision of Beacon lights

8. Training facilities and introduction of new fishing methods
9. Fisheries education

One of the more specific proposals made for urgent consideration was the shifting of the boat anchorage at the lagoon mouth at Vadduwagal the hinterland. For this purpose it is necessary to construct a bridge at Vadduwagal which is tall enough to permit the fishing boats to pass under it on their way to and from the proposed new anchorage. The need to dredge the Vadduwagal Lagoon and finding a solution to the sand bar formation at the mouth of the lagoon were highlighted as important measures required to improve the prawn fishery by enabling a better water exchange.

### **Boats**

The damage to boats which has been estimated at each of the fish landing centers visited was well over 90% of the original numbers. Most of these boats were FRP 18 ft boats and we saw very few traditional boats at the sites that we visited. While closer inspection was possible only in a very few cases it was stated by local authorities that not more than 20% is repairable. While we were at the boat yard (Multi Marine Services – a boatyard approved by the Department of Fisheries) we witnessed two boats damaged over the water line being repaired. However the seaworthiness of such boats needs to be closely looked at. It is also clear that this single boatyard will not be able to handle all the repairs necessary. It had lost its mould as well as the major part of the stocks of raw materials. It is therefore suggested that a few temporary make shift boat repair yards are established along the coast equipped with essential tools and materials such as fibre and resin, in order to accelerate the repair of the boats and put out to sea as a priority.

### **Nets**

By the way the nets had got entangled, torn and strewn it was quite clear that these would not be usable and it will be necessary to provide the entirety of the nets.

### **Engines**

GA's report refers to 1,627 engines being damaged. Even if the mechanics presently operating in the area are able to repair and service these engines they would require spares and other materials. The urgent intervention of the engine agents will be required. Private sector or Ceynor should be given authority to import these engines and distribute to those whose engines have been lost, on some soft terms.

### **Boatyards**

Multi-Marine Services is the only boatyard in the area approved for fiber glass boat building. It was completely damaged by the Tsunami. A makeshift

temporary repair facility has been established at an alternative location and repairs are now in progress.

#### **4. District of Mannar**

The Mannar district has not been affected seriously. The survey team did not have the time to visit this district. According to the Assistant Director of Fisheries no deaths have been reported and houses too not damaged. Fishing gear of most fishermen has also been damaged. The number of affected fishermen is 390. Total cost of repairs/replacement is estimated to be about Rs 110 million.

#### **5. District of Kilinochchi**

The survey team were unable to visit the Kilinochchi district due to time constraints and also because the damages were not severe. According to the Assistant Director of Fisheries the number of fisher families affected was 2087 and the number of deaths 11. A total number of 186 craft, 65 outboard motors and 1406 fishing gear units have been damaged. The number of houses of fishermen damaged stands at 8.

#### **Meeting with LTTE Planning Service**

1. The mission had a meeting with the officials and consultants of the LTTE planning service. The mission informed these officials the purpose of the FAO mission and the importance of preparing a final assessment of the damage in the fisheries sector, for the sole purpose of developing an accelerated short term and long term development plan. It was revealed by the LTTE planning service that they are also in the process of preparing a development plan for the North and the East. The mission suggested to the LTTE team to submit their plan in the draft form for review by FAO. The more crucial aspect is to review both the government plan and the LTTE plan and agreement to be reached for a common plan for implementation.

#### **General Observations/Conclusions**

1. General complaint is that state assistance is meager and slow in coming.
2. In the preparation of plans and estimates for the rehabilitation/reconstruction of the fisheries sector, due regard must be given to the damages suffered during the period of the ethnic conflict and the development advancements made in other parts of the country.

3. Efforts to rehabilitate/reconstruct boats and infrastructure should be decentralized as far as possible, to the periphery, as local skills and resources are available in fair measure.
4. All the Fisheries Offices have several shortcomings in staff, equipment and transport and these should be rectified immediately. The Fisheries Office in Mullaitivu is not functioning, at all.
5. No detailed assessments on Tsunami destruction has been made by the district authorities. The figures available are based on a general assessment by visiting some of the villages. Even the local co-operative unions did not have any records on the damages caused. Therefore whatever figures given here are very preliminary. We were made to understand that the Department of Fisheries is carrying out a detailed assessment of the damages in the Fisheries Sector using about 50 graduates and such data which can be considered more accurate and authentic would be available by 26-27 December. We understood that these enumerators are now on the field and they are being assisted by District Fisheries staff.
6. Prior to the Tsunami the artisanal/small scale fisheries constituted a critical factor in the development of fisheries in the North of the country engaging over 150,000 fishermen and producing around 80% of the total fish landed in the country. They were operating a number of FRP boats of overall length 17 to 22 feet and a large number of traditional motorized vessels. They also use a variety of fishing gear mainly gill nets and handlines. With the onset of the Tsunami a large number of boats, about 80% have been damaged or destroyed and in some areas almost all boats are damaged. Almost all fishing gear has been washed away and a large number of active fishermen are reported dead. This has led to a halt in fishing. Many of the fishermen who intend to restart their operations have no means to repair their damaged boats, have no means of investing in repairs or purchase boat engines and gear. A conducive environment has therefore to be developed to reactivate the small scale fisheries.

The LTTE is also making their assessment in areas controlled by them, with a view to get reliable information for their planning purposes. Translation of a note provided by the LTTE representative at the above meeting is attached as an appendix to the report for your information.

**List of Persons met – Mullaitivu and Kilinochchi Districts**

1. Ms. Emilda Sukumar, GA Mullaitivu
2. Soosai LTTE Sea Tigers Head
3. Sinnappa Master, Head of LTTE Admin
4. Ms P Arani, AGA Hqr Mullaitivu
5. Mr. Kanagaratnam MP Mullaitivu District
6. K. Wijeykumar, Coordinator, Kachcheri, Mullaitivu
7. Anthonypillay Mariyadas, President, FCS Union Mullaitivu
8. L.Loganathan, Propreitor, MMS Boatyard, Mullaitivu
9. Manoharan, ADB, Colombo
10. Dr. T Jeyasingham, Eastern University
11. Selwyn, Director, SIHRN
12. Dr. K Sivrajah, Consultant, PDS

## Attachment 5

**Statement of estimated damage to the Fisheries Sector – in Fish  
Landing Centers visited in the Mullaitivu District**

Fish Landing Center	MDB	31/2 T IEDB	FRP OB Craft	Trad: Craft	Madel	Deaths	Houses Damaged/ Destroyed	Displaced Families
Vanniakulam,	-	-	149	-	-	500	500	500
Kallapadu			345			750	1000	1000
Kovil Kudirippu,			40	6		20	100	100
Manal kudi,			198	7				
Selvapuram,			297	-		200	300	300
Wattuwagal								
Nandi kadal								
			1029			1470	1900	1900

*(Note: According to GA Number of FRP boats damaged is 1,573 while the number of traditional boats reported as damaged is 242)*

## **Attachment B**

### **Visit to the Districts on the Eastern Coast**

Group comprising FAO National Consultants K Thayaparan, Claude Fernando and Fisheries Ministry's Director General Development Mr.A.Hettiarachchi visited the eastern districts of Ampara, Batticaloa and Trincomalee between 4<sup>th</sup> and 8<sup>th</sup> of January in order to make a rapid assessment of the damage caused to Fisheries and the Agricultural sectors in those areas consequent to the Tsunami. Due to the time constraints and the poor road communications it was necessary to leave out certain areas in these districts such as Muttur, Panama, Kinniya which were in the original itinerary in view of the reported damage. The places visited in these districts were as follows:

#### **District of Ampara (4/5/6<sup>th</sup> January)**

Places visited in this district were Potuvil (Arugam Bay, Sinna Ulle, Periya Ulle), Akkaraipattu, Oluwil, Karativu, Periyaneelasanai, Maruthamunai and Kalmunai.

#### **District of Batticaloa (6/7<sup>th</sup> January)**

Places visited were Samudrapuram, Thethativu, Cheddipalayan North, Palmeenmadu, Mattikell, Nawaladi, Punnakudah, Kalmadu (Kalkudah), Pattiyadichenai, Valachenai and Otamavadi.

#### **District of Trincomalee (7/8<sup>th</sup> January)**

Sandy Bay, Samudragama, Pattanumber (Div: 10), Veeranagar, Sirimapura, Vijithapura, Jamaliyapura, Irrakandy, Salle and Cod Bay.

The group met the fishery officers in these places wherever they were available and had discussions with the leaders of the fishing communities/fisheries co-operative societies leaders in the fishing villages and obtained information from them in respect of the damages caused. In most places these persons were unable to give accurate information and we had to make our own observations to get a reasonable assessment of the damage. The list of persons met is in Annex 1.

Information relating to agricultural crops was obtained directly from the Asst: Directors of Agriculture in Ampara and Batticaloa and from the Provincial Director of Agriculture in respect of the Trincomalee district. They pointed out that they were still in the process of collecting accurate information regarding the damage to crops and that such information is expected to take some more time since most of their field officers are busy with the ongoing relief work.

Our general observations are as follows:

#### **Fishing boats, Engines and Gear**

1. Damage to fishing boats was very high in the districts of Kalmunai and Batticaloa. In these two districts the damage appeared to be around 90-95% of the boats in the fish landing centers visited by us. In all these places, the 10ft and higher waves had taken away whatever fishing craft were available on the beach at the time and thrown away all over the adjacent land. In the course of this the hulls had got damaged in varying degrees. Almost all these boats except at Kalmunai and Valachenai are 18-23 ft FRP boats with outboard engines and thonies/oru and vallam made of fibre glass We would estimate that only 20% of the boats (hulls) are repairable. The rest will have to be replaced. Only a very few boats had been retrieved by the owners, most of whom were either still in a state of shock having lost their family members and house and property or are still in camps. In several places like Karativu, Pottuvil many active fishers are dead.

In the district of Trincomalee, the damage to boats, engines and gear appear to be comparatively less but still quite high in the range of 70% of the total on an average. However in certain places like Nawaladi there was total destruction.

2. It appeared that in the landing centers of Kalmunai and Batticaloa only a few engines have been retrieved and most of the engines are missing. We estimate that at least 75% of the engines may have to be replaced. In the district of Trincomalee the damage to engines has been much less and at some of the places we visited (particularly Sirimapura) repair and servicing of engines (primarily removal of sand and water) had already started.
3. In all the landing centers that we visited bundles of torn and damaged nets, rope and floats were scattered everywhere, some resting on houses and trees Even the few nets that could be collected are unlikely to be of much use. Thus nets have to be totally replaced.

Information collected on boats at the places visited is given in Annexe 2.

## **2. Fisheries Infrastructure**

In terms of the damage caused to fisheries infrastructure in the eastern districts, the most noteworthy were the total devastation of the Fisheries Training Centre at Navaladi, close to the mouth of the Batticaloa lagoon, two Ice Plants at Kalmunai, one ice plant in Batticaloa, one boat yard in Trincomalee and one boatyard in Kalmunai, the damages to the Cod Bay Harbour and the NARA's research laboratory.

In addition a large number of fishery roads, beacon lights (12 in Ampara district), community centers (27 in Ampara district), fish auction rooms, rest rooms and co-operative society buildings had been brought down by the Tsunami. The details of these are still being collected by the officers.

The AD's offices in Batticaloa and Trincomalee had got flooded, destroying and damaging some of the furniture and documents.

#### **4. Fishermens' Housing**

A large number of fishermen's houses have been damaged in all three districts. However, except in a few places such as Ulle-Pottuwil area, Navaladi in Batticaloa, Karativu in Kamunai and the Dutch bay in Trincomalee, most of the fishers houses are located away from the sea front. However, large numbers of temporary houses (wadiyas) were located on the seafront and all these have been destroyed

The damages to fishermen's permanent housing are still being investigated by the Department. The initial estimates are 2,475 in Kalmunai and 7,823 in Trincomalee.

#### **5. Agricultural Crops - Ampara District**

##### **Paddy**

The standing crop of paddy in 320 ha of paddy in Ulle-Pottuvil area (80 ha), Ninthaur area (120 ha) and Samanturai area (120 ha) is reported to have got affected as a result of inundation by salt water. Paddy tracts in the Karativu area had not been cultivated this season and the next season's crop could get affected. The damage in financial terms could be around Rs.11 million @ Rs.35,000 per ha.

##### **Highland Crops**

The important highland crops in the coastal areas are groundnut and maize which are grown mainly in the Komari-Pottuwil area. The affected extents are reported to be 70 ha of groundnut and 10 ha of maize. This is as a result of the farmers being displaced from their homes and thus not being in a position to maintain these crops. The financial damage is estimated to be Rs. 1.5 m.

Other In addition, the vegetables in home gardens and thousands of coconut plants have got destroyed and this damage was visible in almost every place visited.

Altogether 750 families are said to be affected by the above damage to agricultural crops.

##### **Batticaloa District**

Betel and chillies are grown in the coastal areas of the Kaluwanchikuddy DS Division and the first indications were that quite lot of these areas would have suffered damage as a result of the salt water flooding of the area. The actual damage is yet to be estimated. Newly planted coconut is yet another victim and thousands of such plants were seen along the coast.

**Trincomalee District**

Red Onion is cultivated along the coastal belt from Nilaveli to Kuchchaweli over an extent of around 1250 ha. However the damage to the standing crop is said to be in 25 ha and this area has got affected by the stagnant sea water which got trapped owing to the low lying conditions in the area. In addition the wells used for watering of the crop have also got contaminated with salt water and this could affect future cultivation.

The standing crop of paddy damaged is said to be around 60 ha while other field crops such as ground nuts and other legumes (330 ha), red onions (25 ha), chillies (55 ha), manioc (35 ha), papaw (10 ha) and nearly 2500 home gardens and Vegetable plots cultivated in the southern area of the district are reported to have got adversely affected. The extent of damage in financial terms is not available as yet. Like in the other districts newly planted coconut trees have got uprooted on a massive scale.

**Persons met**

1. Mr. Dayaratne, AD Agriculture Ampara
2. Mr. H.M.Herath Abeyweera, District Secretary Ampara
3. Mr. Uthuman Lebbe FI, Pottuwil
4. Fisheries Data Collector, Pottuwil
5. Mr. W.I Uvaith, Grama Niladari, Div 11
6. Mr. Nadasivarajan, Resident, Karativu
7. Mr. K.Punyanesan, Teacher, Karativu
8. Mr. K.Navasivayam, President Fisheries Society, Karativu
9. Mr. D.George, AD Fisheries, Kalmunai
  
10. Mr. S.Baskharan, DS, Kauwanchikudy
11. Mr. P.Sinnetamby, President Cheddiyapalan, Fisheries Co-op Society
12. Mr. K.Nagaraja, Treasurer, Mattikelli FCS
13. Mr. S,Pakkiyaraja, Member, FCS Kaluwankerny
14. Mr. P.L. Stephen Cooray, Madel Operator
15. Mr. Selvaraja, AD, Fisheries, Batticaloa
16. Principal, Regional Fisheries Training College, Batticaloa
17. Instructor, FTI Batticaloa
18. Mr. Kumar Gunaratnam, FAO Co-ordinator, Batticaloa
19. Mr. Navid, AD Agriculture, Batticaloa
  
20. Mr. Fareed, Acting AD Fisheries, Trincomalee
21. Dr. Gnanachandran, Provincial Director of Agriculture NE
22. Mr, Chintaka , Fisheries Harbour, Cod Bay
23. Mr. Mohanadas, Fishermen, Salle

Annexe 2

**Fishing Boat Population in the Eastern Districts - 2003**

District	Landing Center	MDB	IEDB	FRP OB	Trad M	Trad NM	Madel craft	Total
<b>Ampara</b>		06	229	340	84	912		1,571
		<b><i>08</i></b>	<b><i>230</i></b>	<b><i>253</i></b>	<b><i>149</i></b>	<b><i>892</i></b>	<b><i>132</i></b>	<b><i>1,662</i></b>
<b>Batticaloa</b>		-	188	294	08	2462		2,952
			<b><i>259</i></b>	<b><i>306</i></b>		<b><i>2524</i></b>	<b><i>102</i></b>	<b><i>3192</i></b>
<b>Trincomalee</b>		43	230	1250	12	1172		2,707
		<b><i>68</i></b>	<b><i>under FRP</i></b>	<b><i>1260</i></b>		<b><i>1221</i></b>	<b><i>147</i></b>	<b><i>2,714</i></b>

**Note:** first set of figures for each district is in respect of 2003 (source Statistics Unit, M/F & AR)  
The second set of figures (in bold italics) is in respect of 2004 (source: ADD Fisheries)

**Annexe 3**

**Information obtained from Landing Centers visited**

**Fishing Boats Destroyed/Damaged**

<b><u>District</u></b>	MDB	IEDB	FRP OB	Trad M	Trad NM	Madel craft	Total
<b><u>1. Ampara</u></b>							
Pottuvil	-	-	150	70	64	15	299
Panama*	-	-	30	10	40	?	80
Akkaraipattu	-	-	25	10	40	2	83
Oluvil (LH point)	-	-	03	35	40	7	78
Oluwil (madel point)	-	=	9	50	-	7	66
Karativu Div 3	-	-	15	15	18	3	51
Karativu Div 8	-	-	20	25	100	04	149
Periyaneelasanai	-	-	05	10	66	?	81
Akbar Fishing Village	-	50	50	-	90	20	210
Kalmunai	-	=	05	03	80	10	98
							<b>1,195</b>
<b><u>2. Batticaloa</u></b>							
Samudrapuram	-	-	-	40	-	5	45
Cheddipalayan	-	-	20	25	-	-	48
Palameenmadu	-	-	75	50	100	=	225
Mattikelli	-	-	10	-	40	-	50
Nawaladi			-				?
Punnakudah			200		110		310
Kalmadu	-	-	50	150		09	234
Pattiadichenai	-	-	-	-	15	1	16
Valachenai	20	-	-	=	-	-	30
Ottomavadi	-	20					20
							<b>978</b>
<b><u>3. Trincomalee</u></b>							
Sandy Bay	=	=	28		2	6	36
Samudragama	=	=	85				85
Number 10			20				20
Weeranagar			35				35
Sirimapura			38		40		78
Tirukkadaloor			50				50
Vijithapura			50				50
Jamaliya			65			4	69
Muttur * (NV –based on AD)			120	80	100	4	204
Kinniya* (NV –based on AD)			30			10	40
Irakkandy			90		28		118
Salle			200		300		500
Cod Bay	<u>20</u>						20
<b>Total damaged</b>							<b>1,305</b>
<b>Grand total</b>							<b>3478</b>

*Abbrev: NV – Not visited : AD –Assistant Director Fisheries*

**Houses Damaged**

	Houses Wadiyas	
Pottuwil area	500	
Akkaraipattu	50	
Oluvil		35
Karativu	100	02
Periyaneelavali	40	
Kalmunai	2000	
Samudrapuram	60	
Thetathiv	50	5
Cheddipalayan	100	10
Palameenmadu	50	
Punnikudah	50	
Sandy bay	18	
Dutch Bay	200	
Div No 10	30	
Weeranagar	25	
Sirimapura	08	
Tirukkaduwal	50	
Jamaliya	25	
Irrakandy		<u>65</u>
	3,356	117

## ATTACHMENT C

### Visit to Hambantota

The group comprising Dr. Rohana Subasinghe, Simeon Guissipse, Dr. Kurupparachchi and Claude Fernando visited the district of Hambantota on Sunday 2<sup>nd</sup> January 2005 on a fact finding tour and the following was noted:

Place	Observations	
1. Kirinda Fishery Harbour	<p><b>Fishing Boats</b> – Boats had suffered considerable damage here. According the Harbour Corporation officials and the fishermen interviewed there had been around 150 - 200 FRP bots in the harbour basin on 26/12 morning and almost all of these were either thrown out of the basin and suffered damaged. These boats had been collected from the harbour premises and outside and were these were placed opposite the temple. We counted around 150 here and still there were at least another 25-30 boats in various places in the village some of them far away from the harbour. Almost every one of these had been damaged to some extent and it was noted that around 50% needed only minor attention while in the case of the rest the damage was very considerable. A detailed inspection would be necessary. Almost all these boats had lost the gear in them. We do not know the damage to the engines. We did not see any engines. A detailed inspection would be necessary. In addition there had been some outrigger canoes on the beach outside the harbour but these could not be seen. We could not find anyone who could give us an estimate of such craft damaged.</p> <p><b>Lives :</b> According to our informants there were at least 60 deaths in the village. All the houses on the sea front had collapsed burying the families killing the family members. No deaths were reported within the harbour premises.</p> <p><b>Facilities/Infrastructure within the Fishery Harbour</b> – The harbour had suffered massive damage and destruction the most notable being as follows:</p> <ol style="list-style-type: none"> <li>1. All the buildings have been severely damaged. These include the auction shed, net mending area, office, guard room, workshop building, warehouse. In addition there was damage to a lesser extent in the case of the Managers quarters and the circuit bungalow.</li> <li>2. Dredger Weligowwa had been taken away by the high waves out of the basin where it had been moored at the time to a distance of around 350 yards and is lying on the ground. According to the Captain there are only</li> </ol>	

	<p>minor damages to the dredger and their main problem is to drag it in to the water again.</p> <p>3. Equipment – among the equipment destroyed or damaged are the following:</p> <ul style="list-style-type: none"> <li>a. 5 ton flake ice plant completely destroyed</li> <li>b. Cool room completely destroyed</li> <li>c. Generator damaged and lying 200 yards away</li> <li>d. 2 tippers badly damaged and thrown away by the water</li> <li>e. Back hoe</li> <li>f. 35 t crane completely destroyed</li> <li>g. Bull dozer</li> <li>h. Loader</li> <li>i. Double Cab</li> </ul> <p>4. Other facilities</p> <p>All five fuel tanks have been washed away out of their bases with around 25,000 l of fuel. All of them are lying far away outside the harbour 3 of them on the beach near the temple, 1 behind the mosque and the other even further away. Marine structures – the boulders in the breakwater have slipped at various points. Two out of the 4 pilot lights have got damaged.</p>	
2.Hambantota	<p><b>Fishing Boats</b> – The fish landing center which on a normal day has around 250 fibre glass boats and at least 100 orus was completely bare. Bundles of damaged fish nets and floats were the only signs of any fishing activity. According to the fishers, the UC member and the Grama sewaka who were interviewed there were at least 200 boats boats and large numbers of orus and the fishers were busy cleaning nets, collecting fish when the waves came. All the boats and the men were taken away by the waters. Around 50 boats were seen in the vicinity of the landing centre some on the road, some of the slopes and high ground and some others on the trees and houses hundreds of yards away from the center. Most of the boats had been removed to the mosque premises and are lying there. These are badly damaged and at least half the number are said to be beyond repair.</p> <p><b>Fishery Service Center</b> – The rear part of the building is damaged. Only the front portion adjoining the road is intact.</p> <p><b>Ice plant</b> – The 5 ton block ice plant owned by the CFC located near the fish landing center had got inundated and is said to be badly damaged. There was no one there to get more accurate information.</p>	
3. Godawaya Fish Landing	<p><b>Boats</b> - Of the around 60 FRP boats nearly 30 are missing. The fishers suspect that some of them may be drifting in the sea.</p>	

Center	<p>We counted about 30 damaged boats strewn on the beach some far away from the landing center. A few of them can be used with minor repairs. About 10 orus are also said to be damaged. All the nets have got destroyed. No accurate information was available on the engines.</p> <p><b>Buildings/facilities</b> – some of the buildings such as the net mending shed and auction hall are slightly damaged. All fish vadiyas and input sales center have collapsed. Three houses on the beach front have collapsed. The beacon light has got destroyed.</p>	
4.Tangalle Fishery Harbour	<p><b>Boats</b> – Here a large number of multi-day boats were damaged. As many as 75 boats have got thrown away from the basin most of them are still lying on the road, near the rest house, and on the Pareiwella beach and below the Naval base. Harbour Manager’s estimate is that at least 200 multi day boats and Inboard Engined day boats have got damaged. In addition there had been a large number of smaller boats on the adjoining beaches. All the Training vessels belonging to NIFNE have got thrown off from their moorings and are lying a around 500 meters away.</p> <p><b>Lives</b> - While it was not possible to get an estimate of the lives of fishermen lost within the harbour we were told that large numbers who were busy with their boats &amp; nets at the time have gone missing.</p> <p><b>Facilities/Infrastructure within the Fishery Harbour:</b>  <b>Buildings-</b> All the buildings have got damaged in varying degrees. These include the Guard Room, CFC and Ceynor offices, auction room, canteen, Office building, Harbour Managers Quarters, cooperative oil shed, toilet complex and the workshop. The boundary wall and the fence have collapsed right round.</p> <p><b>Equipment – The equipment damaged are as follows :</b></p> <ol style="list-style-type: none"> <li>1. Tadano crane (20 T)</li> <li>2. Slipway &amp; winch house</li> <li>3. Two ice plants ie 20T block and 5 T flake</li> <li>4. Cool room</li> <li>5. Two oil dispensers</li> <li>6. Pump house</li> <li>7. Diesel tanks</li> <li>8. Workshop equipment including compressor, lathe, milling machine, drill &amp; grinder</li> <li>9. Tube Well</li> <li>10. Carts for removal of used oil</li> <li>11. Three Wheeler</li> <li>12. Tractor</li> </ol>	

	<p><b>Marine Structures</b> – The pier has gone down slightly at its northern extremity some damage as a result of some damage to the foundation. The breakwater boulders have slipped down at several places ; this is pronounced at the Pareiwella end of the breakwater.</p> <p><b>Other :</b> Power supply and the filtration system for toilets/sewage have been completely destroyed.</p> <p>Also noteworthy is the total destruction of the Pareiwella beach park developed only a few months ago by the HICZMP. All the facilities established including the toilets, cabanas, sewage filtration system have been destroyed while only a small portion of the visitor center is still intact.</p>	
<p><b>5.Unakuruwa</b></p>	<p><b>Boats</b> - A large number of FRP boats, fibre glass and wooden and orus numbering at least 30-40 were seen strewn all over the ground some close to the main road at least 150 meters from the landing center.</p> <p><b>The Fishery Service Center</b> building funded by NORAD is also damaged along with its other facilities.</p>	
<p><b>6.Kudawlla Harbour</b></p>	<p><b>Boats</b> – There were conflicting estimates of the damage to boats here. At least 50 - 60 large and small boats had got thrown away by the waters and these were lying on the breakwater, behind the pier and some other hundreds of meters away to the south of the harbour. We were told that the damage to the smaller boats in the old harbour (landing site) was greater in intensity and magnitude. However we were not able to visit that site.</p>	
<p><b>General Observations</b></p>	<ol style="list-style-type: none"> <li>1. Right along the way it was pathetic to see large numbers of people particularly women with children lining the roads beseeching food and other essential supplies. It appears that either these are not reaching these places or that there is some breakdown in the delivery and distribution system once they reach the distribution centers.</li> <li>2. Housing/shelter and sanitation is the highest priority among the affected groups</li> <li>3. As far as the fishers are concerned the immediate priority seemed to be fishing gear so that at least some of the smaller craft that can be repaired immediately can resume fishing.</li> <li>4. Boat repair facilities as well as skilled workers are available in the area. However arrangements have to be made to make raw material available to them.</li> </ol>	