

THE 2004 TSUNAMI DISASTER: IMPLICATIONS FOR REGIONAL SECURITY COOPERATION

by

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Tsunami Disaster

A great earthquake occurred at 00:58:50 (UTC), 6.58 a.m. Sri Lanka time, on Sunday, 26 December 2004. The magnitude of 9.0 in richter scale event was located off the West coast of Northern Sumatra. This is the fourth largest earthquake in the world since 1900 and is the largest since the 1964 Prince William Sound, Alaska earthquake. The earthquake had a depth of 10 km.

The earthquake triggered a massive tsunami (soo-NAH-mee) that affected several countries throughout South and Southeast Asia. The tsunami crossed into the Pacific Ocean and was recorded along the west cost of South and North America. Tsunami also occurred on the coasts of Cocos Island, Kenya, Mauritius, Reunion and Seychelles. The earthquake was felt (VIII) at Banda Aceh and (V) at Medan, Sumatra. It was also felt in Bangladesh, India, Malaysia, Maldives, Myanmar, Singapore, Sri Lanka and Thailand.

Sri Lanka - One of the worst affected countries

The southern coastline was the worst hit by the tsunami. In this densely populated area many villages along the ocean and the infrastructure were washed off the map. Galle, the capital of the southern province, was a scene of total catastrophe. The tsunami obliterated nearly the entire seafront; no building within 100 meters of the waterfront escaped undamaged.

The whole world has read about and seen the images of the devastation caused by the earthquake and tsunami on December 26, 2004. More than 250,000 people are confirmed dead and five million people have been made homeless. In Sri Lanka alone within 5 minutes over 32,000 were killed, over 500,000 people became homeless, 1,100 children lost both their parents, over 50% of the registered Sri Lankan fishing fleet was destroyed, and over 70,000 houses were destroyed.

Government Response to the Disaster

Sri Lanka was not prepared for this type of tragic disaster. The Sri Lankan Government structure was not sufficient to cater the level of panic caused by this situation. Her Excellency the President appointed three main task forces to handle and coordinate Boxing Day tsunami disaster.

The government of Sri Lanka established three main task forces on 28 December 2004.

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| 1. | Task Force for Rescue and Relief | TAFRER |
| 2. | Task Force to Rebuild the Nation | TAFREN |
| 3. | Task Force for Logistic Law and Order | TAFLOL |

"The tsunami has awakened us in Sri Lanka. Let us join hands as one people and one nation in this hour of grief to convert adversity into triumph. We were not prepared at all, practically or mentally, to face a disaster like this"

Daily News

**Her Excellency Chandrika Bandaranaike Kumaratunga
President of Democratic Socialist Republic of Sri Lanka**

Faced with the worst disaster, the Sri Lankans along with all political parties joined the government of Sri Lanka and the armed forces to face the days that followed in treating the wounded, burning the dead, and finding food and shelter for the displaced. During this time, the whole country came together, forgetting their political and cultural differences, and joined the government in facing this national disaster.

Establishment of Centre for National Operation

The Centre for National Operation (CNO) was established within the Presidential Secretariat on the 29th of December 2004, for Her Excellency President Chandrika Bandaranayakie Kumaranatunga, to co-ordinate emergency relief work among the different government, non government institutions, international organizations and the donor community during the ***First four weeks*** after the tsunami devastation.

The core activities of the CNO were to:

- Collect and analyze data to assess the humanitarian need of the all disaster-affected sectors/region.
- Coordinate and facilitate emergency relief work among provincial, local government authorities, other government institutes and Commissioner General Essential Services.
- Coordinate and channel all international donor assistance, NGO activities and voluntary services to the most required sectors, in consultation with the Ministry of Finance and Planning, Ministry Foreign Affaires and other relevant line Ministers, as appropriate.
- Facilitate the smooth implementation and activities in a systematic manner.
- Coordinate communication activates with local and foreign media on relief and rescue operation.

The CNO was established to fill the void "Think-tank" which would be capable of strategic planning and & overall monitoring of the Tsunami disaster management of the Government, until the state machinery had increased its capacity to cope with this unexpected challenge.

The CNO was the focal point for the coordination of government relief initiatives, with seven key operational desks to handle specific relief operations. The workload of the individual desks varied across the board, in as much as their successes, which were defined in terms of attaining the objectives that were set out for them.

- Line Ministries, which included the Ministry of Social Services, Ministry of Health, Ministry of Rehabilitation Reconstructions & Reconciliation, Ministry of Education, Ministry of Infrastructure & Utilities Housing, Ministry of Public Secretary Law and Order, and Special Desks for Logistics, Food, Provincial Councils, private sectors & pledge.

- Commissioner General of Essential Services and National Child Protection Authority.
- Communications and Media.
- Joint Operations Head Quarters.
- Donor/UN desk.
- Mapping /Department of Survey



Eight -year -old twin brothers, Themio, left and Geoge Pallis display the sign they used to attract attention to their fund -raising effort for tsunami victims on New Year's Eve at a grocery store near home in a town in Washington state. They raised over \$ 5,000 for tsunami relief. (*Elaine Thompson, AP/WWP*)

After the tsunami Sri Lanka brought highly sensitive news to rest of the world. The whole world supported Sri Lanka in different manners. In the rescue and relief operation, efforts were highly commendable. Supplying immediate aid and relief goods were the main assistance from international community. Foreign governments, corporations, and private sector organizations and individuals also willingly helped in this task.

In rescue operations, during the first few hours, Sri Lankan armed forces handled casualties and cleared debris. Foreign governments sent their task forces to assist with rescue operations. US marines were highly dedicated to rescue operations and they helped construct interim shelter program in the affected community. The logistics component of the US Department of Defense, used its ships, planes, and helicopters to establish a rapid supply chain to the stricken regions through CNO donor desk (which represented USAID).

Human Resources

- The CNO which was established on an emergency basis consisted of volunteer staff from the public and the private sector, working together in a lateral organizational structure, highly successful and commended by the visiting foreign dignitaries for being the well managed Tsunami affected Countries in the world. This achievement could be attributed to dedicated commitment and enthusiasm of the volunteer staff of the CNO.
- The key strength of the CNO was the highly committed volunteer staff of nearly 120 working round the clock on special tasks.

Special Tasks

- All weekly donor conferences were chaired by the Director CNO with the respective CNO desk Officers / Coordinators. During the CNO operations, more than 100 local and foreign organizations attended this weekly donor conference. Special meetings/briefings were also organized for Business leaders, Religious leaders and community leaders.
- The CNO Management coordinated the relevant tasks with the District Secretariats and District Coordinating officers appointed by the Joint Operations Headquarters (JOH), Ministry of Defense within the Tsunami affected areas and also visited the respective districts on a weekly basis.

- The CNO distributed more than 5000 MT essential items/medicines, which were donated by local & foreign Companies/Organizations/institutions in response to the 7120 letters and e-mails initiated by the CNO. (To-date Sri List foods in the container loads as per the above)

Public Relations

- All political party leaders visited the CNO and gave valuable guidance for the CNO operation to become more effective and efficient.
- Secretary General (UN), Director General (IOM), foreign Diplomats, Former Prime Minister of Belgium, top official from USAID, and most of the foreign delegates visited the CNO within the first four weeks of its operations.
- **WWW.cnosrilanka.org** was the official website of the CNO and was highly recognized as the Official source of information / database from the very high frequency of hits from around the world. Twice a day all information updates were made to CNO's web site with news reports, need assessments of the Tsunami affected regions and also the digitized maps helped all viewers who were keen to assist in the Tsunami Relief Operations.
- Highly reputed local & international print and electronic media institutes participated at daily CNO press briefings. Visiting media institutions gave wide publicity to the information given by the CNO through their papers / magazines / journals / TV channels / Radio Channels etc.

Initiated Special Projects

- The CNO initiated a state of the art centralized data management system, which will be launched in the near future as the "National Data Centre" under the purview of the Secretary to the President.
- The CNO initiated the establishment of the DN finger printing center within the Institute of Molecular Biology, University of Colombo.
- The CNO cleared and donated more than 500 Mt of essential goods to the Seva Vanitha Branch of the Army and the JOH for distributions among Tsunami affected Regions.

Handing over Functions to the Successor Government Departments

- After completion of the assigned and identified emergency activities the CNO was wound-up in line with the given time line of 4 weeks.
- Within the operational time -lines of the CNO, the respective Government institutions / authorities had to expand their capacity and smoothly absorb all Tsunami related activities, which were carried out by the CNO.
- The CNO initiated special project report on Data Collection Infrastructure was handed over to the Secretary to the President.
- Considering the requests made by several International organizations and local relief institutions, the CNO Management decided to host the website (www.consrilanks.org) for an additional two weeks with the comprehensive information.
- The CNO has handed over all relevant documents to the successor Tsunami related authorities.

TSUNAMI AND THE TRANSITIONAL ISSUES
CHAIRMAN, TAFOR & COMMISSIONER GENERAL OF ESSENTIAL SERVICES

Tsunami tidal waves that lashed some coastal regions in South–East Asia on the 26th of December 2004 devastated 985 km of Sri Lanka’s total coastal belt of 1585 km, at some points water reaching over 2 km inland. Nearly 40,000 lives were lost (including the missing persons), one million persons were affected, 552601 displaced, destroyed and damaged 113, 625 houses, roads, railway tracks, bridges, high and low tension electricity supply lines and transformers, hospitals, schools, police stations, 25 beach hotels and other public buildings, and 22,810 fishing boats.

Though unexpected and, hence, unprepared, the government geared itself almost immediately to commence emergency rescue and relief work with the collaboration of foreign governments, the UN, international agencies, local and international NGOs, religious institutions and organizations, the public, as well as individual donors, etc. They succeeded in providing relief needed in the first phase of relief operations.

For more effective relief operations, a Commissioner General of Essential Services was appointed immediately after the disaster. Because of the magnitude of the relief workload involved, Her Excellency the President appointed three Special Task Forces –

1. Task Force for Rescue and Relief (TAFRER)
2. Task Force for Logistics, Law and Order (TAFLOL)
3. Task Force to Rebuild the Nation (TAFREN)

A Center for National Operations (CNO) – a sub agency of TAFRER - was established to coordinate relief work, the collection and distribution of data, and donor and NGO involvement in relief work.

Basic necessities of food, water, clothing, medicine, shelter and sanitation were adequately provided. The next priority was the restoration of infrastructure: roads, rail tracks, transportation, electricity and telecommunication, public institutions hospitals, schools, police stations, government offices, etc.

The measure of success of these efforts is clearly evident as none died of starvation, there were no reports of malnutrition, no deaths due to lack of medical care, no outbreak of epidemics, law and order were effectively maintained, and basic infrastructure facilities were restored within a short period of about a month.

TRANSITIONAL PERIOD

With the successful completion of emergency relief and rescue work, attention was focused on work pertaining to the transitional issues. To further smoothen the relief and transitional issues the operations of TAFRER and TAFLOL were amalgamated forming the – Task Force for Relief (TAFOR). The responsibility of TAFOR is the provision of food, cash allowances, transitional accommodation as well as matters pertaining to internally displaced persons (IDPP), and the oversight of CNO work.

FOOD

Provision of food to affected and displaced persons was a major task of the TAFOR. Number of beneficiaries under the food rations scheme is 963,000, each receiving a package of food items, and this costs Rs. 4044 million. This supply of food will be continued up to 30th June 2005. However, it is anticipated that the number of recipients would decline to around 500,000, yet the provision of food will have to be continued for a period of further six months.

Food is provided mainly by World Food Programme (WFP) and distribution work handled by the Ministry of Rehabilitation, Reconstruction and Reconciliation (RRR), through Multi-Purpose Cooperative Societies (MPCSS). Up to 12th May 2005, 44,790 metric tones of food items were distributed to affected areas. Out of this quantity, 29,021 (65%) metric tones were distributed to the North East province while 15,769 (35%) metric tones were distributed to the Southern and Western provinces (Chart is annexed).

CASH ALLOWANCE

A cash allowance of Rs. 200/- per week person is being paid for six months, and this is estimated to cost Rs. 4622.4 million. An allowance of Rs. 5,000 for a family per month is being paid up to 30 June 2005 through the state banking system, in order to enable these families to resettle themselves. Payment up to two months has already been made and the payment for the third month is in progress.

INTERNALLY DISPLACED PERSONS (IDPP)

Just after the disaster, there were 552,000 persons living in camps and tents. At present the total number of these IDPP has been reduced to 73,000 persons constituting 17,382 families living in 100 camps and tents. Their distribution, province-wise, is as follows:

Province	No. of Camps	No. of Families In Camps	No. of Families In Tents
Western Province	25	1503	271
Southern Province	21	752	1109
North-East Province	54	5647	8100

Although some families have shifted to transitional accommodations, they still maintain and utilize their former tents and as such the number of these families may be around 15,000, making the total number of persons to around 50,000.

Law and order has been effectively enforced and maintained by the Police and the Police Special Task Force (STF), and hence, no major incidents reported during the immediate aftermath of the disaster. All three Armed Forces and the Police performed their duties in a highly commendable manner in rescue operations, and continued to assist rehabilitation and management of welfare centers.

TRANSITIONAL ACCOMMODATION PROJECT (TAP)

Her Excellency the President has ordered construction of 30,000 transitional accommodation units within three months. The Government is facilitating and coordinating this work, and also providing land and public utilities required. The construction of these units is funded by international and domestic NGOs, headed by UNHCR, IOM, ZOA, GOAL, GTZ, Caritas and Seva Lanka, assisted by over 30 institutions.

The main office of the TAP is located in Colombo, directing operations through sub-offices established in affected districts. Minimum specifications applicable to these units is 200 sq.ft approximately. Cost range stipulated in order to ensure equity is US \$350-500 (RS. 35,000-50,000). These constructions should be outside the Buffer zone and basic facilities such as electricity, water and sanitation will be provided.

The time targets set were – 10,000 units to be completed by 10 April 2005 and an additional 20 000 units to be completed by 31 May 2005. Remarkable progress has been achieved in this respect and 24,896 units have been completed by 10 of May and construction of 9,419 units is in progress. For details, please refer to the annexed Chart.

Though the total requirement of these units is 40,000, donors have pledged up to 53,000 units, thus exceeding the required number of units by 13,000.

100-200 METER BUFFER ZONE

As a future safety measure, a Coastal Green Belt project has been initiated, demarcating a statutory buffer zone of 100m in the Western and Southern Provinces and 200m in the North-East Province, respectively. Steps are being taken to provide systems of natural defence against possible recurrence of such disasters by protecting mangroves, planting suitable vegetation and improving ecology of the coastal belt. Clearing debris from lagoons and reefs and repairing and proper maintenance of conservation structures such as breakwaters is planned.

JUSTIFICATION FOR STIPULATION OF BUFFER ZONE

1. Possibility of having similar earthquakes with Tsunami effects in the future.
2. Since the disaster on 26 December, over 300 earthquakes above 5 point on the Richter scale have occurred.
3. Geologists, oceanographers and meteorologists have observed recently developed seismic activities in the Indian Ocean.
4. During the Tsunami disaster, seawater has reached nearly 3 kilometers into the land in North and East coast and nearly one kilometer in the Southern coast.

STEPS TO BRING BACK LIFE TO NORMALCY

1. The intention of the Government is to see that normalcy of life is achieved within the shortest possible time frame. For this purpose, provision of food, cash allowances, medical care and transitional accommodation has been ensured. These facilities will enable the affected people to be physically and psychologically fit enough to get back to their lifestyle.
2. Assistance will be given to build/ repair their dwellings and acquire household goods.
3. Support will be extended to allow people to get back to their occupations such as fishing, agriculture, small enterprises, cottage industries, etc. or facilities will be provided to train them for new occupations/skills development.
4. Prevent people from becoming used to the dependency syndrome.
5. Address the gender issues, since those most affected are mothers and adolescent females and young girls.
6. Reconstruct and improve infrastructure facilities and schools, hospitals, police stations, post offices, fisheries harbours, ports, etc.

The macroeconomic performance for 2004 has not been seriously affected by the Tsunami as the disruption was felt only during the last week of the year. The GDP growth is 5.4 percent. It is estimated that the anticipated growth rate of GDP in 2005 will have to be revised downward by about 1 percent (from 6.5% to 5.5%). The limited impact on the macro economy is due to the fact that, together, the most affected sectors of the economy (fisheries and tourism and related services) contribute only 3 percent of GDP. The rehabilitation and rebuilding of economic and social infrastructure, hotels and houses is likely to offset the losses in fisheries, tourism and services. The construction sector is expected to grow at more than 8 percent per annum as opposed to around 5 percent before the Tsunami

While the sectors affected by the Tsunami do not constitute a large portion of GDP, the most affected Provinces (northern, Eastern and Southern) constitute about 18 percent of national GDP and about 25 percent of the population of Sri Lanka. Between 25 percent and 33 percent of the population in the affected districts live below the national poverty line. Thus the Tsunami has increased the vulnerability of a large proportion of the very poor (fishermen, farmers, and small enterprises and service providers in the tourism sector) whose incomes were to be uplifted under the government's poverty reduction programme. The fishers' assets, residential houses, schools, hotels, railways, roads, electricity, ports, health institutions, private commercial buildings on which so many of the vulnerable people depend were severely affected.

By itself, the fisheries sector, along two thirds of the Sri Lanka coastline, has suffered enormous loss. The number of deaths of fishermen has been estimated at around 7500. Rehabilitation and resettlement of the remaining families needs to be done with utmost urgency. There may also be a need to voluntarily relocate families from the coastal belt to nearby safer places. This involves compensation payments for land acquisition. Around 80,000 houses and private commercial buildings have been fully or partly damaged.

There has been considerable damage to the hotels sector with an immediate impact on tourism. The industry is hopeful that the recovery will be faster with timely assistance, nevertheless, with a reduction in the numbers of tourists, a net foreign exchange loss of about US \$50 million is projected in 2005, which is critical in the context of high cost of petroleum imports. Both the formal and informal financial sectors were affected by the Tsunami. Several commercial bank branches in the coastal areas were directly affected by the Tsunami disaster. The micro finance sector is likely to have been strongly and adversely affected by Tsunami with the disruption of many micro enterprises.

The Damage and Needs Assessment

Damage

The Tsunami has led to an unprecedented loss of life and severe damage to the private and commercial property as well as productive assets and livelihoods of people in 13 districts. These losses include:

- Fishing boats, fishing gear, and support facilities in fishing industry
- Tourist hotels, restaurants and shops etc.
- Cottage industries such as coir (coconut fibre products), clothing and handicrafts.
- Industry and Enterprises & Finance.
- Houses, furniture and household assets.
- Economic and social infrastructure.

Immediate Relief and Rehabilitation

There were around 119,000 reported displaced families. Until the relocation in permanent houses is completed and livelihoods are restored, these families have been provided with basic needs such as food, shelter, clothing, water, and medical facilities. Immediate measures have been taken to restore normalcy by providing them with following facilities:

- Livelihood support and compensation for victims.
- Housing.
- Restoration of electricity, water supply, transport, road access etc. Restoration of education and health facilities.
- School textbooks and uniforms.
- Compensation for victims.
- Counseling and mental therapy programmes
- Safe and health environment for women and children. Creation of opportunities for employment. The Government has already implemented several measures in this regard.
- Provision of monthly livelihood allowance of Rs. 5000 per family (supported by the World Bank).
- Cash grant and food basket worth Rs. 375 per person per week (supported WFP)
- Provision of Rs. 2500 to buy kitchen utensils.
- Concession of electricity, water and telephone bills.
- Micro and SME credit on concessional terms (supported by ADB / JBIC).
- Temporary housing (supported UN Agencies and INGOs)
- Grants for individual house construction (supported by the World Bank and the Government of Switzerland).

RECOVERY AND RECONSTRUCTION STRATEGY

The reconstruction strategy for the Tsunami affected regions is based on several considerations; rebuilding is bound to be a long term task and planning of settlements will also be a time consuming activity. In this context, it is important to give incentives to the affected families to become key players in their own revival activities. The micro enterprise credit scheme, the medium term credit programme and 'owner driven' housing schemes will promote private initiatives in the reconstruction phase, particularly in the reconstruction of lost houses and businesses. The use of banking infrastructure to disburse funds, the use of community organizations to target beneficiaries, the use of professionals to provide field advice and ensure work standards, carry out periodic audits and disseminate information to ensure work standards, are the most effective instruments to ensure a speedy and acceptable implementation process. The planning process also considers the large skills requirements; accelerated programmes will have to be undertaken to develop required skills for construction work.

Secondly, the rehabilitation and reconstruction programme will aim at providing livelihood support to kick start economic activities in the affected areas to minimize post – Tsunami transitional difficulties such as unemployment and poverty. The pre Tsunami situation in these areas provides some perspectives to the additional burden that is cast upon the people. In the north and east, over 40,000 families were living in relief camps and more than 5,000 houses needed to be constructed. A need may arise to offer rural work programmes for people to engage in earning activities.

Thirdly, the Tsunami affected areas represent the least developed and the worst poverty stricken areas in the country. The north and the east provinces suffer from a long drawn civil war. Post conflict rehabilitation work on housing, health facilities schools roads and livelihood support have been in progress at the time the Tsunamis destroyed parts of such areas. Many areas in the south reflect a high level of unemployment and obsolete infrastructure facilities. The reconstruction strategy should aim at attracting long-term private investments into these areas to promote development. As such, the reconstruction opportunity should be used to develop modern infrastructure in affected areas to overcome poverty. The modernization of the Colombo Matara railway line upgrading and expansion of the coastal road net work connecting Trincomalee, Batticaloa, Matara Galle and Colombo, the development of fisheries harbors and the establishment of well planned townships and tourist resorts have been identified as flagship activities designed to transform the entire affected costal belt in to developed zone providing lasting solution to regional development and poverty reduction.

Fourthly, the reconstruction will not be based on the replacement cost of what is damaged but on the cost of required infrastructure to support modern development, whilst taking into account the multifaceted risks and vulnerabilities of these areas to possible future disasters. This would involve the development of a scientifically defined buffer zone to protect the coastal environment, its resources as well as people living in such areas. Consequently, the development in these areas will be confronted with issues relating to relocation of housing settlements as well as community infrastructure. This will necessitate the identification of temporary housing and other facilities for the affected. In certain districts such as Matara, Hambantota, Kilinochchi and Mullaitivu, such issues may not pose severe problems since vacant land can be easily found and settlement planning is unlikely to suffer from land constraints. However in areas such as Hikkaduwa, Galle and Kalmunai non – availability of land is likely to pose a severe constraint to settlement planning and reconstruction programmes. As such, alternative strategies may require additional capital expenditure in the reconstruction phase.

Fifthly, the development of community housing, housing settlements and livelihood support, and the rehabilitation and reconstruction of schools and hospitals are designed to be completed by the non-governmental sector. Assistance from large donors, both multilateral and bilateral, are expected to assist large infrastructure projects such as constructing townships, roads, fisheries harbours and administrative infrastructure. However, the inherent weaknesses in the procurement systems should be removed in order to ensure that implementation is done without undue delays. Towards achieving this, it is essential that a harmonized procurement system be adopted and that transactions be done in a transparent manner adhering to best practices with timely information and having arrangements in place, to avoid mistrust and misinformation from occurring in the process.

Finally, the reconstruction and development of infrastructure and other community facilities should not overlook the future operational and maintenance expenditure needs of such investments. The national budget and the donor community need to take into account the required maintenance expenditures in planning future public investments to ensure sustainable development. This necessitates effective coordination of infrastructure development in the entire area.

In line with the above perspectives the following guiding principles will be adopted in the Recovery plan:

Donor Assistance

The following table indicates the assistance pledged and committed by various donors in terms of the need assessment done by the Department of National Planning, TAFREN and joint study by ADB / WB/ JBIC

Total commitment	-	Around US \$ 1,374.8 million
Additional amount	-	Around US \$ 214.5 million
Debt relief	-	Around US \$ 337.8 million
Grand Total	-	Around US \$ 1,926.5 million

Detailed break down is given at annex 'A'

Livelihood

The overall strategy of the livelihood support is to advance tsunami affected communities out of dependency and poverty as rapidly as possible by providing support to revive local economies and rebuild livelihoods. Since this can be achieved in the medium term only, income support will be granted to those who are unable to work or for whom there is no work. Also, immediate income opportunities will be offered through community and public work, which will contribute to local economic revival. The support should meet immediate needs as well as contribute to longer term local and national development goals and aspirations.

Water Supply and Sanitation

The major objective of the sector strategy is to provide sufficient and sustainable water supply and sanitation services to the affected areas. The following three actions will be implemented.

- **Immediate need fulfillment**
The objective is to provide adequate water supply and sanitation facilities to meet immediate needs of affected populations. The strategy includes temporary supply of safe water to transit camps, repair of damaged infrastructure and undertaking and assessment on situation of the existing water supply and sanitation situation.
- **Immediate service restoration**
This is to restore the service to similar with the level of prior to the tsunami. This will be achieved through extensions and increasing the capacity of the existing schemes. Sanitation facilities in the resettled areas will be improved through new installation. Progress will depend on availability and firm resettlement plans.
- **Immediate service expansion**
This is to achieve the long-term ambition of meeting the needs of the Tsunami victims with the medium term planning horizon up to 10 years. The components of the strategy include improvement of the water resources and expansion of the schemes to meet the service requirements of the population in the restored/resettled areas and construction of new schemes in the areas where there is potential.
The need assessments reveal that water should be provided at transit camps, new settlements and newly developed commercial areas. The possible sources of water supply range from pipe bone schemes to protected dug wells depending on the demand and technical viability.

Health

Entire reconstruction of all damaged healthcare institutions including Aurvedic Centers and supply of medical equipment will be carried out with financial assistance of international and local agencies. Healthcare waste managements systems and other related infrastructure of the hospitals in principle towns will also be upgraded to ensure quality health service. The reconstruction activities and supply of equipment will be monitored by the committees chaired by provincial health directors.

In order to ensure the successful completion of the projects within the specified time-frame, all donors have entered into agreements with contractors. In the case of supplying medical equipment, the donor is required to work in consultation with the bio medical engineering services unit of the Ministry of Health to avoid any conflict in policy.

The Ministry of Health has appointed a committee of officials with to monitor the projects in the different districts. This committee will function under the direction of the Provincial Directors, Deputy Provincial Director Health services (DPDHS), National Health Development (NHDC) and Health Development Committee (HDC), and will report to the Honorable Minister of Health on a regular basis.

The total requirement for reconstruction and rehabilitation in the health sector is estimated at US \$68 million for the medium term and this amount has been committed by various donors such as Indian Government, UNFPA. German Government, Red Cross Italian Civil protection etc.

Education

The fully and partially damaged schools and vocational training centers within the coastal buffer zone will be relocated in suitable places. The damaged schools and vocational training centers located outside the buffer zone are expected to be repaired. Repairs to the damaged universities are to be undertaken using the allocations made available for 2005.

The relocation and reconstruction of damaged schools used as welfare camps will be done with assistance of local and foreign donor agencies; 182 schools were damaged and 98 will need relocation, 4 universities and 13 vocational institutions will be rehabilitated or reconstructed. The requirement of funds for this work is US \$167 million and the donor assistance so far committed has amounted to US \$146 million, leaving a resource gap of US \$17 million. Reconstruction and relocation of schools will be implemented by the Ministry of Education and Provincial Education Ministries and monitored through a National Monitoring Committee and Zonal Level Committees. A donor coordination committee will work with the participation of the key donors

Housing

The main objective is to facilitate the reconstruction of the housing stock which has been destroyed by the tsunami disaster. The strategy adopted by the government is to establish a grant scheme for fully and partially damaged houses outside the buffer zone and to build housing projects with donor assistance on lands allocated by the government for damaged and destroyed houses within the buffer zone. The partner arrangement for the grant scheme includes the Government of Sri Lanka, International Development Association and Swiss Agency for Development Corporation. The scheme will be governed by a policy and guidelines agreed by the Consortium of partners after extensive consultation with all stakeholders.

Under the housing programme with donor assistance, 53,127 houses will be constructed. MOUs have been signed to construct 31,891 houses and donor pledges have been made for the remainder.

Fisheries

The strategy for reconstruction of the fisheries sector has been broken into 14 identified projects. This includes mainly repair of boats, supply of nets, replacement of fishing crafts, repair of fishery harbours and anchorages, supply of ice plants, providing assistance for training research, coast conversation, livelihood support and provision of setting up Tsunami early warning system. It has been planned to complete all the project activities with 18 months.

Total requirement for the reconstruction work in the fisheries sector is estimated at US \$201 million. Commitments so far by various donors and donor countries including China, Japan, ADB Norway and IFAD have amounted to US\$ 95 million, leaving a resource gap during the medium term amounting to US \$55 million.

Roads and Bridges

The national road network in the coastal areas of the Northeast and Southern Provinces were severely damaged by the tsunami. In addition, extensive damage occurred to the provincial roads and to the local government and municipal roads that were already in a greatly deteriorated state due to lack of maintenance and damage during the conflict period. Further, on the east coast, flooding before and after the tsunami caused damage to coastal roads. It is not possible therefore to separate the value of road damage due to the three different mechanisms, i.e. conflict flooding and the tsunami.

The temporary repairs will be consolidated with permanent repairs to embankments drainage systems (including protection measures) and that the temporary bridges and bypasses would be replaced by permanent bridges. There is then a need to bring the tsunami affected national roads to a maintainable and uniform standard including embankment and carriage way widening to 2 lanes repairing pavements drainage improvements. Flood protection measures culvert and bridge the rehabilitation or replacements. In order to reap the economic commercial and social benefits of rehabilitating the coastal main roads connecting provincial and local government roads will also be fully developed.

The post tsunami recovery in the roads and bridges sector will involve rehabilitation to continuous network of national roads, over 1000 Km long and stretching from Kalutata in the south west to Jaffna in the north. These road rehabilitations will directly benefit the tsunami affected coastal communities by providing access to economic opportunities and good quality services by lowering transport costs and promoting local and regional development.

Railway

Railway tracks signaling and communication systems, and building infrastructure on coastal railway lines were severely damaged. In addition, engine carriages were also destroyed. For the restoration and improvement of the railway the following strategies will be adopted:

- The coastal railway line is one of the main corridors to enter the capital from the South. Recommencement of train services on this coastal railway line will be given high priority.
- Damaged rolling stock communications and railway stations will be rehabilitated.

- The old coastal railway line will also be converted to modern railway line by providing additional rail track from Kalutara to Matara and development of selected railway stations as commercial centers and development of railway stations as inter model transport centers.
- Implementation and monitoring mechanisms will be arranged by the government and private sector participation.
- With regards to financing, the ADB funds will be made available to restore and improve tsunami affected areas of the Sri Lanka railway. This covers Colombo / Matara and the Eastern and Northern lines. In addition, improvement to the railway workshops is also included.

The cost of rehabilitation and improvement has been estimated at US \$185 million. Several donors have shown interest in meeting the cost. The proposed funding by the Indian Government for upgrading and double tracking of the Colombo Matara rail track will significantly improve the operating speed of the railway and will alleviate traffic congestion and improve the socio economic benefits to the country.

Tourism

The Sri Lanka Tourist Board has developed a strategy to restore both tangible and intangible tourism assets in the shortest possible time. This strategy includes following activities:

- The marketing recovery programme Restoration of the Sri Lanka Tourism Brand (US \$ 5.3 million).
- Tourism resort zoning plan; 15 affected tourist towns have been identified for rehabilitation and reconstruction (US \$ 30 million).
- Community restoration plan for housing and infrastructure development for those 15 tourist towns to resettle their displaced communities (US \$15 million.)
- Incentives to hoteliers and tourism related enterprises:
 - Import duty waiver for hotel refurbishments (US \$ 6.7 mn)
 - Susahana loans up to Rs.10 mn with no repayment in the first year
- Import tour Operators
- Sri Lanka Tourist Board
- Ministry of Tourism
- Private sector of the tourism industry and
- Government of Sri Lanka

The monitoring mechanism is spelled out below

- The ministry of Tourism and the Sri Lanka Tourist Board (SLTB) will be the monitoring agencies for all future tourist development including the Tourism Zones. Developers will be encouraged to invest within these zones.
- All zones have been given Themes by SLTB and development will have to be based on this theme.
- All tourist establishments need to possess a license issued by SLTB to carry out tourism business.
- A report with development guidelines has already been published by SLTB to assist developers to design their product.
- All projects proposals will be studied very carefully by SLTB and only then approvals will be given provided it conforms to the guidelines set out by SLTB.

Environment

The major objective is to achieve environmentally sustainable post tsunami reconstruction planning through the establishment of a cross sectoral multi stakeholder structure for coordinated planning that is based on strategic environmental assessment.

The following key activities will be implemented:

- Establishment of the multi stakeholder planning platform to assist in policy review formulation and preparation of sector plans.
- Establishment of an environmental helpdesk to provide guidance on environmental issues.
- Conducting a strategic environment assessment on the post tsunami environmental issues. Detailed action plans per districts and per sector will be devised based on the finding of the SEA and the comprehensive physical damage assessment survey conducted along the entire affected coastline.

The government of the Netherlands has pledged support for the strategic environmental assessment with a grant of one million euros in the year 2005. In addition the donor community in general has expressed willingness to provide support in the form of financial expertise and other resources to selected actions programmes. In the year 2006 a funding in the form of a 0.5 million euro grant would be enabled by the Netherlands in order to continue with the actions programmes. The memorandum of understanding for the proposed strategic environmental assessment to be signed between the GOSL and government of Netherlands is awaiting finalization.

The key implementation agencies will be the Ministry of Environment and Natural Resources (MENR) Central Environment authority (CEA) and the Urban Development Authority (UDA). The proposed multi stakeholder planning structure would be chaired by the UDA and facilitated by the MENR. The planning platform will strongly collaborate with the CEA for technical and operational direction. The other line agencies NGOs and business organizations will be members of the multi stakeholder planning structure contributing towards their relevant sectoral performance. TAFRN will link up with all key partners and provide support to the implementing agencies in the form of facilitation and co-ordination.

Recovery Progress

Immediately after the tsunami disaster, the government initiated a relief and recovery process. Various government institutions, the donor community and non governmental organizations have been implementing projects and programmes during the last three months. Achievements of the sector-wide recovery process according to TAFREN are as follows:

Housing and Urban Development

Impact

- * 35,100 houses fully damaged.
- * 47,500 houses partially damaged.

Progress

- * Temporary shelters provided for 95,937 persons in 263 camps.
- * Transition housing provided for 15,470 families.
- * 3,700 households given Rs. 50,000, a first installment to rebuild houses.
- * Land required for new settlements identified.

- * 159 MoUs signed with 71 donors for 34,000 houses.
- * Construction work started on 2,325 permanent houses.

Livelihood

Impact

- * Loss of employment estimated at 275,000

Progress

- * 234,000 households are getting Rs. 5,000 per household per month temporary relief.
- * 881,000 persons are getting Rs. 375 per week temporary relief.
(Rs. 200 in cash + Rs. 175 in rations)
- * Rs. 5 billion Susahana loan scheme for micro, small & medium industries:
Rs. 915 million disbursed to 2,060 applicants.
- * Rs. 700 million loan scheme for micro industries via NGOs registered

Development Trust Fund:

- Agreements for Rs. 318 million executed via partner organizations.
- Rs. 103 million disbursed to partner organizations.

Water Supply and Sanitation

Impact

- * 550,000 displaced persons affected.
- * 10 pipe borne water schemes damaged.
- * 50,000 house connections damaged.
- * Dug wells were contaminated with sea water.
- * Rs. 20 billion needed for rehabilitation & reconstruction

Health

Impact

- * 72 hospitals damaged.
- * 363 facilities damaged (clinics, dispensaries, offices, etc)
- * Rs. 10 billion needed for reconstruction.

Progress

- * Donor pledges cover almost 100% of the damage.
- * 22 MoUs signed by Ministry of Health for Rs. 6.9 billion.
- * Kinniya Hospital reconstruction started.
- * No disease outbreaks.
- * No deaths due to lack of medical care.

Education

Impact

- * 182 schools damaged.
- * 98 schools need to be relocated.
- * 282 schools used as IDP (internally displaced person) camps damaged.
- * 4 universities partially damaged.
- * 3 advanced technical training institutes damaged; 10 need to be relocated.
- * Rs. 17 billion needed for reconstruction (excluding land acquisitions).

Progress

- * Donor pledges to reconstruct 177 schools.
- * MoUs signed to reconstruct 163 schools.
- * Reconstruction started on 2 schools.
- * Donor pledges to reconstruct 155 schools used as IDP camps.
- * MoUs signed for 59 schools used as IDP institute.
- * Repair work on 4 universities started.

Fisheries

Impact

- * 15,300 boats and 1 million nets destroyed or damaged.
- * Rs. 20 billion needed for rehabilitation & reconstruction

Progress

- * Pledges for Rs. 12.5 billion received from donors.
- * 12,900 boats pledged by donors.
- * Boat & engine repair centers set up.
- * 7,300 boats repaired free of charge.
- * New nets being issued by the Government and NGOs.
- * Foreign Donor projects also cover:
 - Coast conservation
 - Boat manufacturing yards.
 - 10 fishery enterprises with boats, cold storage, etc.
 - 13 fishing harbours.

Roads and Bridges

Impact

- * 1,615 km of roads damaged:
 - 135 km of national roads.
 - 300 km of provincial roads.
 - 1,180 km of local authority roads.
- * 23 bridges damaged:
 - 2 in Northern Province.
 - 15 in Eastern Province
 - 6 in Southern Province.

Progress

- * All damaged roads temporarily repaired and made passable within 2 weeks.
- * All damaged bridges bypassed with temporary Bailey Bridges and made functional.
- * Rs. 31 billion in donor pledges to repair & modernize coastal roads from Panadura to Jaffna.
- * Rs. 3.5 billion in donor pledges to repair & modernize provincial & rural roads in affected areas.

Power

Impact

- 222,660 households lost access to electricity.
- 6,500 Km service lines. 600 Km voltage lines & 50 Km medium voltage destroyed.
- Rs 6.7 billion needed to rebuild electricity suppliers.

- Rs. 4.8 billion more needed for additional transmission & power generation.

Progress

- 47 substations repaired.
- 32.8 Km high voltage lines repaired.
- 136.5 Km low voltage lines repaired.
- 8,580 houses given service connections.

Railway

Impact

- Damage to the railway network:
 - 160 Km of rail tracks.
 - 11 engines and 20 carriages.
 - 10 railway bridges.
 - 35 railway station & 34 substations.
 - 176 Km of signaling & communication network.

Progress

- Emergency repairs to damaged railway tracks completed within 1 month.
- Foreign donor pledges for Rs.38 billion in grants & soft loans cover
 - Rehabilitation of tracks to increase maximum speed to 100 km ph
 - Replacement of damaged infrastructure
 - New line constructions for double rail tracks from Negombo to Matara.

Telecommunication

Impact

- Services partially or totally affected in the coastal belt from Jaffna to Martara.
- Many towers & exchanges along the coastline severely damaged.
- Cable network along the coastline also damaged.

Progress

- Most of the damage repaired by the telecom operating companies.
- Rs.1.8 billion project planned to build 300 towers island wide for wireless CDMA.

Tourism

Impact

- Rs. 25 billion estimated damage to the tourism industry.
- Out of 242 hotels in operation (14,100 rooms), 84 hotels damaged (3,553 rooms).
- Over 70% drop in tourist arrivals in the first 2 months.
- Room capacity insufficient when arrival start increasing form October 2005 as expected.

Progress

- Incentives to hoteliers & tourism related enterprises include:
 - Import duty waiver for hotel refurbishment.
 - Susahane loans up to Rs. 10 million with no repayment in the first year.
 - Tourism vehicle replacement.

- Tourism Resort Zoning plan to rehabilitate & reconstruct 1 town, including housing & infrastructure.
- MOU signed to build 125 community based houses.
- Tourism Marketing Recovery Programme initiated with a US \$ million budget.

US Response

The 2004 Asian Tsunami disaster that struck Sri Lanka and the subsequent US response in January and February did little to change the military-to-military relationship between Sri Lanka and the United States. This is a startling revelation, but true. Little could have occurred to improve upon the already high level of cooperation and friendship that exists between our two countries.

The United States provides the Sri Lankan Armed Forces with International Military Education and Training money - about \$600,000 this year; Counter Terrorism Program money – about \$200,000 this year; Foreign Military Financing of nearly \$1,000,000 in 2004 and roughly one hundred and fifty fully funded slots at seminars, conferences, and exercises in Washington DC, Hawaii, and around the world.

This level of US support to the Sri Lankan military has in part, been responsible for Sri Lanka's willingness to provide Blanket over flight and landing rights for US military aircraft, a policy now in its third year, to provide a battalion troops to a United Nations peacekeeping mission (MINUSTAH) in Haiti, and to exchange information and expertise on terrorist tactics, techniques and procedures gained from more than twenty years of fighting the world's most prolific users of suicide technology, the Liberation Tigers of Tamil Eelam (LTTE).

Prior to 26 December 2004, no one in Sri Lanka would have imagined the United States Marine Corps, let alone the Army, Navy, Air Force and Coast Guard appearing over the horizon to come to Sri Lanka in its hour of need. Since the events of September 11, 2001 there had been much speculation in Sri Lanka on how committed the United States was to fighting terrorism globally, and whether US troops could ever be allowed to enter Sri Lanka in any large number. From the moment the first US Marine officers arrived on 29 December to conduct mission reconnaissance for the US Combined Support Group (CSG), Colombo relief efforts, there could be no doubts about the level of commitment from either side to working together, sharing information and providing maximum transparency.

I am told by the US Defense Attaché in Colombo that the United States military officers, mostly Marines, who worked closely with our Joint Headquarters in Colombo remarked repeatedly that they had never seen such levels of cooperation from a foreign military. How else could we have responded to friends who were coming to our aid? US officers came to the Joint Headquarters for daily and weekly meetings with the Chief of Defense Staff, the Defense Attaché and officers from the CSG came to meet with me frequently at the Center for National Operations and the offices of the Secretary (Defense) and Secretary (Security, Immigration and Customs) were wide open for the CSG Commander and the Attaché at any time.

Nearly sixteen hundred US service members from all five services were in Sri Lanka for over a month, clearing rubble, moving humanitarian relief supplies, repairing schools, treating casualties and helping the country to heal. More importantly however, United States military men and women in uniform provided a constant reminder that the world at large, and especially

the United States, cared about the government and the people of Sri Lanka. Clearly there were amazing lessons to be learned on each side.

American service members learned that extreme hardship does not dampen the Sri Lankan spirit. Days after the tsunami, seventy year old men could be seen moving rubble with their bare hands and sifting through the wreckage to put their lives back together. While many thousands of families lost loved ones, there were still welcoming smiles on the faces of Sri Lankans as they greeted US military units to their towns. So many American service members remarked on how amazingly resilient Sri Lankans are. After twenty-three years of war, one expects some capability to deal with hardship.

For our part, Sri Lankans also learned some amazing things about Americans and the US military. Your ships and trucks and planes and even some of your service members tended to be bigger than what we are used to, so many were surprised at the compassion and caring in the eyes of even the biggest Marine and the strength of character in even the smallest of your lady service members.

You have no racial problems- we saw Asian, Black, Hispanic and every ethnic derivative of American service members including four Sri Lanka-born boys, working side by side in unity and cooperation. You have ladies that fly helicopters and drive bulldozers and are equal to, and in some cases better than their male counterparts. Your soldiers and sailors and airmen and marines were caring by nature and naturally inclined to help people. These are not the images that we are used to, but may be things to which we should aspire.

For our own part, Sri Lanka responded quickly to the tsunami. If you consider that 38,000 dead in Sri Lanka out of a population of 19 million is nearly an order of magnitude more, as percent of population, than the losses on September 11, 2001 were for you, the fact that the government responded at all within the first few hours is staggering.

Lessons Learnt

Although an earthquake of this magnitude occurred near Sumatra, there was no early warning system that had been established which would have resulted in saving of the colossal loss of human lives and property.

The Existing channels and links between Disaster Warning Centres, Diplomatic Missions, Regional Defence Alliances and Government Authorities alone were incapable of assimilating, disseminating and sharing of essential warning and coordination information. Sri Lanka is looking forward to the international community for the establishment of a global early warning system for earthquakes and Tsunami warning.

Delayed arrival of assistance, excessive flow of improperly planned relief aid from certain donor countries and organizations didn't meet the real needs of the victims and were inappropriate in many cases, resulting a chaos at the receiving end due to their limited port/airport capacity and lift capability for onward transportation into affected areas.

NGO and various volunteer activist operations were seriously out of control and disproportionate to the number registered in Sri Lanka.

Quick response by the Sri Lankan Government, especially the health authorities, prevented the outbreak of any epidemic following the Tsunami. Further, support (medical specialists, medicines, and equipment) from countries who voluntarily came forward during Sri Lanka's hour of need, completely controlled spread of any disease.