

ANNEX III – ECONOMIC ASSESSMENT

A. CONSULTATIONS AND SITE VISITS

1. In preparing this preliminary economic impact assessment, discussions were held with officials from the Central Bank of Sri Lanka, the ministries of Finance, Tourism, and Fisheries; and the resident representative from International Monetary Fund during the period January 10-28, 2005. In addition, site visits of the hard hit districts of Hambantota and Amparai were conducted to inform the assessment.

B. ECONOMIC IMPACT OF THE TSUNAMI

Overview

2. The tsunami tidal waves on December 26, 2004 – that hit several countries in Asia and Africa bordering the Indian Ocean – have taken a heavy toll on Sri Lanka’s coastal areas. The burden of the impact of the tsunami on the Sri Lankan economy was focused on the fishing and tourism sectors in parts of the South and North East. In the areas hit, the tsunami devastated lives, social infrastructure, and economic foundations. The losses that have resulted from this disaster include asset losses (direct damage), output losses (indirect damage), and fiscal costs (secondary effects).

3. Quantifying asset losses involves measuring the value of the stocks of buildings, equipment, inventory, and other property lost as a direct result of the tsunami. Measuring output losses involves estimating the value of the goods and services lost as a result of the asset losses and other disruption caused by the disaster. The fiscal costs measure the net additions to the fiscal deficit as a result of revenue lost and additional expenditure incurred as a result of the disaster.

4. Initial estimates place the cost of asset losses at around \$1 billion (4.5 percent of GDP), with output losses in the most affected sectors of fishing and tourism estimated at \$330 million (or 1.5 percent of GDP), and fiscal costs for 2005 of 2 percent of GDP. Because of the relatively small contribution of the fishing, and hotels and restaurants subsectors to overall GDP (3 percent), the impact of the tsunami will be limited to a reduction in GDP growth by 1 percentage point in 2005.

5. Although the sectors mostly affected by the tsunami do not constitute a large portion of GDP and the affected provinces all together only account for about 17.5 percent of GDP, the affected provinces constitute a large portion of the population (26 percent). Available poverty data for districts in the Southern Province affected by the tsunami show that between one-quarter to one-third of the population in these districts live below the poverty line.¹ This makes it evident that a substantial share of the population in the affected provinces has low per capita incomes. The tsunami disaster increases the vulnerability of this segment of the population, therefore making a case for channeling resources to address the needs of these vulnerable groups.

¹ Data on incidence of poverty in the North East was not available during the preparation of this Assessment.

Asset Losses

6. Preliminary estimates of total direct asset damage place losses around \$1 billion (4.5 percent of GDP). Destruction of private assets in the affected districts is substantial, with losses estimated at around \$700 million. This figure includes losses in the fishing (\$97 million) and tourism industries (\$250 million) in terms of infrastructure and equipment. In housing, the asset losses amount to around \$306 to 341 million.

7. In terms of some of the nature of the damages sustained by the private sector, preliminary estimates report around 140,000 houses have been partly or fully damaged, over 19,000 private fishing vessels sustained damages, and about a quarter of hotels were affected (58 of the total 242 registered hotels have been fully or partly damaged). While, in the public sector about 97 healthcare institutions; and 190 schools, universities and vocational training institutes were damaged.

Table 1: Estimated Output and Asset Losses from Tsunami Disaster

Sector	Asset Loss (\$ Mn)	Output Loss*
Housing	306-344	-
Roads	60	-
Water and Sanitation	42	-
Railways	15	-
Education	26	-
Health	60	-
Agriculture*	3	-
Fisheries*	97	200
Tourism*	250	131
Power	10	-
Environment	10	-
Social Welfare**	-	-
Excluded Items****	90	-
Total in \$ Mn	969-1,007	331
Percent of GDP	4.4-4.6	1.5

*Includes estimates for 2005 and 2006 and includes from *livelihoods damage assessment* of fishermen, small farmers, and small businesses in tourism totalling \$ 140 million.

****Includes private assets that perished with devastated houses and buildings and is estimated at about 10% of the total.

Source: Government of Sri Lanka and staff estimates.

Output Losses

8. While the impact of the tsunami on Sri Lanka's gross domestic product (GDP) is not as significant as the extent of asset losses, in the areas that were hit, the tsunami devastated lives, social infrastructure, and economic foundations. It is estimated that around 200,000 people (3 percent of the labor force) might have lost their jobs as a result of the tsunami. This includes 100,000 in fisheries; 27,000 employed in tourism and tourism related activities; and the rest in other informal sector activities. The estimated loss of output in 2005 and 2006 in the most

affected sectors (fishing and tourism) total around 1.5 percent of GDP, but these sectors do not make up a significant portion of national GDP. The hotels and restaurants subsector together with fisheries directly contribute about 3 percent of GDP. Other sectors which will also be negatively affected but to a much lesser extent include telecommunications and transport. On the other hand, the construction sector, which makes up a substantial portion of GDP (7.2 percent) will mitigate part of the contraction in the fishing and tourism industries. Therefore, the tsunami may likely only result in slowing down economic growth by up to 1 percentage point in 2005 (from 6 to 5 percent).

Table 2: Selected Economic Indicators

	Actual		Estimate	Pre-Tsunami	Post-Tsunami
	2002	2003	2004	2005	2005
Real GDP Growth	4.0	5.9	5.2	6.0	5.0
Nominal GDP (Bn. Rs.)	1,583	1,760	1,988	2,297	2,297
Fish production (tons)	302,890	284,960	300,000	300,000	200,000
Tourist arrivals	393,171	500,642	565,000	600,000	425,000
Construction sector growth	-0.8	5.5	5.0	6.0	9.0
Inflation (CCPI annual average)	9.6	6.3	7.6	10.0-11.0	12.0

Source: Central Bank of Sri Lanka for historical data and staff projections.

9. **Fishing.** The December 2004 tsunami will worsen the outlook of the already volatile fishing industry in Sri Lanka. The disaster has affected about one-third (or around 1 million) of Sri Lanka's coastal population (totaling 3.2 million) and the fishing industry provides (direct and indirect) employment to around 170,000 people. In addition to the negative impact on the livelihoods of fishermen due to their asset losses, demand for fish will also be limited in the first few months of 2005 and the price of fish is likely to remain depressed in this period. Fish production is expected to reach only 200,000 tons in 2005 (down from the earlier expected 300,000 tons) and to largely recover in 2006 with a production of 270,000 tons. However, since fishing only accounts for 2.4 percent of GDP, the contraction in the sector will not significantly slow down overall economic growth. The value of output loss for fishing in 2005 and 2006 is estimated at \$ 200 million.

10. **Tourism.** As the benefits of the cease-fire started to bear fruits for the tourism sector beginning in 2002, the tsunami has dampened these prospects for 2005 and to a lesser extent in 2006. Around 565,000 tourists visited Sri Lanka in 2004 and 600,000 arrivals were expected in 2005 before the tsunami hit. Now tourist arrivals are projected to contract to around 425,000 in 2005 and recover in 2006 to 575,000. Around 40 percent of foreign guest night stays in Sri Lanka are spent near the beaches in the South and East coasts of the island, which were among the hardest hit by the tsunami. Hotels and restaurants contribute about 1 percent of GDP and the tourism industry employs around 1 percent of the labor force (130,000 jobs in 2004) both in direct and indirect employment. The tsunami is likely to result in reducing output in the sector by a total of \$131 million in 2005 and 2006.

11. **Construction.** The construction sector will mitigate part of the contraction in the fishing and tourism sectors in 2005 if substantial reconstruction takes place in the next 3 years, adequate inputs can be sourced, and if the industry has the capacity to expand and restructure quickly to meet demand. The larger hotels already plan to start rebuilding in February. Based on discussions with private sector construction companies, rough estimates indicate an 8-10 percent potential growth in the next three to four years. This sector has growing on average by about 5-5.5 percent in the recent past. Construction also makes up a more significant share of GDP (7.2 percent in 2003) and the labor force (5.3 percent) than the combined total for fishing and tourism. If significant reconstruction takes place starting in 2005, the sector can increase its contribution to GDP to close to 8 percent. Much of this depends on the quick resolution of the policy pertaining to the new buffer zone from the sea.

Inflation and Balance of Payments

12. **Inflation.** Average inflation, as measured by the Colombo Consumer Price Index (compiled by the Department of Census and Statistics), has been moderating in the last three years from a high of 14.2 percent in 2001, bottoming in 2003 at 6.3 percent, and increasing slightly to 7.6 percent in 2004. The tsunami is likely to push prices up further throughout 2005 due to the upsurge in demand for consumption goods during the first quarter of the year, increased demand for construction materials in 2005, and the recent hike in international oil prices. Inflation in 2005 is likely to average 12 percent for 2005 compared to the pre-tsunami estimate of 10-11 percent.

Table 3: Selected Balance of Payments Indicators (\$ million), 2002-2005

	Actual		Estimate	Pre-Tsunami	Post-Tsunami
	2002	2003	2004	2005	2005
Exports	4,699	5,133	5,787	6,305	6,305
Imports	6,105	6,673	7,957	8,824	9,541
Trade balance	-1,406	-1,540	-2,170	-2,519	-3,236
Current account balance	-236	-76	-626	-824	-1,564
Capital account:					
Direct investment	186	201	178	261	261
Private long term	-21	-33	8	90	90
Government long term	162	449	327	470	470
Disbursements	542	808	655	873	873
Amortization	380	359	328	403	403
Financing gap	-	-	-	-	790
Overall balance	339	428	-212	97	182
Current account balance (in percent of GDP)	-1.4	-0.4	-3.2	-3.8	-7.1
Gross official reserves (end of period)	1,566	2,147	1,825	1,948	2,133
In months of imports	2.4	2.8	2.2	2.2	2.3
Oil price (\$ per barrel)	25	28.9	37.7	40.5	40.5

Source: Central Bank of Sri Lanka and staff estimates.

13. **Balance of Payments.** Reconstruction efforts to rebuild Sri Lanka following the tsunami will have a significant impact on the country's balance of payments. Rebuilding activities will require a substantial increase in imports (over \$700 million in 2005) and a widening in the trade deficit in the next 2 to 3 years. Increased private transfers will contribute to financing increased imports. In 2005, merchandise exports are assumed to grow at the same "pre-tsunami" levels, but services receipts will decline reflecting a drop in tourist arrivals on the order of 175,000 relative to original 2005 projections (600,000). Additional external financing requirements after the tsunami are estimated at \$790 million in 2005, which could be provided in the form of new concessional loans, grants, and possibly debt relief. The receipt of large foreign inflows is expected to help mitigate the impact of the tsunami disaster on the external sector.

Fiscal Impact

14. According to the Ministry of Finance measure of the fiscal impact of the tsunami on public sector finances are highly tentative at this point. The impact of the tsunami on revenues is expected to be marginal (0.3 percent of GDP). Revenues from value added tax (VAT) and customs duty from the increased imports in 2005 is expected to compensate for most of the revenue shortfalls from tourism and fisheries. Additional tsunami-related expenditures are estimated at Rs. 50 billion (over 2.2 percent of GDP) to be financed through extraordinary external assistance, including debt relief. Of this amount, Rs. 10 billion will be additional recurrent cost and there rest will go to capital. This will result in the widening of the fiscal deficit from the budgeted 7.6 percent of GDP to 9.6 percent of GDP in 2005. Ultimately, the level of increased expenditures will depend on the ability of the Government to mobilize external resources and the absorptive capacity of the public administration. Unlike asset losses and output losses, substantial fiscal costs for reconstruction will continue to be incurred in the medium-term. However, details on the Government's tsunami reconstruction and recovery program are not available at this point in time.

Table 4:Fiscal Framework (As Percentage of GDP) 2002-2005

	Actual		Estimate	Budget	Post
	2002	2003	2004	2005	Tsunami
					2005*
Total expenditures and net lending	25.4	23.7	23.7	24.8	26.4
Current expenditures	20.9	19.0	19.2	18.5	18.5
Subsidies and transfers	4.7	4.0	5.1	4.0	5.3
Capital expenditures and net lending	4.6	4.7	4.5	6.4	8.0
Total revenues	16.5	15.7	15.6	17.2	16.9
Budget deficit before grants	-8.9	8.0	-8.1	-7.6	-9.6

**Assumes debt moratorium of 50% on principal and 50% on interest.*

Source: Ministry of Finance estimates.

C. CONCLUSION

15. The tsunami which hit Sri Lanka in December 2004 has resulted in significant asset losses, especially in terms of housing, hotels, and fishing infrastructure and equipment. The fiscal cost of rebuilding in the next four years will also be significant. The output losses, on the other hand, and overall impact on the macroeconomic foundation of the country will not be as

extensive. However, the tsunami has increased the economic vulnerability of the low income communities affected and underscores the urgent need to start developing appropriate safety nets, livelihood support, and recovery efforts. It is important at this stage to enhance Government capacity to implement and support recovery and rebuilding activities to make full use of available donor assistance. The importance of involving affected communities in reconstruction and recovery programs, especially in housing, cannot be over-emphasized. Community involvement will also provide temporary livelihood sources to affected families.