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Country Environment Profile of Sri Lanka

Final Report







This report is financed by the European Commission and is presented by the consultants for the Government of Sri Lanka and the European Commission. It does not necessarily reflect the opinion of the Government of Sri Lanka or the European Commission.

MWH Consultants:

- Prof. Steven M Newman (Team Leader)
- Prof. Hemanthi Ranasinghe

Assisted by

- Anuradha Vanniarachchy
- Randeewa Malalasooriya

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1. SUMMARY

1.1. Introduction

The main objective of a Country Environmental Profile is to identify and assess environmental issues to be considered during the preparation of a Country Strategy Paper, which will directly or indirectly influence EC co-operation activities. A secondary aim could be to guide bilateral rehabilitation æsistance and regional co-operation at regional levels e.g. Asia wide programs or at sub regional level such as the South Asian Association for Regional Co-operation (SAARC).

In order to mainstream environmental considerations into EC country programming and projects it is essential to note that key environmental indicators are clearly specified in millennium development goal (MDG) number seven. On May 16th 2005 President Chandrika Kumaratunga stated:

"The government 's six year development plan with its development goals would be....in keeping with the Millennium Development Goals......The government's strategy would beto bring in the private sector into the development activities in a more effective and constructive manner."

It is also important to recognise that the environment is often the engine of development for both the urban and rural poor as opposed to something that should be "protected".

The EC Country strategy and National Indicative programme are strategic documents. The most powerful input that an environmental profile can contribute is therefore one of strategy. The emphasis in this document is to highlight this in the conclusions section. In order to conform to report length requirements the status of the environment and related institutional issues have been reduced in length and or demoted to appendices. It should also be noted that any realisation of country strategy and NIP into programs or projects will automatically require Environmental assessment and Environmental Impact Assessment as part of EC project cycle protocol.

The approach taken in compiling the profile included literature review, a field trip to the East and the North (Ampara, Baticaloa, Trincomalee, Vavuniya, and Jaffna), and a participatory workshop on environmental potentials for Sri Lanka 2006-2013. The field trip consisted of meeting with all government agents and the North East Provincial Council.

1.2. KEY FINDINGS

1.2.1. State of the environment

The predicted trends in a number of indicators are presented in the table overleaf.

ISSUE	2015 MDG TARGET	WILL IT BE MET (% WHO THINK NOT)	EFFECT OF WAR	EFFECT OFTSUNAMI	CURRENT EFFECT OF TSUNAMI REHABILITATION
Surface and ground water pollution	Reduce by 75%	100	Hampered improvement	Major salination effect on coast and agri- cultural land	Minimal effects in resettlement camps
Solid waste and sewage disposal	All municipalities ok	91	Hampered improvement	Major concrete rubble problem	Created new sewage problems in camps
Land degradation and erosion	Reduce by 30%	86	Made worse	Major change in coastal topography with increased erodability	Minimal effect
Coral reef damage	Reduce by 50%	78	No effect	Major damage in limited locations	Supplied non traditional boats need corridors cut into coral
Mangrove damage	Reduce by 50%	78	Made worse (mili- tary clearance)	Limited effect initially but may die later due to environmental change	Minimal effect
Sand mining	Reduce by 50%	96	No effect	Major change in coastal topography with increased erodability	EA and EIA being relaxed so highly likely dunes will be reduced and mining will be increased
Biodiversity loss	Reduce by 50%	87	No effect	No accurate data	Minimal effect
Forest loss	Reduce by 50%	74	Net positive effect*	No effect on dense forest only individual or plantation trees	Higher price (doubling) for timber may increase illegal logging
Safe drinking water	Reduce no of peo- ple without by 50%	65	No effect	Salination of wells, but pre tsunami base- line shows most wells were toxic anyway	Many examples of NGOs over extracting water leading to salination of wells

1.2.2. Key environmental factors affecting development, tends, and the adequacy of response

The most important factor affecting development has been the war. This coupled with political instability has led to limited national and financial investment. The insecurity of areas especially to the North and East has meant that thinking and action on aspects of environment and development by the government and the private sector have been constrained to the extreme of having what appears to be an island within an island. Essentially we have a situation of a densely populated resource rich (water and cash crops and minerals) south west quartile with municipal growth centres in Colombo and Kandy surrounded by a sea of neglected sparsely populated resource poor land dominated by low returns from subsistence agriculture and fishing. Exceptions to the rule occur in the North Central Province where there are major irrigation schemes and parts of Jaffna with high value fruit and vegetables. The link between poverty and environmental degradation is extremely complex in Sri Lanka. It is clear however that some environmental degradation is caused by neglect (monitoring and enforcement) and injudicious business practice (paying for "mined" rather than "sustainable managed" resources) rather than damage caused by people trying to subsist. Environmental problems have been made worse on most of the coast by the tsunami and some tsunami rehabilitation methods could exacerbate matters.

Key issues and the adequacy if response are listed below:

- Surface and ground water pollution occurs in urban dump sites, high input agricultural areas, lagoons and tsunami affected areas. The response of citizens, business, and government is inadequate
- Solid waste and sewage disposal in dense urban areas is a health problem that limits investment in the neighbourhood. The response of citizens, business, and government (especially municipalities) is inadequate
- Land degradation and erosion is not a major ongoing issue in non tsunami (apart from restricted areas in the central highlands), as the damage has been done. The tsunami has remodelled coastal topography and ecology with a knock on effect on the pattern of erosion and deposition.
- Coastal degradation pre-tsunami ranks among the world's worst with rampant mangrove, coral, and lagoon destruction coupled with injudicious sand mining and pollution killing off most of the remaining plant and animal communities. This has happened over a twenty year period and made the effects of the tsunami worse. It is too early to see the full effect of the tsunami on coastal ecology but fish returns are already affected. The response of citizens, business, and government is inadequate.
- Terrestrial biodiversity and forest loss has now slowed down due in part to war and in part to long term donor assistance. Monitoring and law enforcement by government has been adequate. Restoration work is still at a pitiful level however.
- Safe drinking water is hard to come by in the North and the West and has been made worse by the tsunami through salt water contamination. The response of citizens, business, and government is inadequate.

All of these issues will increase poverty by reducing livelihood opportunities and investment. Pollution of drinking water and stagnant water in waste dumps will cause illness and death.

1.2.3. Environmental policy legislation and institutions including civil society

Environmental policy and law is on the whole adequate. A main weakness lies in a lack of instruments that would empower people and business to fully contribute. A further weakness is lack of monitoring and enforcement. Official data on poverty and environment in the North and East is inadequate. Government has found it difficult to maintain enforcement in the region due to the war and current perceptions of instability. Enforcement is also weak in the more developed areas of the south west quadrant. Governance in Sri Lanka has improved in terms of a reduction of red tape and corruption, but conditions for local and foreign investment are still not good.

Sri Lanka is conforming to international legislation to the best of its ability.

The Ministry of Environment and Natural Resources has been effective as an environmental police force setting policy and standards but has had little influence on many damaging sectoral policies e.g. energy. The link between environmental potential and poverty reduction has no institutional home in Sri Lanka at present. The National Environment Act has created a good framework for intersectoral action.

Perhaps the most important institutional constraint however is a lack of data on illegal land ownership and use coupled with a lack of law enforcement,

There are few examples of pro-active partnership between government and business where environmental improvement is an objective.

Civil society in Sri Lanka is good in terms of open participation in the development of laws but weak in terms of environmental NGOs active in advocacy and the establishment of best practice in sustainable development. The number of effective environmental and environmental development NGOs in Sri Lanka is limited.

1.2.4. Planning and research

Environmental development planning in Sri Lanka is currently inadequate for a variety of reasons including:

- 1. There is no super ministry or presidential office where land use (linked to registry and geographical information) and environment policy can be modelled and the role of line ministries monitored and regulated in the attainment of millennium development goals, e.g. poverty reduction.
- 2. There is no system of environmental development zones linking clear planning, biological and social issues and potentials.
- 3. There is no research or appreciative inquiry by government on how the private sector could play a role in delegated sustainable management of resources, environmental monitoring, enforcement and environmental business and or social enterprise.
- 4. There is little evidence of major innovative research or innovation in appropriate technologies e.g. building and infrastructure in the tsunami zone.

1.2.5. Donor responses

The major donors with a commitment to fund environmental interventions in Sri Lanka is order of scale are Asian Development Bank, World Bank, UNDP and Dutch Aid.

The main approach of all donors to environment has been capacity building at central and local level. The funds have produced few results of high impact or sustainability. It appears that organisational development approaches linked to delegated management would achieve more. Encouragement of public private partnerships is of central importance.

EU- Sri Lanka co-operation has traditionally focused on poverty alleviation through rural development. However, the balance has shifted towards economic co-operation as Sri Lanka's economy developed. In the post - ceasefire environment, the Commission proposed significant extra funding to support rehabilitation and reconstruction efforts. Due to the conflict, a large proportion of EC's assistance has been through ECHO, for humanitarian relief operations, and from the Aid to Uprooted People budget line for assistance programmes in favour of the displaced people in the North and East.

The Commission has committed significant additional funding for humanitarian relief (approximately 30 million Euro) as well as reconstruction (approximately 100 million Euro) in response to the tsunami. The two main area of activity for tsunami reconstruction in Sri Lanka are support to livelihood and communities in the North and East, through UNDP and the proposed multi-donor Trust\t Fund, and support for reconstruction of the key Matara- Batticaloa partly coastal road running from the South to the East of the country.

EC economic co-operation through inks with Europe appears to be too thinly spread and could be usefully concentrated on environmental technology which is an area in which Europe has a comparative advantage.

Donors appear to find it difficult to link environment to economic co-operation and poverty reduction. They also appear to find it hard to use small grant programs and evaluation to learn lessons in order to improve the impact and sustainability of major projects and programs.

1.2.6. Mainstreaming mechanisms

Environment can be "mainstreamed" into development thinking through four approaches

- 1. By realising that environment is the engine of development for the 21st century. Bio and eco information is one comparative advantage that Sri Lanka has. Environment is not only "something to be protected or preserved"
- 2. By recognising that Millennium goal no 7 has key indicators of judicious environmental development.
- 3. By establishing an environmental development strategy for international and national public private partnerships in functionally important development zones.
- 4. By approaching poverty reduction through a livelihood approach. Poor people have a story to tell about how environment has meaning to them in terms of health, jobs, and their vulnerability. They also have assets including environmental knowledge that can help them to rise above the poverty line. If donors and government use this knowledge, operationally important aspects of the environment will already be "mainstreamed".

1.3. RECOMMENDATIONS

1.3.1. Country strategy and national indicative programme

- The strategy should be guided by the environmental development zone approach in order to maximise impact and sustainability in poverty reduction and economic co-operation. The table overleaf illustrates the main features.
- 2. Any programme or project in the tsunami zone should have a full EIA
- 3. Land registry improvement, enforcement of land law, and the link between poverty and environment and its institutional home are the most important environmental issues and if possible should form the basis of a programme or project.
- 4. The housing, road and energy sectors could have the highest impact on poverty elimination linked to the creation of new environmental opportunities
- 5. Economic co-operation between Europe and Sri Lanka should focus on environmental business and social enterprise and be guided by a study of win:win:win business partnership models
- 6. Any area development project should consider organisational development and delegated management approaches rather than purely increasing government "capacity". Monitoring the constraints to environmental business and environmental business partnerships should be a central part of design. Along with recording livelihood perceptions of important environmental limitations.

1.3.2. Rehabilitation

7. An environmental assessment should be carried out as soon as possible as many tsunami interventions are and will have significant negative impact. Tsunami recovery in most areas will take between 5 and 10 years given current rates of progress

1.3.3. Regional

- 8. The tsunami condition on Asia wide programs should be extended for five years
- Links between Asia and European environmental business in building, roads, solid waste/sanitation and energy should be a priority and research partnerships in these areas should be encouraged.

1.3.4. Sub regional

- 10. An identification mission is needed to investigate the potential for EC funded SAARC actions on
 - Centre for sustainable marine fisheries
 - · Centre for biodiversity
 - Centre for forest restoration linked to poverty elimination

ZONE	CHARACTER	KEY ENVIRONMENTAL TECHNOLOGIES	EC ENVIRONMENTAL POVERTY REDUCTION STRATEGY
Tsunami	Disaster area with minimal livelihood potential, fishing tourism and agriculture. Major donor funds available.	Reconstruction and rehabilitation works including production of cement concrete and other building materials, Tourism and marine fisheries	Training for construction employment using environmental sound approaches and roof top rainwater harvesting. Research and European links in eco-building approaches. Marine fishery development. Lagoon beach and other focused touristic development
Municipality	Urban sprawl with integral slums. Good infrastructure and high investment potential. Access to labour and markets. Poor continuity of electricity supply. Second highest poverty density.	Electricity from biomass, recycling and solid waste composting, non polluting vehicles. Urban forestry	Encourage investment in environmental technology by European links and reform of business environment. Slum led participatory development plans linked to waste as a resource
Coastal non tsunami	Tourism especially cultural and nature, fishing	Marine fishery, Fish product processing	Encourage European links in eco and cultural tourism, marine fisheries and fish/shell fish product development.
High potential	Very high touristic potential, high value crop production. Low number of protected areas. High investment and asset values. Water catchment is forest and plantation crops. Highest poverty density	Agro-tourism, Bottled water from named catchment sources, biodiversity research and commercial development, very high value crops e.g. orchids and medicines.	High intensity high value agroforestry. Encourage joint work in bottled water, rain forest products, medicines an restoration of forest function using high value fruit and nut trees.
Double crop	Major irrigation schemes, minor tank based schemes, clear forest catchments	Agricultural and high value crop production, animal husbandry and animal products e.g. milk	Tank rehabilitation, improved marketing processing and sale of agricultural products
Low population low rainfall	Low poverty density, high forest cover and denuded forest lands	Extractive reserves for bio-energy, insect products e.g. lac and silk, dendro energy and biodiesel plantations	Partnership approaches for extractive reserves. Not agricultural development as this is not cost effective.

ENVIRONMENTAL ISSUE	INDICATORS	BASELINE YEAR	VALUE	LATEST YEAR	VALUE	PROJECTION YEAR
15. Forest loss	a) Total forest area	1996	1,650,111 ha	2001	1,309,440	2010
15. Forestioss	b) Closed canopy area	1992	28.88%	-	-	2020
16 Clean aparay	a) Electricity generation	1996	4,377 GWh	2001	6,520 GWh	2010
16. Clean energy	b) Electricity consumption	1996	2999 GHw	2001	4376 GWh	2010
17. Tourism	Number of visitors	1994	407,511	2001	336,794	-
18. Environmental health	a) Life expectancy at birth.	1980	68	2001	73	-
16. Environmentar neattr	b) Access to safe sanitation	1994	68.4%	2000	75.37%	-
29. Safe drinking water	% of households that gets safe drinking water.	1994	68.4%	2000	75.7%	-
20. Housing & settlements-official	Number of persons per house	1971	5.6	1981	5.2	-
20. Housing a settlements-official	Number of persons per nouse	13/1	5.0	2002	4.5	
21. Housing & settlements-unofficial	% of permanent housing	1953	34.9%	1994	66.9%	-

2. INTRODUCTION

The main objective of a Country Environmental Profile is to identify and assess environmental issues to be considered during the preparation of a Country Strategy Paper, which will directly or indirectly influence EC co-operation activities. A secondary aim could be to guide bilateral rehabilitation assistance and regional co-operation at regional levels e.g. Asia wide programs or at sub regional level such as the South Asian Association for Regional Co-operation (SAARC).

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The assessment will attempt to deliver the following results:

- 1. An assessment of the environment identifying key environmental factors influencing the Country's development and the responses to these.
- 2. An assessment of national environmental policy and legislation; institutional structures and capacity, and the involvement of civil society in environmental issues.
- 3. An assessment of past and anticipated future tends of environmental indicators.
- 4. An overview of past and ongoing international co-operation in the environment sector.
- 5. Recommendations and, as far as possible, guidelines or criteria for mainstreaming environmental concerns in priority development areas.

3. STATE OF THE ENVIRONMENT

3.1. COUNTRY DESCRIPTION

The island of Sri Lanka lies between 6 and 10 degrees North latitude and between 80 and 82 degrees East. It has an area of 65,610 square kilometres and a population of 19,462,000 (mid 2004). The population is very uneven with 60% located in one quarter of the island known as the wet zone. Over 72% of the population live in rural areas. The population density in 2004 was 310 persons per square kilometre.

The economy registered an annual growth of 5.4% in the real Gross Domestic Product in 2004. GNP per capita is over US\$800 per capita which is ahead of some South Asian Countries. 6.6% and 45.4% of the population earned below \$1 and \$2 per day respectively in 1995. (2004 Annual report of the Central Bank of Sri Lanka)

The island has a very rich cultural heritage with productive agricultural kingdoms starting before the 4th century BC. The indigenous knowledge of agriculture, water management and medicine is of global importance.

3.2. PHYSICAL ENVIRONMENT

The island has a central mountainous massif and a vast plain surrounding it, giving a significant variation in climate. The annual temperature in the coastal belt ranges from 26 to 35 degrees centigrade while in the central highland it ranges from 15 to 19 degrees. As a tropical island there is little temporal variation in temperature. The annual rainfall varies from 1000 mm in arid areas in the south west and north west of the island to over 5000 mm in a few places on the SW slopes of the central highlands. The 3000 mm isohyet divides the country into the wet zone covering the south western part and the dry zone covering the north and east of the highlands. The seasons contain two monsoons. The Yala monsoon brings rain to the south west during May to August. The Maha monsoon brings rain to the North and the East from October to January. A breakdown of Land use types is given overleaf taken from the 1998 Statistical Compendium.

- Only 32% of the population are served by a piped water supply
- The highest mountain is Mount Pidurutalagala at 2524m
- Prior to the tsunami, the only occasional major natural disaster risk was from cyclones

LAND USE TYPE	EXTENT IN HA	
Built up lands	29,190	
Agricultural lands	3,710,880	
Forest lands	1,759,840	
Range lands	593,520	

LAND USE TYPE	EXTENT IN HA	
Wet bodies	61,810	
Barren lands	77,480	
Total	6,523,240	

3.3. BIOLOGICAL ENVIRONMENT

At the beginning of the 20th century about 70% of the island was covered by forest. By 1998 this had shrunk to 24%. 82% of the land is theoretically controlled by the state, but in reality there has been considerable official and unofficial encroachment and the actual level of state control is currently unclear.

Sri Lanka is considered to be the most bio-diverse country in Asia per unit area and is a global biodiversity hotspot. About half of its native species are endemic, including all freshwater crabs, 90% of amphibians, 50% of freshwater fish, 26% of flowering plants and 14% of its mammals. There are over 3368 species of flowering plant and over 400 species of spiders. Sri Lanka has very high ecosystem diversity as shown in the table overleaf. The island also has high agricultural biodiversity.

3.4. SPECIAL ISSUES

The conflict waged by Tamil separatists in the northern and eastern regions of Sri Lanka since 1983 experienced a break with a cease-fire on the 22 February 2002. The donors support meeting on humanitarian aid, held in Oslo in November 2002 consolidated steps towards peace, with the donor conference in Tokyo in June 2003 resulting in pledges amounting to € 4,5 billion.

The tsunami that hit the countries around the Indian Ocean on December 26, 2004 was one of the worst natural disasters in recorded history. After Indonesia, Sri Lanka has suffered the most from the tsunami. The tsunami has destroyed or damaged: 130,000 houses, 168 public schools, four universities, 18 vocational centres; 92 local clinics, hospitals and drug stores; significant losses in power, transportation (roads and railways), water supply and sanitation. Sri Lanka's tourism industry has been very hard hit since the disaster occurred during one of their busiest periods of the year destroying key infrastructure

Both of the above issues have had profound environmental effects

FOREST	INLAND WETLAND	COASTAL AND MARINE	AGRICULTURAL
Tropical wet evergreen	Flood plain	Mangrove	Paddy
Tropical moist evergreen	Swamp	Salt Marsh	Horticulture
Tropical dry mixed evergreen	Streams and rivers	Sand dunes and beaches	Annual crop
Tropical thorn	Reservoirs and ponds	Mudflats	Plantation crops
Savannah	Wet Villu grasslands	Seagrass beds	Home gardens
Riverine	Wet montane grassland	Lagoons and estuaries	Chena
Tropical sub montane	Wet patanas	Coral reef	
Tropical montane		Coastal sea	
Dry montane grassland and dry patanas			

3.5. CRITICAL ENVIRONMENTAL ISSUES

The table overleaf on trends and spatial effects is based on literature and on the results of the stakeholder workshop poll. It should be noted that over 50% of the attendees were from government or intergovernmental organisations. The MDG target was set against a 2002 baseline. The table on the following page shows actual changes in relation to agreed indicators. The source of data is also indicated (see administrative appendix 4 key baseline documents). No reliable data could be obtained on environmental issues related to irrigation, roads, marine fisheries or effects of climate change.

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Biodiversity loss	Reduce by 50%	87	No effect	No accurate data	Minimal effect
Forest loss	Reduce by 50%	74	Net positive effect*	No effect on dense forest only individual or plantation trees	Higher price (doubling) for timber may increase illegal logging
Safe drinking water	Reduce no of peo- ple without by 50%	65	No effect	Salination of wells, but pre tsunami base- line shows most wells were toxic anyway	Many examples of NGOs over extracting water leading to salination of wells

^{*} War and mining prevents people and livestock entering forest allowing for natural regeneration and this effect is greater that military clearance.

3.6. SUMMARY OF CRITICAL ENVIRONMENTAL TRENDS AND CONSEQUENCES ON HUMAN WELLBEING AND SUSTAINABLE DEVELOPMENT

3.6.1. Surface and ground water pollution

Based upon our tour of Ampara, Battica and Trincomalee, the situation is grave. The situation appears to be getting worse. In intensive agricultural areas a key problem is agro-chemicals. In municipal areas ground water is being polluted by seepage from solid waste dumps on permeable soils. Many lagoons have been polluted by prawn culture with inadequate waste treatment. In tsunami affected areas both surface and ground-water has been polluted by the incursion of salt water. The effect of this is not fully understood but it will directly affect health, and livelihoods in the more acute areas. It also inhibits investment.

Nearly two thirds of the country gets less than 1500mm of rainfall in a year and almost all of it comes during October to January. Storage shortages are being experienced already and the scope of increasing storage for future growth demand is very limited and prohibitively expensive. Transfer of water from surplus to deficit areas is expensive and social and environmental costs are very high. While excessive concentration in and around municipal townships has caused a drain in available water, in the coastal districts especially southern, north eastern and northwestern there is a shortage of potable ground water largely due to prolonged droughts and intrusion of salinity. The tsunami situation has aggravated this as most of the water sources were salinised. The rehabilitation efforts have drawn unprecedented demands on freshwater thus causing further salinity.

The country is rapidly experiencing a shortage of potable water due to administrative inefficiencies in controlling pollution of water resources. The main culprits are agriculture with special reference to paddy cultivation, industrialisation and disposal of industrial wastes to water bodies, urbanisation and consequent excessive generation of waste, open dumping of waste and the consequent pollution through leachates, uncontrolled sand mining causing salt intrusion. In coastal areas, prawn cultivation also has had a significant effect on water pollution. As a consequence of these, many freshwater and brackish water bodies are being polluted and the trend is continuing.

3.6.2. Solid waste and sewage disposal

The situation is getting worse in all areas and is now at the level were cases against municipalities are being brought to caught involving concerned citizens. The situation is particularly bad in coastal areas where lagoons or coral reefs are being destroyed. The effect of this is not fully understood but it will directly affect health, and livelihoods in the more acute areas. It also inhibits investment and has already affected tourism in some former beauty spots e.g. Hikkadua.

Although a comprehensive waste management strategy has been formulated nationally, failure to implement this at both national, provincial and local levels properly has led to many problems related to waste management including collection and disposal. Ad hoc arrangements for waste disposal by each Local Authority has given rise to high social and environmental costs. Despite many awareness efforts, there has been a marked failure in changing the attitudes of public significantly towards proper waste management including separation at the source, adhering to best practices in waste management etc. The Local Authorities who are responsible for waste collection and disposal are experiencing significant drawbacks in terms of funds and infrastructure, equipment etc. for optimal functioning. Proper disposal mechanisms in large scale ie land fills, incinerators etc. are almost non existent.

3.6.3. Land degradation and erosion

Man made erosion is only a major problem on steep slopes with an absence of permanent plant cover. This has occurred in the hill country on such areas as nationalised tea lands. The problem appears to have stabilised and many areas are being restored. Land degradation is accelerating in the country and is being estimated that already about 45% of the land is degraded. The main culprits of this are effecting land use without proper consideration to the land capabilities, Poverty also has a significant stake in this since 25% of the land is already under chena cultivation practices sometimes on steep slopes in the wet zone. About 80% of the land is under state ownership and there are significant encroachments sometimes on environmentally sensitive areas. A large number of institutions are involved in the management of land resources but proper co-ordination and enforcement of legislation is poor thus leading to acceleration of land degradation. The tsunami has caused new patterns of erosion and deposition that were made worse by injudicious removal of sand, coral and mangroves. The effect of this is yet to be full characterised on coastal topography and it is still too early to state the effects on sustainable development

3.6.4. Coral reef damage

The situation has stabilised in all areas with illegal destruction for sale of dead coral and for production of lime used in mortar for some brickwork and for rendering work only being carried out is selected locations. However, the destruction is likely to continue and be adversely affected by post tsunami rehabilitation. The effect on sustainable development is not fully known. The country has many coral reefs around the coastline. Many have fully or partially died due to many reasons ie warming of sea waters, marine pollution and physical damage from anthropological factors. Sea coral mining has caused severe coastal erosion along the south-west coast. The growth of the construction industry has led to the accelerated sea coral mining which involved the destruction of living reefs that form natural barriers against wave action. In addition despite the Coast Conservation Act, there are many unauthorised constructions and unplanned development along the coast causing beach erosion and reducing the aesthetic value. However, the Tsunami Reconstruction and Rehabilitation effort had prohibited any development up to 100-200m of the beach thus have a positive effect on erosion.

3.6.5. Mangrove damage

Significant areas of mangrove were cleared before 20 years ago. After this selected areas were cleared by the military and by people in areas where there was an absence of firewood. The rate of loss therefore has declined. The effect on future erosion, fish breeding areas and biodiversity is not full known other than it will be negative. The economic effect will be mostly felt by fisherman and agriculturalists, who's land is affected by coastal erosion. The extent of mangrove coverage in the country is small, around 0.1-0.2% of the total land area. Some mangrove areas are under the jurisdiction of Government Agent and others under the Forest Department. Due to the small extent they are being threatened due to various developmental efforts and also use in fisheries and related activities ie use as brush parks for fisheries, fuelwood and aquaculture and human settlements. Many mangrove areas have been instrumental in reducing the extent of Tsunami but in some areas mangroves have been adversely affected.

3.6.6. Sand mining

The problem is getting worse and will be made significantly worse by post tsunami reconstruction which will demand a considerable quantity of sand and aggregate for construction. The sand is mined from rivers and from the shoreline. Sand dunes are also destroyed for this purpose. The main effect is exacerbated coastal erosion. The economic effect will be mostly felt by fisherman and agr-culturalists who's land is affected by coastal erosion. River sand mining is increasing at a rapid rate in almost all the provinces while North-western Province recording the highest. The total sand mined had increased from 8.1 million m³/year in 2002 to 10.7 million m³/year in 2005. This is expected to rise further. Many sand dunes around the coast had been instrumental in reducing the extent of damage caused by Tsunami. However, as sand is an essential component in infrastructure construction, Tsunami Reconstruction has placed a significant constraint on the sand resource.

3.6.7. Biodiversity loss

The greatest loss of biodiversity in Sri Lanka is likely to have occurred in coastal and wetland areas. This loss is continuing at an alarming rate. Loss of forest biodiversity has stabilised. Spread of invasive species, continued loss of environmentally sensitive habitats, unsustainable extraction and trade of species collected from the wild habitats ie ornamental fish and plants, The biggest effect will be more instability in agro-ecosystems and a major loss of the countries main asset for sustainable development.

3.6.8. Forest loss

The rate of loss in all areas has reduced. In the North and East in war affected areas there is evidence of an increase in natural regeneration. There could be major economic advantages in a judicious programme of accelerated forest restoration, due to the absence of major irrigation and settlement projects. Illicit felling of forest for domestic and commercial purposes is still continuing despite stringent laws. Decline in forest habitat for wildlife has created a serious conflict between man and animal. Forest degradation occurred over 20 years due to war in the North and East but with the peace process the rate is slowing and abandoned areas are being naturally regenerated. Despite large number of legislation on forest conservation, poor implementation/enforcement is a problem

3.6.9. Safe drinking water

From a global perspective, Sri Lanka's position in terms of access to safe drinking water to all citizens by 2010 is 85% which is better than most of the other countries. Pipe borne water is available for only about 23% of the population and water from protected wells is available for 52%. Water from other sources such as rivers, streams and unprotected wells is available for about 21% of the population, therefore about 75% of the population has access to improved drinking water at present. However, improper sanitation especially in the estates in the central region as well as tsunami rehabilitation camps has increased the coliform counts in the waters significantly thus rendering the water unsuitable for consumption. This situation is aggravated by the salinisation caused by extensive pumping of water for tsunami affected areas.

This environmental catastrophe affects health, increases poverty and reduced investment. There are no clear statistics that link well contamination with mortality and morbidity.

4. ENVIRONMENTAL POLICY, LEGISLATIVE AND INSTITUTIONAL FRAMEWORK

4.1. ENVIRONMENTAL POLICY, STRATEGY AND LEGISLATION

The need for clear overarching environmental action plans and policy aimed at addressing environmental issues has been clear to the government since the early 1980's. National Environmental Action Plans (NEAP) have been in place since 1992. The third and last NEAP was for the period 1998-2001. Important recommendations of this plan and our comments are listed in the tables below for the private sector and the public sector respectively.

2001 RECOMMENDATIONS TO THE PRIVATE SECTOR	IMPRESSIONS OF PROGRESS BY 2005 AND SUGGESTIONS
Make concessionary finance available to smallholder farmers	Still problems of threshold
Encourage private sector investment in forest plantations	Limited
Formulate a policy to promote private sector investment in renewable energy projects	Very limited with problems of low prices paid for selling electricity to the grid
Issue environmental licenses through certified private licensed institutions	Limited
Establish a fund to finance private sector investment in environmental management activities/projects	Limited
Encourage private sector involvement in environmental insurance and financial guarantee activities	Limited
Make privatisation programme environmentally compatible	Limited
Institute environmental entrepreneur of the year awards	Achieved
Involve community organisations in land alienation decisions	Limited

In 2003 the ministry of environment and natural resources (MENR) recognised that "these actions however fell short of what is required for ensuring that the development process remains sustainable and that environmental integrity is maintained". They produced a booklet on National Environmental Policy and Strategies and an action plan entitled "Caring for the environment 2003-2007 Path to sustainable development". The objectives of the policy are

- To promote the sound management of Sri Lanka's environment in its entirety without compromise, balancing the needs for social and economic development and environmental integrity, to the maximum extent possible restricting inimical activities
- 2. To manage the environment by linking together the activities, interests, and perspectives of all groups including the people, non government organisations and government at both central and local levels
- 3. To ensure environmental accountability

Key new concepts in the principles section of the policy are "polluter pays" and "governance". Key new concepts in the statements section are "life cycle and cleaner production" and "public-private and community partnerships". The policy and strategy document does not have any targets or indicators.

2001 RECOMMENDATIONS TO THE PUBLIC SECTOR	IMPRESSIONS OF PROGRESS BY 2005 AND SUGGESTIONS
Restructure CEA to meet the change in needs brought about by devolution, decentralisation and privatisation	Achieved
Establish an environmental and natural resources data base centre	Some progress
Institute policies to mandate rehabilitation and restoration of degraded land	Limited
Institute national environmental monitoring and environmental performance indicators	Limited
Improve policy analytical capacity of the Ministry of Forestry and Environment, particularly of its environment division	Achieved
Promote the establishment of internationally accredited Association for Environmental Professionals	Limited
Create an Environmental Issues Mediation Board	Limited
Establish a Trade and Environment Committee	Achieved
Establish a regulatory framework to manage bio-safety, bio-technology and bio-prospecting	Limited
Help Sri Lanka Standards Institution to promote compliance with ISO 14000 standards in Sri Lanka	Achieved

The action plan is also innovative in that it considers environmental dimensions of sectoral activities Key features are listed overleaf under sectoral headings

SECTOR	INNOVATIVE ACTION				
	Promote agroforestry				
Forestry and wildlife	Put degraded and fallow land in the dryzone to productive use				
	Involve the private sector in conservation of forests and wildlife				
Agricultura Diantationa land	Investigate why 1996 Soil conservation act has not worked				
Agriculture Plantations land development and mining	Investigate use of 1 million ha of sparsely used or fallow land e.g. non-irrigable uplands				
development and mining	Take action on encroachments				
Fisheries and Coastal and	Involve local communities in management				
Marine area management	Encourage co-operation between countries of the region in conserving the marine and coastal environment				
Industry and tourism	Encourage locating or relocating polluting industries to zones with adequate facilities				
industry and tourism	Encourage eco-lodges and small scale guest houses with minimal environmental impact				
	Promote the use of renewable energy				
Energy and transport	Impose standards for the import and use of motor vehicles and engines				
	Regularly monitor atmospheric pollutants at strategic locations				
Health Sanitation and Urban Promote rain water harvesting in urban areas					
development	Upgrade the houses of people living in slums				

Unfortunately there are no targets and clear indicators in the action plan. There is a general lack of clarity on who is to do what by when and how quality of action will be measured, In addition none of the government ministries and departments appear to have clear published public service agreements.

4.2. NATIONAL ENVIRONMENTAL LEGISLATION

There appears to be a very high number of acts and ordinances to do with rational management of natural resources and the environment. The latest official list with comments is given in Technical Appendix.III. In discussions with MENR, the only act which appeared to require high priority further development was concerned with soil conservation.

The stakeholder workshop involved an assessment of the adequacy of policy in relation to the key environmental issues. The analysis of the adequacy of policy and law was based upon its effectiveness in dealing with the problem, which in turn requires adequate monitoring and enforcement along with the involvement and compliance of the private sector The results are shown below with the percentage of yes answers

ISSUE	Monitoring	ENFORCE- MENT	Policy	Law	PRIVATE SECTOR INVOLVEMENT
Surface and ground water pollution	0%	0%	14%	29%	57%
Solid waste and sewage disposal	0%	0%	14%	21%	79%
Land degradation and erosion	7%	0%	21%	29%	86%
Coral reef damage	21%	0%	36%	57%	71%
Mangrove damage	7%	0%	14%	43%	71%
Sand mining	7%	0%	7%	29%	71%
Biodiversity loss	7%	0%	36%	29%	57%
Forest loss	36%	21%	64%	64%	71%
Safe drinking water	29%	21%	29%	21%	71%

The main conclusion is that enforcement is the main problem and to a lesser extent monitoring. It is clear that there is a role for the private sector in terms of environmental improvement of business operations and helping to set enforceable regulations. Forestry as a sector has had large donor support. Perhaps this is reflected in the comparatively high scores that the issue obtained in policy, law, monitoring and enforcement. Drinking water monitoring had a reasonably high score.

There does appear to be good public participation in the drafting of laws. The free press is a good vehicle for this. There is less participation in the drafting of national policy. There appears to be a long way to go in terms of the influence of village level plans on divisional and district level actions.

4.3. INTERNATIONAL ENVIRONMENTAL LEGISLATION

The table overleaf shows the legislation that Sri Lanka has signed up to and the departmental responsibilities. Most of this is straightforward apart from the convention on biological diversity which requires a very high level of co-ordination between several ministries. The convention is unrealistically complex and very few countries can comply effectively.

CONVENTION	DATE	FOCAL POINT
Convention on Wetlands Of International Importance Especially As Waterfowl Habitat (1971) – Ramsar		Department of Wildlife Conservation
Convention concerning the protection of the World Cultural and Natural Heritage (1972)		Ministry of Cultural Affairs
Convention on International Trade un Endangered Species Of Wild Fauna and Flora (1973)- CITES		Wild life Department
Convention on the conservation Of Migratory Species of Wild Animals (CMS 1979)	23.06.1979	Wild life Department
United Nations Convention on The Law Of the Sea	10.12.1982	MPPA
Vienna Convention for the Protection of the Ozone Layer (1985)		MENR
Montreal Protocol on Substances That Deplete the Ozone Layer (1987)		MENR
Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (1989)		MENR
Convention on Biological Diversity (1992)	10.06.1992	MENR
United Nations Framework Convention on Climate Change	10.06.1992	MENR
United Nations Framework To Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, particularly in Africa (1994)	09.12.1998	MENR
Agreement relating to the implementation of part XI of the United Nations of the United Nations Convention on the Law of the Sea of 10 th December 1982	29.07.1994	Ministry of Foreign Affairs
Agreement for the implantation of the provisions of the United Nations Convention on the Law of the Sea of 10 th December 1982 relating to the conservation and management of straddling fish stocks and highly migratory fish stocks	09.10.1996	Ministry of Foreign Affairs
(Copenhagen) Amendment to the Montreal Protocol on substances that deplete the Ozone layer		MENR
Montreal Amendment to the Montreal Protocol on substances that deplete the ozone layer		MENR
Agreement on the Network of Aquaculture Centres in Asia and the Pacific		MFOR
Convention on the Prohibition of the Development, Production, Stockpiling and use of Chemical Weapons and on their destruction	14.01.1993	Ministry of Foreign Affairs
Agreement for the establishment of the Indian Ocean Tuna Commission		MFOR
International Plant Protection Convention		MAL
Plant Protection Agreement for Asia and Pacific Region* (as amended)		MAL

CONVENTION	DATE	FOCAL POINT
Convention on the Continental Shelf	30.10.1958	Ministry of Foreign Affairs
Convention on Fishing and Conservation of the Living Resources of the high seas	30.10.1958	MFOR
Convention on the High Seas	30.10.1958	MFOR
Convention concerning the protection of workers against ionizing radiations		MFOR
International Convention on Civil Liability for Oil Pollution Damage (as amended)		MPPA
International Convention relating to intervention on the high seas in case of oil pollution casualties		MPPA
International Convention on the establishment of an international fund for compensation for oil pollution damage (as amended)		MPPA
Convention on the prohibition of the development, production and stockpiling of bacteriological (biological) and toxin weapons and their destruction	14.01.1993	Ministry of Foreign Affairs
Convention on the prohibition of military or any other hostile use of environment modification techniques	08.06.1977	Ministry of Foreign Affairs
(London) Amendment to the Montreal Protocol on Substances that deplete the ozone layer		MENR
The International Convention for Prevention of Pollution from the ships (MARPOL)- 1973		MPPA
Bio-safety Protocol	24.05.2000	MENR

4.4. ENVIRONMENTAL INSTITUTIONAL FRAMEWORK

4.4.1. Institutional arrangements within MENR

The divisional responsibilities of the ministry are shown below

DIVISION	RESPONSIBILITY
Natural resources management	Natural resources policy and implementation
Biodiversity	Formulating National policy framework
Pollution management	Pollution management directives
Policy planning	Facilitates National environmental policy implementation
Environmental Economic and global affairs	Global initiatives
Promotion and environmental education	Awareness
Human resources development	Support
Legal	Support
Finance and administration	Support

The agency responsibilities of the ministry are shown overleaf along with budget and revenue for 2005.

4.4.2. The CEPOM approach

The institutional framework proposed for co-ordinating progress in NEAP 1998-2001 was the setting up of Committees on Environmental Policy and Management (CEPOM). These were thought to help with inter ministerial and inter sectoral issues. Eight were established; Land and Minerals, Water, Biodiversity, Coastal and Marine, Industry, Energy and Climate change, Environmental health and Urban and the Built environment. The effectiveness of these was thought to be limited by the fact that some were concerned with resources and others with sectors of development. The following are now proposed by MENR:

- Forestry and wildlife conservation
- Agriculture plantations land development and mining
- Fisheries coastal and marine management
- Industry and tourism
- Energy and transport
- Health, sanitation and urban development

AGENCY	RESPONSIBILITY	CAPITAL MILLION	RECURRENT MILLION	REVENUE MILLION
Forest Department	Silviculture, Forest inventory & Management, Environmental Management, Forestry Research& Education, Social Forestry & Extension, Planning & Monitoring, Forest Protection & Law Enforcement	Rs.62.5	Rs.359.9	Rs. 208.125
Department Of Wildlife Conservation	Maintaining a network of protected area which covers 13% of total land area of Sri Lanka, including 15 National Parks, 4 Natural Reserves, 3 Strict Natural Reserves & 55 Sanctuaries.	Rs.65.0	Rs.178.88	Rs. 200
Department Of Natural Zoological Gardens	Conservation of the endemic species, Maintenance of an accurate Gene Data Base, Creating the proper conditions for entertaining visitors.	Rs.3.35	Rs.5.64	Rs.162
Department Of Meteor- ology	Observe & collect meteorological, climatological, hydro- meteorological, agro-meteorological elements. Understand the weather & climate over Sri Lanka.Provide relevant information to anyone who needs them.	Rs.45.0	Rs.63.7	Rs. 40.0
Central Environmental Authority (CEA)	Environment pollution control, Environmental Management & Assessment., Environmental Education & Awareness, Human Resource Development.		Rs.126	Rs.10.0
Geological Survey And Mines Bureau	Undertaking the systematic geological mapping, Assessing the mineral resource of the country.	Rs. 80.8	-	Rs. 126.1
State Timber Corporation (STC)	Extraction of timber from forests, Conversion of such timber Maintaining finished products, Sale of logs, sawn timber & finished products, Construction of forest roads for log extraction, Operating sawmills, Impregnation & preservation of plants, Import of timber. Scientific management of forests & forest plantations.	Rs.1314.17	-	Rs.1536.03
Marine Pollution Prevention Authority (MPPA)	Formulate & execute schemes for marine pollution prevention. Undertake related research. Take measures to manage & safeguard territorial waters. Provide shipboard waste reception facility. Provide facilities for bunkering activities. Formulate & implement National Oil Spill Contingency Plan. Create awareness among general public.	Rs.12.8	Rs.16.78	Rs.1.5
Wildlife Trust Of Sri Lanka	1. Conduct education & awareness programmes on wildlife conservation and related activities of the country.	Rs.26	Rs.39.12	Rs.10

The proposed membership would include:

- Key officials of government bodies e.g. ministries
- Experts
- NGOs
- Private sector
- Provincial administration

The role of the committees would be to advise and monitor

4.4.3. Post Tsunami structures

In terms of the brown environment the following works have been identified:

- Road rail port and power development
- Housing development
- Solid waste and sewage disposal
- Water supply
- Harbour and bridge development

In terms of the green environment the following works have been identified:

- Ecosystem restoration
- Habitat restoration

The co-ordination of works and linking of donor contributions is carried out by the task force for rebuilding the nation (TAFREN). There are a number of sub committees e.g. housing and a number of plans have been prepared e.g. the UN post Asian tsunami waste management plan.

For the North and the East of the country, a post tsunami operational management structure (PTOMS) is currently under negotiation. This would channel donor funds to the region and involve representatives of government and the LTTE

4.5. INTEGRATION OF ENVIRONMENTAL CONCERNS INTO THE MAIN SECTORS

4.5.1. Integration with sustainable development and poverty elimination

The CEPOM approach as outlined in section 3.4.2 would improve awareness of environmental issues by such ministries as Industry, Tourism, Energy and transport, Health etc but would not be adequate to show high level macro economic, financial and poverty reducing benefits of using environmental approaches for sustainable development. At present there is little operational linkage between poverty reduction programs e.g. Samurdhi and environmental based technologies for sustainable development. There is also no apparent recognition by poverty reduction programmes that the role that environment plays in livelihoods varies with location and ethnicity. The integration of poverty with environment is best done by understanding the role that the environment plays from the viewpoint of the poor.

4.5.2. Integration in relation to ministerial hierarchy

Under the current situation, ministries would tend to see the MENR as a kind of environmental police that would wish to restrict their activities. Many sectoral project designers would have to "jump through hoops" set by MENR. The only way that this could be overcome would be by creating economic intelligence unit at the level of a Presidential Office concerned with modelling and monitoring environmental technology and approaches on poverty development and economic development. Such a unit would require a GIS approach linked to clear geographical data on land ownership (land registry). This is currently absent.

4.5.3. Spatial integrated planning

There are marked differences in the density of poverty, ethnicity, and livelihood across the country. There are also marked differences in agro-ecological environment and across the country. In order to improve perception of the role of environment in sectoral development and the links with poverty production and economic group, it is essential to develop an environmental (sustainable) development zone approach. This is currently absent. The following method was used to develop a zonal approach based upon literature analysis, expert consultation, and testing at the workshop:

- The tsunami zone is distinct in its environmental problems and potentials, available funds through new political structures and livelihood opportunities
- The municipality or dense urban zone is distinct in its environmental problems and potentials, type of poverty, and potentials for business development
- The coastal non-tsunami zone is distinct in its environmental problems and potentials and has varied livelihood potentials and political structures
- The high potential zone has the greatest availability of water, biodiversity and plantation industry yet has poverty at high density levels
- The double crop paddy zone has a good agricultural base with minor and major irrigation activities
- The remaining low population and rainfall zone has relatively low population and therefore poverty density has low production potential but high potential for extensive extractive reserves and agroforestry.

Map One in Technical Appendix 6.1 shows the extent and location of the zones. Map two shows the distribution of poverty density but unfortunately figures do not appear to be available for the North and East. Map three is a provincial boundary map and map four is a district map. The table overleaf shows some of the key features of this zone, key environmental potentials and key strategic approaches to poverty alleviation.

ZONE	Character	KEY ENVIRONMENTAL TECHNOLOGIES	EC ENVIRONMENTAL POVERTY REDUCTION STRATEGY
Tsunami	Disaster area with minimal livelihood potential, fishing tourism and agriculture. Major donor funds available.	Reconstruction and rehabilitation works including production of cement concrete and other building materials, Tourism and marine fisheries	Training for construction employment using environmental sound approaches and roof top rainwater harvesting. Research and European links in eco-building approaches. Marine fishery development. Lagoon beach and other focused touristic development
Municipality	Urban sprawl with integral slums. Good infrastructure and high investment potential. Access to labour and markets. Poor continuity of electricity supply. Second highest poverty density.	Electricity from biomass, recycling and solid waste composting, non polluting vehicles. Urban forestry	Encourage investment in environmental technology by European links and reform of business environment. Slum led participatory development plans linked to waste as a resource
Coastal non tsu- nami	Tourism especially cultural and nature, fishing	Marine fishery, Fish product processing	Encourage European links in eco and cultural tourism, marine fisheries and fish/shell fish product development.
High potential	Very high touristic potential, high value crop production. Low number of protected areas. High investment and asset values. Water catchment is forest and plantation crops. Highest poverty density	Agro-tourism, Bottled water from named catchment sources, biodiversity research and commercial development, very high value crops e.g. orchids and medicines.	High intensity high value agroforestry. Encourage joint work in bottled water, rain forest products, medicines an restoration of forest function using high value fruit and nut trees.
Double crop	Major irrigation schemes, minor tank based schemes, clear forest catchments	Agricultural and high value crop production, animal husbandry and animal products e.g. milk	Tank rehabilitation, improved marketing processing and sale of agricultural products
Low population low rainfall	Low poverty density, high forest cover and denuded forest lands	Extractive reserves for bio-energy, insect products e.g. lac and silk, dendro energy and biodiesel plantations	Partnership approaches for extractive reserves. Not agricultural development as this is not cost effective.

3.5.4 Post tsunami

The tsunami and the linked donor fund commitment offers unique opportunity for pro-active environmental development.

3.5.5 Sectoral and partnership synergy

It is very clear from the workshop and government literature, that there is very little awareness of the role that the private sector can play in sustainable development and environmental improvement. The table below shows stages of awareness and behaviour.

	F PERCEPTION OF THE ROLE OF THE PRIVATE IMAGE AND ACTION RELATION TO THE ENVIRONMENT
1	The private sector is causing the problem and needs to be policed
2	The private sector may give donations to environmental causes
3	The private sector could carry out environmental management and poverty reduction under our direction
4	Parts of the private sector have a core business which generates profit, gives environmental improvement, and reduces poverty
5	Parts of the private sector will help improve environmental regulations and assist in their enforcement as part of vested interest (market share)
6	We have analysed the role the private sector can play and have built a strategy on how the government can facilitate positive private sector action based upon a functional classification of companies

The present situation in Sri Lanka is level two moving on to level three. The most creative part of the stakeholder workshop was based on an exercise to identify key industry for a win:win:win scenario in relation to profit:poverty reduction:environmental improvement. The outcome is presented in the table overleaf.

INDUSTRY	PROFIT	POVERTY REDUCTION	ENVIRONMENTAL IMPROVEMENT	MOST PROMISING ZONES	PARTNERSHIP REQUIRED *	COMMENT
Cement and concrete	***	**	***	Factory needs to be close to lime and or gypsum. Construction in tsunami zone	PC	Dominant companies could help regulate cowboy operations using coral and river/sea sand. Heat using factories could use biomass and sell waste heat and electricity (CHP) as by products replacing non renewable polluting sources. People employed in construction and biomass
Wood, mud and thatch in buildings	***	***	***	Tsunami	GPC	Needs research for long life socially acceptable buildings (past styles in Sri Lanka did not have longevity)
Biodiesel using Jat- ropha curcus or Pongamia pinnata	***	***	***	Low rain low popula- tion	GPC	Plantations to be intercropped with food and cash crops. Liquid fuel replaces fossil diesel with concomitant pollution and balance of payments benefits. High energy density improves transport economics and energetics.
Bottled water	***	**	**	High potential	GP	Catchment labeled water should have surcharge to generate loan guarantee funds for small loans in environmental development within the catchment
Mobile phones	***	***	*	Double crop	GP	Service providers should pay tax on a regional basis to generate loan guarantee funds for small loans in environmental development within the region. Also a rent paid on masts. Mobile phones reduce poverty where market information is a limiting factor
Tasar silk	***	***	***	Low rain low popula- tion	GPC	Silk from Terminalia trees provides rural employment
Vermicomposting	***	***	***	Municipality	GPC	Urban income from compost and sale of worms

^{*}G = government; P = private sector; C = community based company

5. EU AND OTHER DONOR CO-OPERATION WITH THE COUNTRY FROM AN ENVIRONMENTAL PERSPECTIVE

5.1. INTRODUCTION

Donor co-operation with Sri Lanka from an environmental can take several forms. These are listed below:

- In relation to instrument e.g. bilateral development or economic co-operation (DEC), bilateral rehabilitation (war and or tsunami) and small project grant.
- In relation to sector e.g. directly to the environment sector (e.g. forestry or coastal management), to sectors with major environmental impact (e.g. energy, roads, area development), or as a consequence of poverty or governance programs.
- The trends in co-operation are presented in the table overleaf with the major donors listed in order of highest contribution. (P refers to past, C to current and F to future support)

5.2. THE EUROPEAN COMMISSION

On the basis of the CSP, the 2006 NIP will focus on two components: i) support to the peace process, through the resettlement of Internally Displaced Persons (IDPs) and improving good governance in the North and East and ii) economic co-operation and trade-related technical assistance. The programming mission for the next NIP 2007-2013 took place early June 2005. The E.C. is interested in taking stock of the present situation and integrating Environment as a cross-cutting issue for all future reconstruction programs.

5.3. MAJOR FINDINGS

The major donors with a commitment to fund environmental interventions in Sri Lanka is order of scale are Asian Development Bank, World Bank, UNDP and Dutch Aid.

Major changes in strategy have and are taking place within the EC and DFID. For both donors the total development and economic co-operation assistance has reduced due to Sri Lanka becoming a middle income country. For both donors rehabilitation funds have overtaken normal co-operation funding.

Both EC and DFID are moving to more poverty focused support with emphasis on pro-poor strategies. Both are moving away from "projects" to "sector wide or direct support" mechanisms.

DFID now has a very narrow approach to development relying purely on funding the government's own response to the problem of poverty elimination.

Donor approaches are very weak at learning lessons due to weaknesses in human resource strategy, monitoring and evaluation, and clarity. It is unfortunate that few of the lessons learned from careful evaluation, research or small project approaches are fed back to the design of major programs. This is especially the case with environment where donor impact on the ground in Sri Lanka appears to have had less impact on the ground during the last ten years than it did in the previous decade.

Donor	INSTRUMENT	ENVIRONMENT SECTOR	SECTORS WITH IMPACT	POVERTY OR GOVERNANCE	COMMENT
ADB	DEC	PCF	PCF	PCF	Uses grants linked to loans
	Rehabilitation	PCF	PCF	PCF	
	Small grant	PCF			Small grants chanelled through GEF
World Bank	DEC	PCF	PCF	PCF	Uses grants linked to loans
	Rehabilitation	PCF	PCF	PCF	
	Small grant	PCF	PCF	PCF	
UNDP	DEC	PCF	PCF	PCF	Grant
	Rehabilitation	PCF	PCF	PCF	
	Small grant	PCF	PCF	PCF	
Dutch Aid	DEC	PCF	PCF	PCF	Grant often as co-funder or paral- lel-funder to multilateral bank
	Rehabilitation	PCF	PCF	PCF	
	Small grant	PCF	PCF	PCF	Limited scale
EC	DEC	PC	PCF	PCF	
	Rehabilitation	PCF	PCF	PCF	
	Small grant	PCF	PCF	PCF	Large scale and very diverse
DFID	DEC	Р	Р	PCF	Major contributor to forestry in the past now grant often as co-funder or parallel-funder to multilateral bank
	Rehabilitation	PCF	PCF	PCF	
	Small grant	Р	Р	PCF	Used to fund research projects mainly

6. CONCLUSIONS AND RECOMMENDATIONS

6.1. CONCLUSIONS

6.1.1. Key environmental factors affecting development, tends, and the adequacy of response

The most important factor affecting development has been the war. This coupled with political instability has led to limited national and financial investment. The insecurity of areas especially to the North and East has meant that thinking and action on aspects of environment and development by the government and the private sector have been constrained to the extreme of having what appears to be an island within an island. Essentially we have a situation of a densely populated resource rich (water and cash crops and minerals) south west quartile with municipal growth centres in Colombo and Kandy surrounded by a sea of neglected sparsely populated resource poor land dominated by low returns from subsistence agriculture and fishing. Exceptions to the rule occur in the North Central Province where there are major irrigation schemes and parts of Jaffna with high value fruit and vegetables. The link between poverty and environmental degradation is extremely complex in Sri Lanka. It is clear however that some environmental degradation is caused by neglect (monitoring and enforcement) and injudicious business practice (paying for "mined" rather than "sustainable managed" resources) rather than damage caused by people trying to subsist. Environmental problems have been made worse on most of the coast by the tsunami and some tsunami rehabilitation methods could exacerbate matters

Key issues and the adequacy if response are listed below in order of severity:

- Coastal degradation pre-tsunami ranks among the world's worst with rampant mangrove, coral, and lagoon destruction coupled with injudicious sand mining and pollution killing off most of the remaining plant and animal communities. This has happened over a twenty year period and made the effects of the tsunami worse. It is too early to see the full effect of the tsunami on coastal ecology but fish returns are already affected. The response of citizens, business, and government is inadequate.
- 2. Safe drinking water is hard to come by in the North and the West and has been made worse by the tsunami through salt-water contamination. The response of citizens, business, and government is inadequate.
- 3. Solid waste and sewage disposal in dense urban areas is a health problem that limits investment in the neighbourhood. The response of citizens, business, and government (especially municipalities) is inadequate
- Surface and ground water pollution occurs in urban dump sites, high input agricultural areas, lagoons and tsunami affected areas. The response of citizens, business, and government is inadequate
- 5. Land degradation and erosion is an ongoing issue in the whole country with special reference to the central highlands. The tsunami has remodelled coastal topography and ecology with a knock on effect on the pattern of erosion and deposition.
- 6. Terrestrial biodiversity and forest loss has now slowed down due in part to war and in part to long term donor assistance. Monitoring and law enforcement by government has been adequate. Restoration work is still at a pitiful level however.

All of these issues will increase poverty by reducing livelihood opportunities and investment. Pollution of drinking water and stagnant water in waste dumps will cause illness and death.

6.1.2. Environmental policy legislation and institutions including civil society

Environmental policy and law is on the whole adequate. A main weakness lies in a lack of instruments that would empower people and business to fully contribute. A further weakness is lack of monitoring and enforcement. Official data on poverty and environment in the North and East is inadequate. Government has found it difficult to maintain enforcement in the region due to the war and current perceptions of instability. Enforcement is also weak in the more developed areas of the south west quadrant. Governance in Sri Lanka has improved in terms of a reduction of red tape and corruption, but conditions for local and foreign investment are still not good.

Sri Lanka is conforming to international legislation to the best of its ability

The Ministry of Environment and Natural Resources has been effective as an environmental police force setting policy and standards but has had little influence on many damaging sectoral policies e.g. energy. The link between environmental potential and poverty reduction appears to have no institutional home in Sri Lanka at present but the National Environment Act is a good start at improving inter sectoral linkages.

Perhaps the most important institutional constraint however is a lack of data on illegal land ownership, occupation and use. This is coupled with a lack of poor enforcement of laws and statutes.

There are few examples of pro-active partnership between government and business where environmental improvement is an objective.

Civil society in Sri Lanka is good in terms of open participation in the development of laws but weak in terms of environmental NGOs active in advocacy and the establishment of best practice in sustainable development. Effective environmental and environmental development NGOs in Sri Lanka would benefit from institutional strengthening.

6.1.3. Planning and research

Environmental development planning in Sri Lanka is currently inadequate for a variety of reasons including:

- 1. There is no super ministry or presidential office where land use (linked to registry and geographical information) and environment policy can be modelled and the role of line ministries monitored and regulated in the attainment of millennium development goals, e.g. poverty reduction. The Ministry of Finance and Planning are involved in macro planning for the entire country and have been given the task of monitoring the MDG. With regard to land information, there is a separate division on land use policy planning where GIS is being extensively used for planning.
- 2. There is no system of environmental development zones linking clear planning, biological and social issues and potentials.
- 3. There is no research or appreciative inquiry by government on how the private sector could play a role in delegated sustainable management of resources, environmental monitoring, enforcement and environmental business and or social enterprise.
- 4. There is little evidence of major research or innovation in appropriate technologies e.g. building and infrastructure in the tsunami zone. Key organisations involved are Univ of Moratuwa, National Building Research Organisation and the National housing Authority.

6.1.4. Donor responses

The major donors with a commitment to fund environmental interventions in Sri Lanka is order of scale are Asian Development Bank, World Bank, UNDP and Dutch Aid.

The main approach of all donors to environment has been capacity building at central and local level. The funds have produced few results of high impact or sustainability. It appears that organisational development approaches linked to delegated management would achieve more. Encouragement of public private partnerships is of central importance.

EU- Sri Lanka co-operation has traditionally focused on poverty alleviation through rural development. However, the balance has shifted towards economic co-operation as Sri Lanka's economy developed. In the post- cease-fire environment, the Commission proposed significant extra funding to support rehabilitation and reconstruction efforts. Due to the conflict, a large proportion of EC's assistance has been through ECHO, for humanitarian relief operations, and from the Aid to Uprooted People budget line for assistance programmes in favour of the displaced people in the North and East.

The Commission has committed significant additional funding for humanitarian relief (approximately 30 million Euro) as well as reconstruction (approximately 100 million Euro) in response to the tsunami. The two main area of activity for tsunami reconstruction in Sri Lanka are support to livelihood and communities in the North and East, through UNDP and the proposed multi-donor Trust\t Fund, and support for reconstruction of the key Matara- Batticaloa partly coastal road running from the South to the East of the country.

EC economic co-operation through links with Europe appears to be too thinly spread and could be usefully concentrated on environmental technology, which is an area in which Europe has a comparative advantage.

Donors appear to find it difficult to link environment to economic co-operation and poverty reduction. They also appear to find it hard to use small grant programs and evaluation to learn lessons in order to improve the impact and sustainability of major projects and programs

6.1.5. Mainstreaming mechanisms

Environment can be "mainstreamed" into development thinking through four approaches

- 1. By realising that environment is the engine of development for the 21st century. Bio and eco information is one comparative advantage that Sri Lanka has. Environment is not only "something to be protected or preserved"
- 2. By recognising that Millennium goal no 7 has key indicators of judicious environmental development.
- 3. By establishing an environmental development strategy for international and national public private partnerships in functionally important development zones.
- 4. By approaching poverty reduction through a livelihood approach. Poor people have a story to tell about how environment has meaning to them in terms of health, jobs, and their vulnerability. They also have assets including environmental knowledge that can help them to rise above the poverty line. If donors and government use this knowledge, operationally important axpects of the environment will already be "mainstreamed".

6.2. RECOMMENDATIONS

6.2.1. Country strategy and national indicative program

- The strategy should be guided by the environmental development zone approach in order to maximise impact and sustainability in poverty reduction and economic co-operation. The table overleaf illustrates the main features.
- 2. Any programme or project in the tsunami zone should have a full EIA
- 3. Land registry and the link between poverty and environment and its institutional home is the most important environmental issue and if possible should form the basis of a project.
- 4. The housing, road and energy sectors could have the highest impact on poverty elimination linked to the creation of new environmental opportunities
- 5. Economic co-operation between Europe and Sri Lanka should focus on environmental business and social enterprise and be guided by a study of win:win:win business partnership models
- 6. Any area development project should consider organisational development and delegated management approaches rather than purely increasing government "capacity". Monitoring the constraints to environmental business and environmental business partnerships should be a central part of design. Along with recording livelihood perceptions of important environmental limitations.

6.2.2. Rehabilitation

7. An environmental assessment should be carried out as soon as possible as many tsunami interventions are and will have significant negative impact. Tsunami recovery in most areas will take between 5 and 10 years given current rates of progress

Regional

- 8. The tsunami condition on Asia wide programs should be extended for five years
- Links between Asia and European environmental business in building, roads, solid waste / sanitation and energy should be a priority and research partnerships in these areas should be encouraged.

Sub regional

- 10. An identification mission is needed to investigate the potential for EC funded SAARC actions on
 - Centre for sustainable marine fisheries
 - Centre for biodiversity

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CENTRE FOR FOREST RESTORATION LINKED TO POVERTY ELIMINATION ZONE	CHARACTER	KEY ENVIRONMENTAL TECHNOLOGIES	EC ENVIRONMENTAL POVERTY REDUCTION STRATEGY
Tsunami	Disaster area with minimal livelihood potential, fishing tourism and agriculture. Major donor funds available.	Reconstruction and rehabilitation works including production of cement concrete and other building materials, Tourism and marine fisheries	Training for construction employment using environmental sound approaches and roof top rainwater harvesting. Research and European links in eco-building approaches. Marine fishery development. Lagoon beach and other focused touristic development
Municipality	Urban sprawl with integral slums. Good infrastructure and high investment potential. Access to labour and markets. Poor continuity of electricity supply. Second highest poverty density.	Electricity from biomass, recycling and solid waste composting, non polluting vehicles. Urban forestry	Encourage investment in environmental technology by European links and reform of business environment. Slum led participatory development plans linked to waste as a resource
Coastal non tsunami	Tourism especially cultural and nature, fishing	Marine fishery, Fish product processing	Encourage European links in eco and cultural tourism, marine fisheries and fish/shell fish product development.
High potential	Very high touristic potential, high value crop production. Low number of protected areas. High investment and asset values. Water catchment is forest and plantation crops. Highest poverty density	Agro-tourism, Bottled water from named catchment sources, biodiversity research and commercial development, very high value crops e.g. orchids and medicines.	High intensity high value agroforestry. Encourage joint work in bottled water, rain forest products, medicines an restoration of forest function using high value fruit and nut trees.
Double crop	Major irrigation schemes, minor tank based schemes, clear forest catchments	Agricultural and high value crop production, animal husbandry and animal products e.g. milk	Tank rehabilitation, improved marketing processing and sale of agricultural products
Low population low rainfall	Low poverty density, high forest cover and denuded forest lands	Extractive reserves for bio-energy, insect products e.g. lac and silk, dendro energy and biodiesel plantations	Partnership approaches for extractive reserves. Not agricultural development as this is not cost effective.



Framework Contract AMS/451 Lot N°6
Request for Services N°2005/102913 – Version 2

Country Environment Profile of Sri Lanka

Final Report - Technical Appendices

August 2005



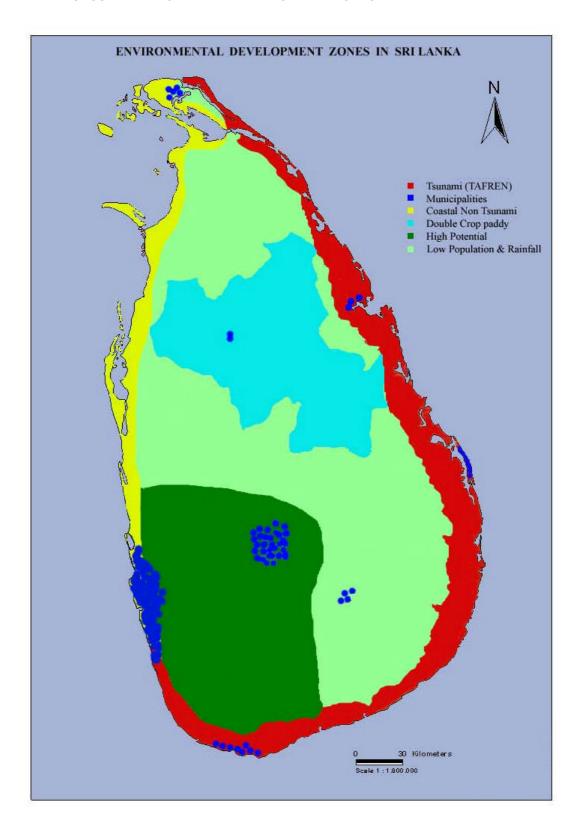
This project is funded by the European Union



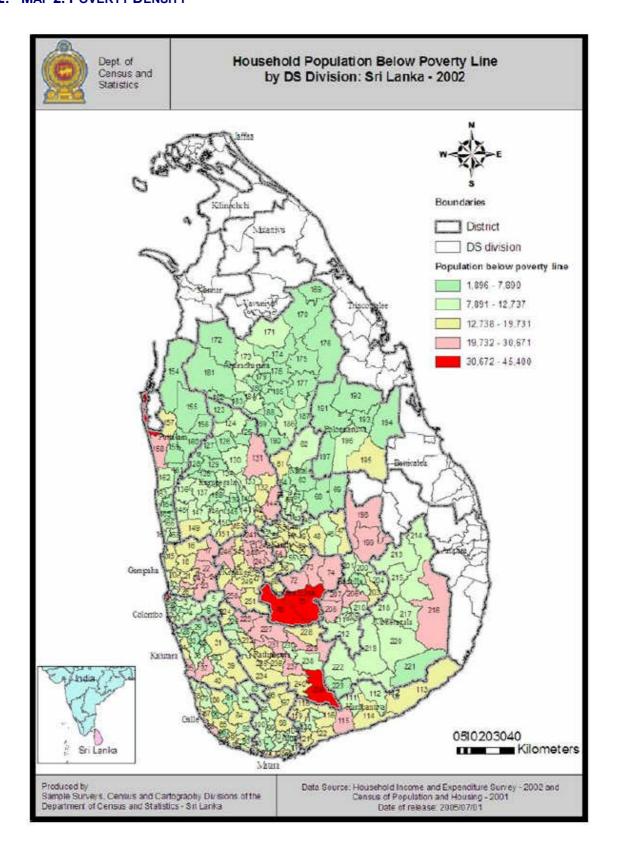
A project implemented by MWH

Appendix 1: Environmental maps of the country

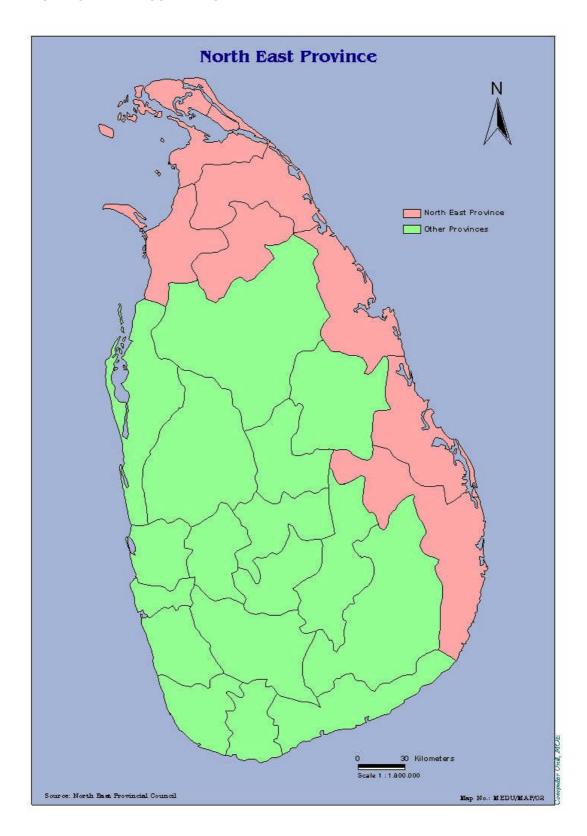
1. Map 1. Proposed Environmental Development Zones



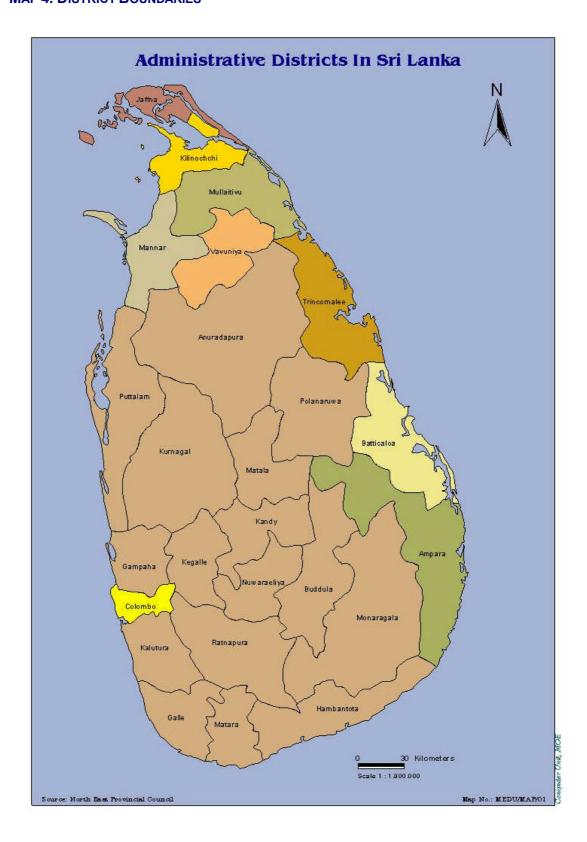
2. MAP 2. POVERTY DENSITY



3. MAP 3. PROVINCIAL BOUNDARIES



4. MAP 4. DISTRICT BOUNDARIES



Appendix 2: Reference list of environmental policy documents, statements and action plans, and other relevant technical information.

1. EC DOCUMENTS

- National Indicative Programme 2006
- The EC and Sri Lanka, Co-operation Strategy 2002-2006

2. SRI LANKAN AND DONORS DOCUMENTS

- Annual Report 2004 Central Bank of Sri Lanka
- Biodiversity And The Millennium Development Goals IUCN Balakrishna Pisupati, Emilie Warner – December 2003
- Biodiversity Conservation in Sri Lanka Ministry of Forestry and Environment 1999
- Caring For The Environment 2003-2007 Ministry of Environment and Natural Resources September 2003
- Guide for Implenting the EIA process, No 1, 1998. Central Environmental Authority, Sri Lanka – 1998
- Johannesburg Summit 2002, Sri Lanka Country Profile UN 2002
- National Forestry Policy And Executive Summary Ministry of Agriculture, Lands and Forestry November 1995
- Natural Environmental Policy and Strategies Ministry of Environment and Natural Resources August 2003
- Post Tsunami Environmental Assessment in Sri Lanka Ministry of Environment and Natural Resources – June 2005
- Poverty Reduction Through Improved Natural Resource Management SLANRMP
- Progress Report 2004 And Action Plan 2005 Ministry of Environment and Natural Resources
- Rapid Assessment of Damage to Natural Ecosystems in the Coastal and Associated Terrestrial Environments – Ministry of Environment and Natural Resources
- Rapid Environmental Assessment on Post-Tsunami Brown Environment University of Moratuwa – June 2005
- Review of Environmental Legislation in Sri Lanka (Volume 1) Central Environmental Authority, Ministry of Environment and Parliamentary Affairs
- Sri Lanka Poverty Assessment WB June 2002
- Sri Lanka Protected Areas Management and Wildlife Conservation Project Ministry of Environment and Natural Resources – June 2005
- Sri Lanka, Improving The Rural And Urban Investment Climate WB,ADB 2005
- Sri Lanka: New Development Strategy Ministry of Finance and Planning May 2005
- Sri Lanka: Sate Environment 2001 UNEP-RRC.AP 2001
- Sri Lanka's Middle Path to Sustainable Development in the 21st Century Ministry of Environment and Natural Resources – August 2002
- Statistical Abstract 2003 Department Of Cencus And Statistics, Sri Lanka
- State Of The Environment In Sri Lanka Ministry of Environment and Natural Resources January 2002

Appendix 3: LEGISLATION

1. LAND USE, AGRICULTURE AND SOIL CONSERVATION

No	LEGISLATION	ACT NO.	DETAILS	COMMENTS
01	Land Development Ordinance	19 of 1935	This relates to the development and alienation of state land, is basically a regulation on how this should be done	
02	Tea Control Act	Section 56		
03	Tea Small Holdings Development Law	Section 4		
04	Sri Lanka Tea Board Law	Section 6		
05	Tea and Rubber Estates (control of fragmentation) Act	Section 10		
06	Rubber Research Ordinance	Section 3		
07	State Agricultural Corporation Act	Section 10		
08	Mahaweli Authority of Sri Lanka Act	23 of 1979, amendment 59 of 1993	This act has provisions for the Mahaweli Authority to have the power to take such measure as may be necessary for watershed management and control of erosion in the relevant lands under its purview	
09	Coconut Development Act	Section 3, 26	This ensure that environmental protection is one the objective of the board constituted under the act	
10	Soil Conservation Act	25 of 1950, amended in 1996	This act deals only with the question of erosion. It also empowers, the minister to declare and acquire "erodible areas', to specific measures regulating the of land in such areas and to acquire lands for carrying out measure to prevent erosion.	One of the major shortcoming in this has been identified as the lack of provision to integrate the application of soil conservation measures on a watershed basis and it does not consider other aspects of soil degradation

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2. LAND USE, AGRICULTURE AND SOIL CONSERVATION (CONTINUED)

NO	LEGISLATION	ACT NO.	DETAILS	COMMENTS
11	State Land Ordinance		This deals with the power of state to sell, lease, grant or otherwise dispose of state lands	
12	Land Grant (Special provision) Act		This is act to provide for the transfer of state land to any citizen of Sri Lanka	
13	Land Settlement Ordinance		This act addresses issues of disputes of ownership between the state and individuals	
14	Flood Protection Ordinance	4 of 1924	This deals with protecting areas subjects to damage from flood; notable areas declared to be a flood areas by the Director of Irrigation	

3. FOREST AND PLANT PROTECTION

NO	LEGISLATION	ACT NO.	DETAILS	COMMENTS
01	Forest Ordinance and amendments thereto	16 of 1907	Protection of what used to be ample forest recourses, for the exclusive exploitation by the administration, based on their economic values. The forestry department is responsible for the implementation of this.	The new Forest Conservation Act is in the Draft stage.
02	Plant Protection Ordinance	6/50, 22/55, 50/57		Replaced by Plant Protection Act
03	Water hyacinth Ordinance	4 of 1909	This to prevent the introduction into, and dissemination in, Sri Lanka of the plants	The Plant Protection Ordinance of 1924 covers the same area of authority.
04	Felling of Trees (control) Act	9 of 1951	This Act makes provision for the prohibition, regulation or control of the felling of specified valuable tree species, including cultivated species such as jak.	
05	National Environmental Act	47 of 1980 amended 56 of 1988	The NEA served to create the Central Environment Authority, while its amendment of 1988 empowers all project approving agency to obtain an Environmental Impact Assessment from any developer for prescribed development project.	A new National Environment Protection Act is being drafted
06	Plant Protection Act	35 of 1999	This Act controls the introduction of noxious plant, pests and diseases of plants into Sri Lanka. The Director of Agriculture is the administering under this Act.	
07	The National Heritage Wilderness Area Act	3 of 1988	This Act has been enacted to enable the preservation of unique natural ecosystems.	

4. FISH AND MARINE LIFE

NO	LEGISLATION	ACT NO.	DETAILS	COMMENTS
01	The Fisheries and Aquatic Resources Act	2 of 1996	This Act promotes measure for the integrated management, regulation, conservation, and department of fisheries and aquatic resources in Sri Lanka	This Act replaced the Fisheries Ordinance No 24 of 1940
02	Pearl Fisheries Ordinance			
03	Whaling Ordinance			
04	Chank Fisheries Ordinance			
05	State lands Ordinance	Section 37	This seeks to regulate the operations of such aquaculture enterprises by requiring any person who engages in carrying out an aquaculture enterprises to obtain a license	
06	National Aquatic Resources and Development Agency Act	54 pf 1981	This Act was enacted to establish the NAR&DA as the premier institute.	
07	Marine Pollution Prevention Act	59 of 1981	This Act enabled the establishment of the Marine Pollution Prevention Authority (MPPA) and provides for the prevention, reduction and control of pollution in Sri Lanka waters, for effect to international conventions that SL is a signatory to for the prevention of pollution of the sea.	

5. WILDLIFE CONSERVATION

NO	LEGISLATION	ACT NO.	DETAILS	COMMENTS
01	Fauna and Flora Protection Ordinance	2 of 1937 and subsequent amendments including Act No 49 of 1993	This contains several provisions relating to interpretation of words in the statute and definition of areas in the statute. The department of wildlife conservation is primarily responsible for the implementation of this Act.	Under this ordinance five categories of protected areas were established, viz :Strict natural reserves, natural parks, natural reserves, jungle corridors and intermediate zones
02	National Environ- mental Act	Section 20	This recommend to the minister a system of rational exploitation and conservation of wildlife resources and shall encourage citizen participation in such activities	

6. MINES AND MINERALS

NO	LEGISLATION	ACT NO.	DETAILS	COMMENTS
01	Mines and Minerals Act	4 of 1973 amended on 33 of 1992	This Act was introduced to liberalise the mineral sector to attract investment.	
02	State Gem Corporation	13 of 1971		
03	Radioactive Minerals	48 of 68		
04	Salt Ordinance	Section 1	This provides for the appointment of a salt commissioner who has the power to control and regulate the sale, storage, possession, removal, manufacture, importation and export of salt.	
05	State Gem Corporation Act	13 of 1971	This is to fulfill the long felt need of regulating the activities to the gem industry.	
06	Ceylon Petroleum Corporation Act			

7. INDUSTRY

NO	LEGISLATION	ACT NO.	DETAILS	COMMENTS
01	Factories Ordinance	45 of 1942		
02	Employment of Females in Mines Act	12 of 1937		
03	Industrial Disputes Act	43 of 1950		
04	Silk Worm Seed Law	38 of 1934		
05	Silk and Allied Products Development Law	30 of 1975		
06	Coconut Products Ordinance	13 of 1935		
07	Coconut Fibre Act	17 of 1971		
08	Paddy Marketing Board Act	14 of 1971		
09	Agricultural Products Agents (Registration) Act	29 of 1939		
10	Agricultural Product (Grading and Marking) Ordinance	28 of 1940		
11	Industrial Products	18 of 1949		
12	Ceylon Institute of Scientific and Industrial Research Act	15 of 1955		
13	Food Control Act	25 of 1950		
14	Food Control (Possession) Act	14 of 1956		

NO	LEGISLATION	ACT NO.	DETAILS	COMMENTS
15	Ceylon Petroleum Corporation Act	28 of 1961		
16	Petroleum Products (regulation & control supplies) Act	34 of 1979		
17	Consumer Protection Act	1 of 1979		
18	Rice Reserve Ordinance	52 of 1941		
19	Industrial Promotion Act	48 of 1990	This provides for the identification and registration of industries carried on to be commenced.	

8. TRANSPORT

NO	LEGISLATION	ACT NO.	DETAILS	COMMENTS
01	National Environment Act	47 of 1980 Section 23		
02	Offences Against the Public Property Act			
03	Poisons, Opium and Dangerous Drugs Act		This where the restriction on the offender commence immediately on detecting.	

9. PESTICIDES AND RELATED STATUES

NO	LEGISLATION	ACT NO.	DETAILS	COMMENTS
01	Control of Pesticides Act	33 of 1980	This reveal certain deficiencies pertaining to the adequacy of the provision of the law remedy the pollution of air, land, water.	
02	Malathion Control Act	22 of 1985	This contains provisions which prohibits the possession, transport, sale and use of malathion.	
03	Coconut Research Ordinance Cap 440		This is important in order to ensure that such activities would not harm the environment.	Last amended in 1984
04	Rubber Research Ordinance		This is important in order to ensure that such activities would not harm the environment.	
05	Plant Protection Ordinance	Cap 447	This ordinance aims at the prevention of diseases injurious to or destructive of plants and for sanitation of plant in SL	
06	Customs Ordinance		This appears to contain provision for the principal collector of customs to appoint warehousing of goods.	

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10. DANGEROUS SUBSTANCE

NO	LEGISLATION	ACT NO.	DETAILS	COMMENTS
01	Petroleum Ordinance	Cap 184	This ordinance regulates the importation, possession, transportation and hoarding of petro- leum and other fluids of a like nature.	
02	Petroleum Products (regulation & control supplies) Act		This act provides for the regulation and control of the distribution and use of petroleum with a view to ensuring the fair distribution of such products.	
03	Firearms Ordinance	Cap 182	Under this, a license can be obtained to manufacture guns.	
04	Explosives	Cap 183	This act controls and regulates the manufacture, importation, exportation, possession, sale, exposure for sale, supply, purchase, use and transport of any explosive.	
05	Gas Ordinance	Caps 206	This ordinance relates to supply of gas to the municipal and other towns in Sri Lanka through pipe lines.	
06	Motor Traffic Act		On mobile source, this Act appears to be the only legislation in force and it authorised issuance of regulations that may prescribe "any condition or requirement not expressly provided for in this Act.	The statute does not mention air quality.

11. FERTILIZERS

NO	LEGISLATION	ACT NO.	DETAILS	COMMENTS
01	Fertilizers Act	21 of 1961		
02	Regulation of Fertilizer Act	68 of 1988	This is dealing with sources of fertilizers such as imports, manufacture and formulation (blends of mixtures of different fertiliser ingredients)	

12. HUMAN SETTLEMENTS

NO	LEGISLATION	ACT NO.	DETAILS	COMMENTS
01	Land Development Ordinance	Chap 464		
02	Soil Conservation Act	25 of 1951		
03	Housing & Town Improvement Ordinance	19 of 1950	This ordinance regulates the construction of building and the demolition of ruined building. This is the only law which specifies standards to be adopted in building activities.	
04	Coast conservation Act	57 of 1981 amended 64 of 1988	The Act devolves on the Director of the Coast Conservation Department who has to issue permits for all development activities undertaken within the coastal zone.	

NO	LEGISLATION	ACT NO.	DETAILS	COMMENTS
05	Water Resources Board Act	29 Of 1941		
06	Forest Ordinance	Chap 451		
07	Felling of Trees Control Act	Chap 452		
08	Irrigation Ordinance	32 of 1946: Irrigation Act No.1 of 1951	This Act covers matters connected with irrigation and paddy cultivation within irrigation schemes.	
09	Mines and Minerals Act	4 of 1973		
10	State Gem Corporation Act	13 of 1971		
11	Town and Country Planning Ordinance	13 of 1946	This law governs the functions of the Town and Country Planning Department on land use planning and zoning, and deals with the planning and development of land in the country. Both human environment and natural environment are covered by this law	
12	Urban Development Authority Law	37 of 1978 amended by subsequent 4 of 1992	This law served to established the UDA and Act provides for the development of environment standard for environmental improvement in areas identified as UDA areas.	

13. WATER & WATER RESOURCES

NO	LEGISLATION	ACT NO.	DETAILS	COMMENTS
01	Water Resources Board Act	29 of 1964	This Act decrees that 'it shall be the duty to the Board to advise the Minister on specific matters, and any other matter that are referred to the Board for advice by the Minister.	This Act does not empower the Board to act on any of relevant issues.
02	National Water Supply and Drainage Board Act	12 of 1974	This provides for the establishment of the NWS&DB	
03	Crown lands ordinance		This right to use manage and control water in public lake or stream has been vested in the State under Section 72 of this ordinance	

Appendix 4: Donor Projects Funded and Future Plans

1. EUROPEAN COMMISSION DEVELOPMENT PROJECTS

TITLE OF	BUDGET	T CONTRACT	PARTNERS		Core Activities	TIME	FRAME	TARGET			
PROJECT	LINE	No.	EC	LOCAL	CORE ACTIVITIES	BEGIN	END	ZONES	EU	TOTAL	% EU
	CO-OPER	ATION WITH	ASIA 19.1	0.01 (former B7-300)							
Moneragala Irrigation and Community Development Project	B7-300	1992/0010- ALA/92/10	EC	GoSL	Rehab. Irrigation schemes providing irrigation/ Support diversification and intensification agricult/ Livestock improvement for milk prod/ Fuelwood component/ Employment for women & youth	1992		Moneragala District, UVA Prov- ince	5,760,000	7,300,00 0	78.9
Mahaweli Consolidation	B7-300	1995/0087- ALA/95/03	EC	GoSL	To consolidate and transform settler communities to viable and self sustaining farmer comm. engaged in comercial farming and other comercial activ.	1995	31/12/2 002	Central East	5,980,000	10,910,0 00	54.8
Dry Zone Ag- ricultural De- velopment Project DZADP	B7-300	1998/0175- ALA/98/175		GoSL, National, Provincial, Local Authorities/ Local NGO's	Sustainable increase the productivity and net income of 16000 farm households/ Increase effectiveness in articulating their needs as well as increasing their access and control of resources		005	Anurad- hapura, Putta- lam,Monara gala, Ham- bantota Districts	5,130,000	9,410,00 0	54.5
DZADP Ex- tension	B7-300	2002/6017		Local Authorities/Local NGO's	Sustainable increase the productivity and net income / Increase effectiveness in articulating their needs as well as increasing their access and control of resources		88 months (7y. 4m. from 01/09/1 999)		984,000	984,000	100
North and East Road Rehabilitation Programme	B7-300	5889	GoSL, Dept of External Re-	NECORD	Rehabilitation of provincial, local government and departmental roads/ improvement of institutional capacity			8 districts of North and East	13,150,00 0	13,425,0 00	97

TITLE OF	BUDGET	CONTRACT	PARTNERS		Copy Acriviries	TIME	FRAME	TARGET			
PROJECT	LINE	No.	EC	LOCAL	Core Activities	BEGIN	END	ZONES	EU	TOTAL	% EU
(NERRP)			sources								
AID TO UPRO 19.10.03 (form	-)PLE									
Assistance for Internally dis- placed and conflict af- fected house- holds	Uprooted People	2001/4608 (former system ref: LK/2001/04 81)	CARE-Ger	many	Improve living conditions for IDP's/ Irrigation & access to water/ Increased food production/ Improve access to education and health/ Support local organisations		05	Anurad- hapura, Puttalam, Vavuniya, Polo- naruwa, Trinco and Mannar	1,400,000		
and durable	B7-7302 Uprooted People	2001/4609 (former system ref: LK/2001/04 82)	UNHCR		Support to UNHCR's programme: Water & Sanitation; Access to health and nutrition facilities; Temporary shel- ter; Income generation activities; Education; Fisheries; Legal assistance and protection		31/1/20 04		1,950,000		
Programme of assistance for spontaneous returned or IDPs in Sri Lanka		REH/2002/ 2744 (for- mer system ref: LK- 2002-2744)			Support to UNHCR's programme: Water & Sanitation; Access to health and nutrition facilities; Temporary shel- ter; Income generation activities; Legal assistance and protection	01/01/ 2003	31/12/2	003	3,900,000		
Integrated Recovery and Resettlement Programme		REH/2003/ 005-922	UNDP		Community based housing reconstruction/ Support to Fisheries sector recovery/ Integrated Agricultural Sector Recovery/ Support to Community Reintegration	2004		North and East Prov- ince (8 Dis- tricts)	4,000,000	4,745,00 0	84
Support to the reintegration of the reset-tled people into 12 villages in Sri	B7 302 AUP	REH/2004/ 098-312	CARITAS	CARITAS SL	Reintegration of uprooted people into native community enabling them to enjoy a minimum standard of life including security, housing, hygene, access to water and to lead a dignified and peaceful community life	2005	24 months	Jaffna, Killi- nochchi, Mannar, Trinco, Am- para, Anurad-	1,152,386	1,280,42 8	90

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TITLE OF	BUDGET	CONTRACT	PARTNERS		Cope Activities	TIME	FRAME	TARGET			
PROJECT	LINE	No.	EC	LOCAL	Core Activities	BEGIN	END	ZONES	EU	TOTAL	% EU
Lanka								hapura, Puttalam, Moneragala			
Uprooted People's Water and Sanitation, Agriculture and Re- sources De- velopment Project (UPWARD)	B7-7302 Uprooted People	REH/2004/ 098-293	CARE DE		Reintegration of uprooted people through securing of livelihoods, access to safe water and sanitation facilities, support for agriculture, off farm income generation activities coupled with capacity building and implementation of peace building and reconciliation initiatives.	2005	36 months	Anurad- hapura, Va- vuniya, Kili- nochchi, Mulaitivu and Trin- comalee		1,607,46 6	90
REHABILITAT B7-303)	ION 19.10.	04 (Former									
Immediate Communities Livelihood Programme	B7-7303 R	tehabilitation	UNDP		Livelihood activities will be resumed increasing income ge sectoral productivity and revenue	neratior	and	North and East	5,400,000		
Support to Livelihoods and Commu- nities via the TF	B7-7303 R	Rehabilitation	WB		,			North and East	9,900,000		
Rehabilitation of the Matara- Batticaloa Road	B7-7303 R	tehabilitation	ADB		Reconstruct 7 sections of the road + capacity building for RDA		South and East	39,400,00 0			
RAPID REACT MECHANISM											

TITLE OF	BUDGET	GET CONTRACT	NTRACT PARTNERS		0000 4000	TIME	FRAME	TARGET			
PROJECT	LINE	No.	EC	LOCAL	CORE ACTIVITIES	BEGIN	END	ZONES	EU	TOTAL	% EU
Rapid Recovery Programme	RRM B7- 671		UNDP		Cash for work activities for Debris Clearance and waste m component	anagem	ent	North and East	2,000,000		
Support to Livelihoods and Commu- nities via the TF	RRM B7- 671		WB		Repair the affected communities' livelihood, infrastructure	North and East	2,000,000				
NGO COFINA 6000	NCING B7-										
Agro proc-	B7-6000 NGO Cofi- nancing	PVD/2000/ 231/UK	Interme- diate Technol- ogy De- velop- ment Group, ITDG	ITDG SRI LANKA	Sustainable support for small scale agroprocessing/ Policy changes to support small agroproc./ Appropriate agroproc. Tech/	30/1/2 001	04/01/2 005	Bangla- desh, Nepal and Sri Lanka	492,964 Regional	1,567,35 2 Re- gional	31.4 Regional
velopment	B7-6000 NGO Cofi- nancing	PVD/2000/ 254/UK	Interna- tional Childcare Trust	Makandura Village Projects	To offer secure but transitional home to 50 distressed girls/Training for employment for 30 girls/self confidence for low income women/ Complete training building		12/01/2 005	Colombo	185,639	247,519	75
opment and	B7-6000 NGO Cofi- nancing	PVD/2000/ 343/FRG	Adventist Develop- ment and Relief Agency, ADRA	ADRA Sri Lanka	To generate income for at least 160 low income families through a cow bank and animal husbandry		05/01/2 005	Maskeliya, Nuwara- Eliya District (Central Province)	302,299	432,836	70
ing the insti-	B7-6000 NGO Cofi- nancing	PVD/2000/ 345/UK		National Forum of People's Organisa- tions, NFPO	Organisational dev.strategies for each district-level NGO/ Capacity building and support to NFPO and each district- level NGO		04/01/2 005	22 Admin- istrative Districts	500,000	1,142,24 4	44

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TITLE OF	BUDGET	CONTRACT	PARTNERS		Core Activities	TIME	RAME	TARGET			
PROJECT	LINE	No.	EC	LOCAL	CORE ACTIVITIES	BEGIN	END	ZONES	EU	TOTAL	% EU
pacity of an NGO net- working, Sri Lanka			seas, VSO					over 25 in Sri Lanka			
duction and	NGO Cofi- nancing	PVD/2002/ 020-263		Sewa Lanka Founda- tion	Strengthening the development capacities of CBO to improve soc-eco situation/Skills Improvement in agricultural, management and marketing practices/ Gender and enviromental conciousness/ 6500 fam (29.250)		006	92 villages in Southern parts of Va- vunya/ Mannar/ and borther area of Va- vunya and Anurad- hapura Dis- tricts	484,305	645,740	75
TROPICAL F B7-6201	ORESTS										
Sustainable Suply of Fu- elwood to meet Sri Lanka's needs	Forests B7-	LKA/B7- 6201/IB/97 0538(05)			To demonstrate the technical feasibility of short rotation fuelwood plantations/ To enhance institutional knowledge of fuelwood		002	10 Fields spread in several dis- tricts around center east and south.	ŕ	512,607	77.2

2. EUROPEAN COMMISSION HUMANITARIAN AID PROJECTS

	Title of Dooleon	BUDGE	O O UTTO LOT NO	Parti	NERS	Oope Activities	TIME F	RAME	Tubort Zouro	BUDGET	EUROS	
N*	TITLE OF PROJECT	T LINE	CONTRACT NO.	EC	LOCAL	Core Activities	BEGIN	END	TARGET ZONES	EU	TOTAL	% EU
ECH	O 2002											
1st [DECISION 22/02/2002: E	uro 1,0	00,000									
	tients and Medical		ECHO/LKA/210/2002/ 01001	ICRC				21/08/20 02	Jaffna	700,000	700,000	100
2*			ECHO/LKA/210/2002/ 01002	Action co Faim (AC France	F)	Multisectoral programme for 15,000 IDPs and residents; w/s; nutritional surveys; distribution of kits (agric,poultry, fishing); agricultural rehabilitation		21/08/20 02	Jaffna	300,000	300,000	100
2nd	DECISION 03/06/2002:	Euro 1,	500,000									
3*			ECHO/LKA/210/2002/ 02001	HALO TR (UK)			03/06/20 02	02/12/20 02	Jaffna (Cheva- kacheri), Trin- comale, Battica- loa, Vanni.	350,000	350,000	100
4*			ECHO/LKA/210/2002/ 02002	Advisory Group, MAG- UK		De-mining verification/ survey and demarcation, mine awareness	03/06/20 02	02/12/20 02	LTTE-controlled Vanni	420,000	420,000	100
5*	community-based re-		ECHO/LKA/210/2002/ 02003		White Pigeon,		01/07/20 02	30/06/20 03	Jaffna, Mannar, Vanni, Vavuniya	280,000	280,000	100

	T:-: D: :	BUDGE	Ocume con No	PART	NERS	0000 4000	TIME	RAME	T 7	BUDGET	EUROS	
N*	TITLE OF PROJECT	T LINE	CONTRACT NO.	EC	LOCAL	Core Activities	BEGIN	END	TARGET ZONES	EU	TOTAL	% EU
					, Sar- vodaya							
6*	gramme, Eastern Mul-		ECHO/LKA/210/2002/ 02004	MSF- ND				02/06/20 03	Mallaitivu area (Puthukkudiyi- ruppu-PTK Hos- pital)	450,000	450,000	100
3rd	DECISION 22/07/2002: E	Euro 3,8	00,000									
7*	to spontaneous returns		ECHO/LKA/210/2002/ 03001	UNHCR				31/01/20 03	Jaffna (1000 fam), Trinco- malee (1000 fam), Vanni (5000 fam), North Vavuniya & Mannar (3000 fam)	450,000	450,000	100
8*			ECHO/LKA/210/2002/ 03002			Supply basic agricultural seeds, tools, herbicide and fertilizer kits for 10,000 families		30/04/20 03	Kilinochchi, Mullativu, Man- nar, Vavuniya, Trincomalee	800,000	800,000	100
9*	-,		ECHO/LKA/210/2002/ 03003	ACF-F				31/01/20 03	Jaffna and Trin- comale	750,000	750,000	100
10*	tance to ressetled fami-		ECHO/LKA/210/2002/ 03004	Action-	Lanka Foun-	Ressetlement of 607 families in Vav North, 758 in Mannar through provision of shelters, rehab. of 130 wells and 4 water tanks/ Agricultural inputs provided		14/02/20 03	Mannar (Manthai West) and Va- vuniya (North) districts	500,000	500,000	100

	Title of Doolest	BUDGE	COUTTAGTNO	Parti	NERS	Core Activities	TIME F	RAME	Tubort Zouro	BUDGET	EUROS	
N*	TITLE OF PROJECT	T LINE	CONTRACT NO.	EC	LOCAL	Core Activities	BEGIN	END	TARGET ZONES	EU	TOTAL	% EU
11*				Cross	Lankan Red			31/03/20 03	Vavuniya, Kili- nochchi, Mal- laithivu	400,000	400,000	100
12*	for IDP's returning to		ECHO/LKA/210/2002/ 03006		SL			28/02/20 03	Jaffna, Vanni	400,000	400,000	100
	gramme for returnees		ECHO/LKA/210/2002/ 03007	Movi- mondo-l	daya	Support for 18700 returnees and IDP and local population/ Distribution agricultural kits/ 30 water pumps		14/02/20 03	Jaffna	250,000	250,000	100
		B7-	ECHO/LKA/210/2002/ 03008	MSF-F				31/01/20 03	Mannar district	250,000	250,000	100
4th [DECISION 11/12/2002: E	Euro 2,0	00,000									
15*			ECHO/LKA/210/2002/ 04001	Halo Trus		Completion of national survey and production of integrated work-plan for high priority mine clearance in the country for 2003 for the benefit of 125,000 returnees and 400,000 residents/ Manual and mechanical mine-clerance in Jaffna/Demining training / Ambulance service for mine victims		31/12/20 03	Jaffna (Chava- kacheri), Trin- comalee, Batti- caloa, GoSL controlled Vanni	666,000	666,000	100
16*				Mines Ad Group, M				31/12/20 03	LTTE-controlled Vanni	664,000	664,000	100

	T D	BUDGE	0 a v == 1 l a	PART	NERS	0000 4000 0000	TIME F	RAME	T 7	BUDGET	EUROS	
N*	TITLE OF PROJECT	T LINE	Contract No.	EC	LOCAL	Core Activities	BEGIN	END	TARGET ZONES	EU	TOTAL	% EU
		210				200,000 returnees/ Explosive ordonance disposal						
17*			ECHO/LKA/210/2002/ 04003	Norwegia ples's Aid	an Peo- I	Mine field surveys, mine risk education, manual and mechanical mine clerance in the Vanni	01/01/20 03	31/12/20 03	LTTE-controlled Vanni	670,000	670,000	100
ECH	O 2003											
1st [DECISION 31/03/2003: E	uro 6,0	00,000									
18*	and Community based-		ECHO/TPS/210/2003/ 06001	UNICEF		,		31/12/20 03	Jaffna, Va- vuniya, Trinco- malee and Vanni	·	240,000	100
19*			ECHO/TPS/210/2003/ 06002	FAO		Supply basic agricultural seeds, tools, herbicide and fertilizer kits for 60.000 beneficiaries/ Training of landless poor10,000 families/Rehabilitation		29/02/20 04	Jaffna, Va- vuniya, Trinco- malee, Mannar, Kilinochchi, Mullaitivu, Batti- caloa	800,000	800,000	100
20*	rity, w/s support to vul-		ECHO/TPS/210/2003/ 06003	ACF-F		Distribution of basic agricultural/ artisan/ poultry kits; Basic training/ Rehabilitation of 110 drinking wells and maintenance and sanitation training		31/03/20 04	Jaffna, Trinco- malee and Batti- caloa	765,000	765,000	100
21*			ECHO/TPS/210/2003/ 06004	Red Cross	Lankan Red Cross		03	31/01/20 04	Kilinochchi, Mullativu, Va- vuniya un- cleared, Trinco- malee and Batti- caloa	585,000	585,000	100
22*			ECHO/TPS/210/2003/ 06005	German Agro		Construction of temporary shelters and distribution of ktichen utensils benefiting 1,700 families;			Vavuniya and Kilinochchi	750,000	750,000	100

	Title of Doorse	BUDGE	Ocumptor No.	PART	NERS	Copy Activities	TIME	RAME	T. D. C. T. 70.150	BUDGET	Euros	
N*	TITLE OF PROJECT	T LINE	CONTRACT NO.	EC	LOCAL	Core Activities	BEGIN	END	TARGET ZONES	EU	TOTAL	% EU
	ressetled/returnee families in theWanni (Districts of Vavuniya and Kilinochchi)	210		Action- D	Foun- dation	rehabilitation of 87 drinking wells and 6 irrigation ponds, distribution of agric inputs.						
23*	habilitation Programme		ECHO/TPS/210/2003/ 06006					31/03/20 04	Jaffna and Mul- laitivu	295,000	295,000	100
24*	gramme for returnees		ECHO/TPS/210/2003/ 06007	Movimon		Distribution agricultural kits to 1840 families/ paddy for 1350 families/ poultry kits for 400 poor widows with training/ Rehabilitation of 40 agro and 90 drinking wells/ restoration of 524 latrines and hygienic kits/ Training on sanit/hygienic		14/01/20 04	Jaffna, Kili- nochchi	450,000	450,000	100
25*	the Vanni Region		ECHO/TPS/210/2003/ 06008	CARE De land	eutsch-	Food security and w/s activities for 15,000 benef: paddy and pulses kits for 400/ provision 1200 agrokits/ 150 fishing kits/ construction and rehabilitation of 125 wells and 400 latrines		31/03/20 04	Maritimepattu and Oddussudan division in Mul- laitivu	640,000	640,000	100
26*	the Vanni Region		ECHO/TPS/210/2003/ 06009	ZOA Refu Care - NL	LĎ			31/01/20 04	Mannar and Kili- nochchi	500,000	500,000	100
27*	ans sustainable re-		ECHO/TPS/210/2003/ 06011	IOM		l , ,		29/02/20 04	Ampara (Tirukkovil Div); Anuradhapura (Padaviya Div); Trinco (Kuch- chaveli Div)	275,000	275,000	100

	TITLE OF PROJECT	BUDGE	Contract No.	PARTI	NERS	Core Activities	TIME F	RAME	TARGET ZONES	BUDGET	EUROS	
N*	TITLE OF PROJECT	T LINE	CONTRACT NO.	EC	LOCAL	CORE ACTIVITIES	BEGIN	END	TARGET ZUNES	EU	TOTAL	% EU
ECH NAD	O SUPPORT TO TAMIL U	REFUG	EES OF SRI LANKA IN	TAMIL								
DEC	ISION ECHO/IND/2002/0	01000 ()3/06/2002: Euro 1,000,	000								
28*	proving health and nu-	B7- 210	ECHO/IND/2002/0100 ?	Dan Chui DK	rch Aid				Tamil Nadu, In- dia	550,000	550,000	100
1st [ECISION 31/03/2003: E	::uro 6,0	00,000									
29*	proving health and nu-		ECHO/TPS/210/2003/ 06010	Dan Chui DK	rch Aid		01/04/20 03	31/12/20 03	Tamil Nadu, India	700,000	700,000	100
DIPE	ECHO B7-219											
30		HO B7-		Spanish Red Cross	Lankan Red Cross		01/11/20 01	03	Ratnapura, Kalutara, Putta- lam, Trinco- malee, Galle, Colombo, Batti- caloa and Polonnaruwa districts	400,000	400,000	100
ECH 2003	O SUPPORT TO FLOOD ())-AFFE(CTED PEOPLE IN SOU	TH WEST	(MAY							
DEC	ISION ECHO/LKA/210/2	003/060	01 03/06/2002: Euro 1,	,000,000								
	drinking water and		ECHO/LKA/210/2003/ 01001	UNICEF		To provide access to adequate sanitation facilities of about 5000 people/ To provide access to about 40,000 affected people to safe drinking water		03	Ratnapura, Ma- tara, Hamban- tota, Galle Dis- tricts	300,000	300,000	100

	T D :	BUDGE	0 a v == v == N a	PART	NERS	0	TIME I	RAME	T 7	BUDGET	Euros	
N*	TITLE OF PROJECT	T LINE	CONTRACT NO.	EC	LOCAL	CORE ACTIVITIES	BEGIN	END	TARGET ZONES	EU	TOTAL	% EU
32	improve w/s facilities to		ECHO/LKA/210/2003/ 01002	Spanish Red Cross	Sri Lankan Red Cross Society, SLRCS	W/S; Training activities targeting general local population and especially vulnerable groups (500,000)	24/06/20 03	23/12/20 03	Ratnapura, Kalutara, Galle Districts	500,000	500,000	100
	DECISION ECHO/LKA/2 0,000	10/2003	3/02000 11/12/2003: Eur	0								
33*	ect, Sri Lanka		ECHO/LKA/210/20030 2001	Halo Trus	st - UK	Completion of national survey and production of integrated work-plan for high priority mine clearance in the country for 2004-2006 for the benefit of 2,635,351 returnees and residents; Manual and mechanical mine-clearance in Jaffna, including de-mining training; UXO bulk demolition and destruction in situ; Ambulance service for mine victims		31/12/20 04	Jaffna, Kili- nochchi, Mullai- tivu, Vavunya, Mannar, Trinco- malee, Battica- loa, Ampara and Polonnaruwa districts	600,000		100
34*	tion, Vanni Region, Sri		ECHO/LKA/210/20030 2002	Mines Ad Group, M	,	Surveys and mine risk education for 200,000 beneficiaries: Level 1 surveys, mine risk education, technical survey and fencing, emergency mine clearance		31/12/20 04	Vanni region: Kilinochchi, Mullaitivu dis- tricts and Va- vuniya north	400,000		100
35*	programme for the		ECHO/LKA/210/20030 2003	Norwegia ples's Aid		Mine field surveys, mine risk education, manual and mechanical mine-clearance in the Vanni		31/12/20 04	Vanni region: Kilinochchi, Mullaitivu dis- tricts and Va- vuniya north	600,000		100
36*	and Community-based	210	ECHO/LKA/210/20030 2004	UNICEF		Mine awareness for the benefit of 260,000 IDPs and resident populations, especially chidren and women: community-based MRE activities, MRE in schools through training of teachers and provision of educational material, building up of local MRE capacity, development of mass	04	31/12/20 04	Jaffna, Kilinoc- chi, Mullaitivu, Vavunya, Man- nar, Trincomalee and Batticaloa districts	300,000		

	T D	BUDGE	0	PARTI	NERS	0	TIME F	RAME	T	BUDGET	EUROS	
N*	TITLE OF PROJECT	T LINE	CONTRACT NO.	EC	LOCAL	CORE ACTIVITIES	BEGIN	END	TARGET ZONES	EU	TOTAL	% EU
	- 2004					media campaign; support to 250 mine-victims.						
37*	habiliation Centre, SRI		ECHO/LKA/210/20030 2005	HI - F				28/02/20 05	Batticaloa	100,000	228,136	43,8
ECH	O 2004											
Ad h	oc decision of 31 March	2004 - E	::CHO/-SA/BUD/2004/01	1000: Euro	5,500,0	00						
38*			ECHO/- SA/BUD/2004/01001	DCA		Health care and awareness to 60,000 refugees living in the camps in Tamil Nadu; Nutritional support to 18,050 most vulnerable refugees in Tamil Nadu and 4,990 most vulnerable IDPs living in 3 welfare centers; Rehabilitation support with seeds and tools to 200 returned families from India; Maintenance of the refugee database.	04		Refugee camps in Tamil Nadu, India; Vavunyai & Mannar dis- tricts	375,000	375,000	100
39*			ECHO/- SA/BUD/2004/01002	UNHCR		Distribution of NFRI to 89,610 returnees and provision of shelter and watsan to 19,859 IDPs living in welfare centers		31/12/20	8 conflict- affected districts of S L and ad- joining districts of Puttalam, Anuradhapura, Polonnaruwa and Moneragala.	1,000,00	1,000,0	100
40*		B7-	ECHO/- SA/BUD/2004/01003	ZOA		Support to 62,000 people: rehabilitation of 15 irrigation tanks and 15 wells, construction of 15 wells, 900latrines; provision of hygiene teaching and preventive health education; Conduct of a watsan feasibility study. Provision of agrcultural imputs to 600 families, of livestock imputs to 500 familes and of fisheries inputs to 500 families; Provision of skills training.	04	31/03/20 05	Mannar, Kili- nochchi, Trinco- malee, Battica- loa and Ampara districts	892,700	892,700	100

	Title of Doolson	BUDGE	O O VITTO A OT NO	PART	NERS	Copy Activities	TIME F	RAME	T. D. S. T. Z. V. S.	BUDGET	EUROS	
N*	TITLE OF PROJECT	T LINE	CONTRACT NO.	EC	LOCAL	Core Activities	BEGIN	END	TARGET ZONES	EU	TOTAL	% EU
41*			ECHO/- SA/BUD/2004/01004	ACF-F		3 I 3 ⁷			Jaffna, Trinco- malee and Batti- caloa districts	640,000	640,000	100
42*	tling IDPs in the Wanni,		ECHO/- SA/BUD/2004/01005	GAA	LANKA F		15/04/20 04	05	Vauniya and Kilinochchi dis- tricts	600,000	600,000	100
43*			ECHO/- SA/BUD/2004/01006	CARITAS		11 '	15/04/20 04	05	Jaffna, Kili- nochchi and Mullaitivu dis- tricts	350,000	350,000	100
44*			ECHO/- SA/BUD/2004/01007	MOVIMO			15/04/20 04	14/01/20 05	Jaffna and Ampara districts	500,000	500,000	100
45*	Sustainable resettle- ment, reintegration and livelihood development of IDPs, SL	B7-	ECHO/- SA/BUD/2004/01008	IOM		Support to 1,850 resettling IDP families and hosting families (about 9,250 individuals): rehabilitation or construction of 1,850 temporary shelters, provision of 1,850 NFRI; distribution of agricultural imputs and livestock, assistance for fishermen, tools for artisans; construction of 20		31/01/20	Mannar, Am- para, Anurad- hapura districts	300,000	300,000	100

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		BUDGE		PART	NERS		TIME F	RAME	_	BUDGET	EUROS	
N*	TITLE OF PROJECT	TLINE	CONTRACT NO.	EC	LOCAL	CORE ACTIVITIES	BEGIN	BEGIN END TARGET ZONES		EU	TOTAL	% EU
						agro-wells.						
46*			ECHO/- SA/BUD/2004/01009	CARE - D		Support to 1,298 returning and IDP families and hosting communities in 12 villages: construction of 275 water-seal latrines and construction or rehabilitation of 58 wells; provision of agricultural inputs including livestock and fishing equipment.	04	31/01/20 05	Mullaitivu district	302,300	302,300	100
	for the rehabilitation of agri-based livelihoods of recently resettled IDPs families in the Districts of Kilinochchi, Mullaitivu and Trinco- malee, N-E Prov, SL	B7- 210	ECHO/- SA/BUD/2004/01010	FAO		Support to 4,000 farming and non-farming recently returnee families (20,000 people): Provision of 4,000 poultry kits and training, provision of 40,000 seedling of perennial crops, provision of 4,000 kits of vegetable seeds; Provision of 3,800 lots of paddy seeds and related fertilisers		005	Mannar, Kili- nochchi, Mullai- tivu and Trinco- malee districts	300,000	300,000	100
48	sion of Nov 2004 - ECHC	O/LKA/BI	JD/2U04/01000: Euro 1	, ,	Trust	Support 550,000 residents and returning IDP in the target areas by mitigating risks presented by mines & UXOs and maintain a technical assistance capacity in the field to assess needs, appraise project proposals & to coordinate & monitor the implementation of operations.	01.02.20 05	31/01/20 06	North and Northeastern re- gions, particu- larly Jaffna	1,000,00		
Eme	rgency decision of Dec 2	2004 - E	CHO/-SA/BUD/2005/01	000: Euro	10,000,0	00						
49	Immediate relief for vict tidal wave in Sri Lanka	ims of th	ne ECHO/- SA/BUD/2005/010	UNIO	CEF	520 Water tanks and 30 water pumps including 25,000 packages of water purification tablets distributed and installed in selected IDP camps; 25,000 IDPs in selected camps in target districts have received basic livelihood items for their well-being; Basic drugs for treatment of basic illnesses are available in key areas of target districts	04	30/06/20 05	Jaffna, Killi- nochchi, Mullai- tivu, Trinco- malee, Battica- loa, Ampara	1,200,20 9	1,200,2 09	100%

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	TITLE OF PROJECT BUDGE	Ocump of No.	PARTNERS	Oope Activities	TIME F	RAME	T. DOTT 701/50	BUDGET	BUDGET EUROS		
N*	TITLE OF PROJECT T LINE	CONTRACT NO.	EC LOCAL	Core Activities	BEGIN	END	TARGET ZONES	EU	TOTAL	% EU	
50	Wat/san programme for Mullaitivu, Trincomalee and Batticaloa, Sri Lanka	ECHO/- SA/BUD/2005/01003	Oxfam	CLEAN WATER Formation of water committees; installation/provision of water supplies and safe drinking water; water testing, monitoring and disinfection. SAFE SANITATION Formation of community committees to supervise sanitation work; provision of water, soap and latrine attendants; Training of local volunteers in promotion of safe use of latrines; waste disposal systems; safe disposal of dead animals from the living areas HEALTH PROMOTION Formation of Health Promotion Committees; Identification and training of local Health Promoters; Community awareness raising; Distribution and demonstration of hygiene kits; Influencing decision makers regarding participation of women and children in the decision making regarding water and sanitation services.	04	26/06/20 05	Mullaitivu, Trin- comalee, Batti- caloa	571,534	571,534	100%	
51	Emergency water and sanitation, food aid and non food items programme for tidal wave attected population in Eastern Sri Lanka	ECHO/- SA/BUD/2005/01004	ACF	Water and Sanitation: needs assessment; treatment- regular water trucking for 14 camps; decontamination of 220 wells in camps and villages; hygiene kit distribution; water supply infrastructures rehabilitation. Food Aid and Food security:needs assessment; first distribution of 21,500 dry rations for under 5-children; other distributions organized according to needs Assistance with Essential items: needs assessment; 10,000 kits will be distributed to the most affected households.	26/12/20 04	25/05/20 05	Jaffna, Trinco- malee, Battica- loa, Ampara	1,200,00	1,200,0	100%	

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	TITLE OF PROJECT BUDGE	Courrent No	PARTNERS	CODE ACTUATION	TIME	RAME	T. D. O. T. 70.150	BUDGET	EUROS	
N*	TITLE OF PROJECT T LINE	CONTRACT NO.	EC LOCAL	CORE ACTIVITIES	BEGIN	END	TARGET ZONES	EU	TOTAL	% EU
52	Emergency relief project in response to Tsunami, Sri Lanka	ECHO/- SA/BUD/2005/01005	ZOA	Transporting and clearing of bodies; Assisting displaced people to settle on higher ground; Provision of NFRIs, food, temporary shelter, chlorine tablets, drinking water facilities, mosquito bed nets; Construction of temporary latrines; Rehabilitation/construction of drinking water systems and latrines in original or new areas; Provision of temporary shelter in newly defined areas; Construction of wells.	04	25/06/20 05	Killinochchi, Mullaitivu, Trin- comalee, Batti- caloa, Ampara	1,400,00	2,641,5 09	53%
53	, ,	ECHO/- SA/BUD/2005/01007	Terre des Hommes	Eight mobile clinics; Re-hydration treatments distributed; Create community committees to disseminate general health messages; Build 500 latrines for the locations where the displaced people are and in their location of origin.	27/12/20 04	27/06/20 05	Batticaloa, Ampara	748,779	1,048,7 79	71%
54	Immediate relief assistance for tsu- nami affected communities in Mul- laitivu and Killinochchi districts, Sri Lanka	ECHO/- SA/BUD/2005/01008	CARE	Distribution of emergency food rations and clothing; Data collection; Participation in relief co-ordination; Monitoring of needs; Distribution of medicines; Rehabilitation and construction of wells; Construction of latrines; Distribution of material for the construction of temporary shelter; Monitoring of population movements and temporary settlements; Identification of further needs and development of a strategy for mid-term rehabilitation measures.	28/12/20 04	28/06/20 05	Mullaitivu, Killi- nochchi	413,088	413,088	100%

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3. ASIAN DEVELOPMENT BANK

TITLE	Donor	AMOUNTU S\$ MN.	START	END	DEPARTMENT	SUMMARY
Project area management and wildlife conservation project	ADB/GEF		06/06/00	30/06/06	Department of wildlife conservation Ministry of environmental and Natural Resourses	Enhancing DWLC's institutional capacity/ eco-tourism capacity
Forestry Recourses Management Project	ADB		24/10/00	31/02/07	Forestry Development Ministry of Environmental & Natural Recourses Central Environmental Authority	Forest management/ Capacity building/ Infrastructure
North East Community Restoration and Development	ADB	40.0			,	
Secondary Town and Rural Community Based Water Supply and Sanitation Project	ADB	35.0				
Conflict Affected Area Rehabilitation Project	ADB	103.5				
North East Coastal Community Development Project	ADB	28.0				
Upper Water Management Project	ADB	17.9				
Forestry Resources Management sector projects	ADB	30.2				
Projected area mgt & Wildlife Conservation	ADB/Dutch Aid	13.2	1/8/01	31/7/07		
Natural Recourses & Environmental Management	ADB/Dutch Aid	0.8				
Coastal Resources Management Development	ADB	42.2	1/7/03	31/12/06		
Aquatic Resources and Quality Improvement	ADB	15.2				
Water Resources Management Projects –Part A	ADB	13.9	20\10\00	30\06\06		Management of water resources in Sri Lanka
Water Resources Management Projects –Part B	ADB	9.4	20\10\00	30\06\06		Management of water resources in Sri Lanka
North East Coastal Community Development Project	ADB/Dutch Aid					

4. WORLD BANK PROJECTS

TITLE	Donor	AMOUNT US\$ MN.	START	END	DEPARTMENT	SUMMARY
Renewable Energy for Rural Economic development	World Bank					
Community water Supply and Sanitation	World Bank					
Health Sector development project	World Bank					
North East Irrigated agricultural projects	World Bank	27.0				
North East Emergency Reconstruction Program	World Bank	37.0				
North East Irrigated Agriculture Project – Follow-on	World Bank	66.0	23\07\04	30\06\11		Rehabilitation of 400 small irrigation schemes
North East Infrastructure and capacity building Project	World Bank	100				
Second North-East Irrigated Agriculture Project	World Bank		06\2004	03\2011		

5. DUTCH AID PROJECTS

TITLE	Donor	AMOUNT US\$ MN.	START	End	DEPARTMENT	SUMMARY
Project on institutional strengthening & capacity building of environmental program of Sri Lanka	Government of Netherlands	0.282	1/4/02	31/3/05	Ministry of environment & natural recourses ; IUCN; Central Environmental Authority	Implementation of envi- ronment components
Environment programme	Government of Netherlands	3.4	15\10\03	31\12\06	Ministry of environment & natural recourses	
Biodiversity research	Government of the Netherlands	3.1	15/11/02	14/11/05	IWMI	

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6. UNDP PROJECTS

a) Recently Closed Projects

	TITLE	SHORT DESCRIPTION	Status**
1	Renewable Energy & Energy Capacity Building	Funds: GEF and TRAC; Budget: US\$ 1,862,000; Project promoted increased utilization of RE sources through private and government sector participation in mini-hydro, wind energy, solar and biomass programs. It built professional capacity of RE technologies and energy efficiency in design and implementation and facilitated performance testing and energy conservation techniques aimed at reducing fossil fuel based power generation.	OC, FO, TE; NEX components has been completed, UNIDO requires to submit their final reports for the financial closure, there are some remaining funds to be returned or used for developing the newly proposed project; to be closed in 2005
2	Sustainable Manage- ment of Land Resources	Funds: TRAC; Budget: US\$ 103,850; Land taken, as a whole is the most seriously affected natural resources in Sri Lanka. The project supported the country to improve its ability to manage their land resources on a sustainable basis by developing the land use policy for the country	OC, FC in 2004
3	Climate Change Ena- bling Activity	Funds: GEF; Budget: US\$ 210,000; Project supported the identification of technology needs, capacity building to assess modalities to acquire and absorb technologies, to participate in systemic observation networks and preparation of programs to address climate change issues.	OC, FO, TE, TR has been drafted; to be closed in 2005
4	Elimination of Methyl Bromide in Tea Sector	Funds: MPU; Budget: US\$	OC, FC in 2004
5	Pollution Reduction in Bata-atha Leather Com- plex	Funds: NORAD; Budget: US\$ 1,255,542;	CPMP has been commissioned; Most of the selected leather manufactures are waiting for the approval of their bank loans to move to the Complex; Issue with the near-by community related to the effluent outfall near the sea has not been resolved; To be closed in 2005

^{*} Operationally closed, but financially open **Operationally Closed - OC; Financially Closed - FC; Financially Open - FO; Terminal Evaluation to be done - TE; Terminal Report to be submitted - TR; Others (describe)

b) Ongoing

Conservation of Biodiversity through Integrated Collaborative Management in the Rekawa, Ussangoda and Kalameitiya Coastal Ecosystems

Short description

RUK coastline constitutes rich biodiversity including nesting sites to 5 globally threatened marine turtle nesting sites and contains globally significant ecosystems. Population increase, poverty and destructive livelihood practices in the area have created serious threats to the ecosystems. The project proposes to address these issues in an integrated collaborative approach. The expected outcomes of the project include: 1) A replicable Special Area Management Plan to be developed and implemented: (2) Participatory mechanisms for resource management developed and livelihoods of the local community improved through the introduction of nature-based tourism initiatives and other sustainable sources of income. This will enable the local communities to gain increased income from sustainable livelihood practices and increase production in the lagoons, while regulating or reducing the level of coral and shell mining and other over exploitation of resources; (3) Conservation programmes for the globally significant biodiversity established and local biodiversity units created and operationalised to enhance community awareness and participation on conservation of natural resources; (4) Efficient policy level coordination and law enforcement established to improve biodiversity conservation and supporting policies amended as necessary or new policies introduced; and (5) An effective monitoring system in place to assess development activities and their impact to biodiversity established to ensure that the economic development in the project area is compatible with conservation management goals.

Executing modality: NEX

Executing agency: Coast Conservation Department/Ministry of Fisheries & Aquatic Resources

Other partners to be noted: IUCN Sri Lanka

Budget & financial status

Total Budget US\$ 729,670 (GEF)
Planned closing date December 2006

Contributing to the Conservation of Unique Biodiversity in the Threatened Rainforests of Southwest Sri Lanka

Short description

Deforestation and illegal encroachments due to population pressure, poverty, ignorance and gaps in enforcement of laws have contributed to the destruction of wet zone forests that are rich in species and endemism. Project attempts to ensure this globally threatened biodiversity are given adequate protection and promote conservation through community co-management. The expected outcomes of the project are (1) buffer zone community (and society at large) cooperating in the conservation of the selected rainforest ecosystems harboring globally threatened species establishing CBOs in the buffer zones, providing livelihood opportunities and participating actively in forest conservation; (2) a suitable model developed for securing collaboration between the local community, state agencies and other stakeholders in managing the rainforest ecosystems: A functioning, replicable institutional set-up established in each forest, with the local community collaborating with state agencies and other stakeholders; (3) Sustainable use of non-timber forests products secured through suitable mechanisms; and (4) forest adequately protected against encroachment and illicit logging.

Executing modality: NEX

Executing agency: Forest Department

Contact details of the project team & counterpart in the Regional Centre and/or HQ

National Project Director

Mr Sarath Fernando

National Project Coordinator

Mr Anura Sathurusinghe

Conservator General of Forests Act/Deputy Conservator of Forests –

Tel: +94 11 2866616 Environment Management

Fax: +94 11 2866633 Forest Department
Email: forlib@sltnet.lk

Tel/Fax: +94 11 866634
Email: emdiv@sltnet.lk

Budget & financial status

Total Budget US\$ 724,000 (GEF)
Planned closing date August 2005

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National Capacity Self-Assessment for Global Environmental Management

Short description

The National Capacity Self-Assessment is envisaged to provide the key national decision makers and external-funding agencies with critical information about the country's

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specific capacity needs to protect and manage the global environment. The main goal of the project is to identify, through a country-driven consultative process, priorities and needs for capacity development to protect the globally significant environment in Sri Lanka, taking into account the three global conventions on biodiversity, climate change and desertification/land degradation, and also to explore synergies among and across these areas. To accomplish this goal, several specific objectives will be promoted through the NCSA process. These include: identify, confirm or review priority issues for action within the thematic areas of biodiversity, climate change and desertification/land degradation, respectively; explore related capacity needs within and across the three thematic areas; catalyse targeted and coordinated action and requests for future external funding and assistance; and link country action to the broader national environmental management and sustainable development framework. It will have a strong environmental governance focus, which would include better coordination mechanisms and harmonisation for maximum benefits. The project will be process-driven and will produce documents highlighting prioritised national capacity needs, resource mobilisation strategy and a capacity development action plan.

Executing modality: NEX

Executing agency: Ministry of Environment and Natural Resources

Other partners to be noted: -

Contact details of the project team & counterpart in the Regional Centre and/or HQ

National Project Director National Project Coordinator

Mr P M Leelaratne Mr Anura Jayatilake

Secretary Acting Director – Environmental Eco-

Ministry of Environment and Natural nomics and Global Affairs

Resources Ministry of Environment and Natural

'Sampathpaya" Resources
Rajamalwatte Road 'Sampathpaya"
Battaramulla Rajamalwatte Road

Tel: +94 11 2877290 Battaramulla

Fax: +94 11 2877292 Tel: +94 11 2887452, +94 11 4441236

Fax: +94 11 2887456 Email: eeconga@yahoo.com

Budget & financial status

Total Budget US\$ 200,000 (GEF)
Planned closing date December 2006

Biomass Energy Development Project

Short description

Energy from biomass constitutes an important part of the total energy supplies of Sri Lanka. The household sector is the major end user, which includes fuel wood, crop residues and animal wastes. Biomass can provide further energy service through end use efficiency improvement, use of agricultural residues, currently disposed of dumping or burning and plantation in degraded land. Energy from biomass normally commands the biggest share in the supply of energy in rural areas. Most traditional technologies existing in the rural sector have been identified as inefficient, and there is room for numerous improvements in efficiency. The amount of biomass that can be saved through efficiency improvement can serve as a source of additional energy and can potentially substitute fossil fuels to reduce net GHG emissions. The project promotes the assessment of indigenous biomass thermal application technologies used in the process of drying of agricultural, industrial and consumer items in rural Sri Lanka and to improve their energy efficiency in order to reduce the pressure on forests and other biomass resources, study of the potential indigenous biomass energy conversion technologies that can be used in Sri Lanka through a process of applied research aimed at achieving greater efficiency and undertake selected pilot projects involving the industry to demonstrate the efficiency of the developed processes for potential industrial applications and thereafter commercialising the technologies. These will assist in expanding the use of efficient technologies in the utilisation of biomass energy in public and private sectors, improve the understanding and feasibility of biomass development in rural areas and provide new skills for biomass developers in the country.

Executing modality: NEX

Executing agency: Ministry of Power and Energy

Other partners to be noted: Energy Conservation Fund, Ceylon Electricity Board,

NERD Centre and Energy Forum

Contact details of the project team & counterpart in the Regional Centre and/or HQ

National Project Director
Mr P Weerahandi
N/A
National Project Coordinator
N/A

Secretary

Ministry of Power and Energy

80, Flower road Colombo 7

Tel: +94 11 2564847

Fax: +94 11 2688258

National Project Manager

Project Office

Mr P Livanarachchi

Tel: Fax:

Email: biomass@sltnet.lk

Regional Centre Headquarters N/A Mr. Minoru Takada

For technical support contact: **Environment and Energy Group**

Dr Kamal Riial

Tel: + 212 906 5155 Policy Advisor – Sustainable Energy Email: minoru.takada@undp.org

Bangkok Regional Centre Tel: +662 288 2129 (general) Email: kamal.jijal@undp.org

Budget & financial status

Total Budget US\$ 183,000 (ESD TTF)

Planned closing date August 2005

Methyl Bromide phase out for all remaining uses in Sri Lanka excluding Quarantine and Pre-shipment (QPS) Applications

Short description

MeBr is used in Sri Lanka for pest control, primarily for soil fumigation, for durable and perishable commodities, for warehouses and stored products, for archival materials and for PQS treatments. Sri Lanka has agreed to the Montreal Protocol terms of phase out; i.e., to freeze imports at the baseline level of 5.42 metric tons ODS with a 20% reduction by January 2005 and final phase out by January 2015. This project encompasses uses of MeBr including use in poly tunnels for growth of high-value crops such as flowers, ornamental plants, certified seed potatoes, vegetables and strawberries. Some MeBr is used for stored products, in particular by Paddy marketing Board and for timber. The objective of this project is to facilitate the adoption of effective, practical and economically feasible alternatives for all remaining non-QPS uses in Sri Lanka to phase out 3.25 ODS MT of MeBr.

Executing modality: NEX

Executing agency: Ministry of Environment and Natural Resources

Other partners to be noted: -

Contact details of the project team & counterpart in the Regional Centre and/or HQ

National Project Director National Coordinator Mr P M Leelaratne Dr D W Sumathipala

Coordinator Secretary

Ministry of Environment and Natural National Ozone Unit

Resources Ministry of Environment and Natural

'Sampathpaya" Resources Raiamalwatte Road "Parisara Pivasa"

104. Robert Gunawardena Mawatha Battaramulla

Tel: +94 11 2877290 Battaramulla

Fax: +94 11 2877292 Tel: +94 11 2887455

Email: sumathi2@sri.lank.lk

Project Coordinator Project Office

National Ozone Unit

Ministry of Environment and Natural

Resources "Parisara Pivasa"

104. Robert Gunawardena Mawatha

Battaramulla

Regional Centre Headquarters

N/A Ms. Dominique Kayser

Email: domingue.kayser@undp.org

Budget & financial status

Total Budget US\$ 130,000 (MP) Planned closing date December 2005

Monitoring Refrigerant Management Plan (RMP) for Sri Lanka

Short description

Executing modality: NEX

Executing agency: Ministry of Environment and Natural Resources

Other partners to be noted: -

Contact details of the project team & counterpart in the Regional Centre and/or HQ

National Project Director **National Coordinator** Mr P M Leelaratne Dr D W Sumathipala

Coordinator Secretary

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Ministry of Environment and Natural National Ozone Unit

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Resources Ministry of Environment and Natural

'Sampathpaya" Resources
Rajamalwatte Road "Parisara Piyasa'

Battaramulla 104, Robert Gunawardena Mawatha

Tel: +94 11 2877290 Battaramulla
Fax: +94 11 2877292 Tel: +94 11 2887455
Email: sumathi2@sri.lank.lk

Budget & financial status

Total Budget US\$ 15,979 (MP)
Planned closing date December 2006

Incentive programme for the commercial and industrial refrigeration end-user sector under refrigerant management plan for Sri Lanka

Short description

The objective of the incentive programme is to eliminate the consumption of CFCs (R-12 and R-502) in the commercial and industrial refrigeration end user sector as much as possible through provision of financial incentives to enterprises in these sectors that have existing refrigeration equipment using CFCs.

Executing modality: NEX

Executing agency: Ministry of Environment and Natural Resources

Other partners to be noted: -

Contact details of the project team & counterpart in the Regional Centre and/or HQ

National Project Director
Mr P M Leelaratne

National Coordinator
Dr D W Sumathipala

Secretary Coordinator

Ministry of Environment and Natural National Ozone Unit

Resources Ministry of Environment and Natural

'Sampathpaya" Resources
Rajamalwatte Road "Parisara Piyasa'

Battaramulla 104, Robert Gunawardena Mawatha

Tel: +94 11 2877290 Battaramulla

Fax: +94 11 2877292 Tel: +94 11 2887455

Email: sumathi2@sri.lank.lk

Budget & financial status

Total Budget US\$ 254,000 (MP)
Planned closing date December 2006

National Compliance Action Plan (NCAP) for Sri Lanka to phase out Ozone Deleting Substances

Short description

Through the UNEP/Japanese bilateral project NCAP for Sri Lanka was prepared with the objective to phase out the remaining consumption of all CFCs over the period of 2004-2010 in all sectors and Halon management. A series of investment, non-investment, technical assistance and capacity building activities are proposed through the NCAP. The project will provide further financing for the commercial refrigeration end-user incentive, MAC recovery, recycling and retrofit and for monitoring of the phase out of ODS. The project has seven activities: enhancement of national capacity to monitor trade and prevent illegal trade of ODS (UNEP), extension training of the established refrigeration technicians (UNEP), MAC – recovery, recycling and retrofitting programme (UNDP & Japanese Govt.), recovery and recycling of CFCs (UNDP & Japanese Govt.), end-user incentive programme (UNDP & Japanese Govt.), Halon bank management programme (UNEP) and monitoring the NCAP activities (UNDP & Japanese Govt.).

Executing modality: NEX

Executing agency: Ministry of Environment and Natural Resources

Other partners to be noted: -

Contact details of the project team & counterpart in the Regional Centre and/or HQ

National Project Director
Mr P M Leelaratne
National Coordinator
Dr D W Sumathipala

Secretary Coordinator

Ministry of Environment and Natural National Ozone Unit

Resources Ministry of Environment and Natural

'Sampathpaya" Resources
Rajamalwatte Road "Parisara Piyasa'

Battaramulla 104, Robert Gunawardena Mawatha

Tel: +94 11 2877290 Battaramulla

Fax: +94 11 2877292 Tel: +94 11 2887455 Email: sumathi2@sri.lank.lk

Budget & financial status

Total Budget US\$ 665,400 (MP)
Planned closing date December 2006

Institutional strengthening to phase-out Ozone Depleting Substances (ODS) Phase V

Short description

Through the UNEP/Japanese bilateral project NCAP for Sri Lanka was prepared with the objective to phase out the remaining consumption of all CFCs over the period of 2004-2010 in all sectors and Halon management. A series of investment, noninvestment, technical assistance and capacity building activities are proposed through the NCAP. The project will provide further financing for the commercial refrigeration end-user incentive, MAC recovery, recycling and retrofit and for monitoring of the phase out of ODS. The project has seven activities: enhancement of national capacity to monitor trade and prevent illegal trade of ODS (UNEP), extension training of the established refrigeration technicians (UNEP), MAC - recovery, recycling and retrofitting programme (UNDP & Japanese Govt.), recovery and recycling of CFCs (UNDP & Japanese Govt.), end-user incentive programme (UNDP & Japanese Govt.). Halon bank management programme (UNEP) and monitoring the NCAP activities (UNDP & Japanese Govt.).

Executing modality: NEX

Executing agency: Ministry of Environment and Natural Resources

Other partners to be noted: -

Contact details of the project team & counterpart in the Regional Centre and/or HQ

National Project Director Mr P M Leelaratne

Secretary

Ministry of Environment and Natural

Resources 'Sampathpaya" Raiamalwatte Road

Battaramulla

Tel: +94 11 2877290

Fax: +94 11 2877292

Budget & financial status

US\$ 665,400 (MP) Total Budget

2005 Budget US\$ **National Coordinator**

Dr D W Sumathipala

Coordinator

National Ozone Unit

Ministry of Environment and Natural

Resources "Parisara Pivasa"

104. Robert Gunawardena Mawatha

Battaramulla

Tel: +94 11 2887455

Email: sumathi2@sri.lank.lk

effective control of invasive alien species in Sri Lanka

Project Development Fund (PDF A) for strengthening partnerships fro

Short description

Observations made during the recent time have led to the documentation of 20 species of invasive alien fauna and 39 species of invasive alien flora spreading in natural and semi-natural ecosystems in the different bio-climatic zones of Sri Lanka. There is lack of baseline information on their biology and ecology and policies, laws or strategies in Sri Lanka for managing the introduction and spread of IAS. The overall goal of this project is therefore to establish the mechanism needed to significantly reduce economic and ecological damage caused by spread of alien invasive species in Sri Lanka by ensuring that relevant institutions and stakeholder groups are able to take informed decisions and implement management measures based on scientific knowledge to control the spread of IAS. The PDF stage will focus in identifying the current legal and institutional settings, research needs and stakeholder assessment for the development of the Medium-Size project for GEF funding.

Executing modality: NEX

Executing agency: Ministry of Environment and Natural Resources

Other partners to be noted: - IUCN Sri Lanka

Contact details of the project team & counterpart in the Regional Centre and/or HQ

National Project Director National Project Coordinator

Mr P M Leelaratne Mr Gamini Gamage Director - Biodiversity Secretary

Ministry of Environment and Natural Ministry of Environment and Natural

Resources Resources 'Sampathpaya" 'Sampathpaya" Raiamalwatte Road Raiamalwatte Road Battaramulla Battaramulla

Tel: +94 11 2887454 Tel: +94 11 2877290

Fax: +94 11 2877292 Email:

Budget & financial status

Total Budget US\$ 25,000 (GEF)

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Planned closing date June 2005

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Global Environment Facility - Small Grants Programme: Phase 2

Short description

The GEF-SGP concentrates on mainly biodiversity conservation and climate change mitigation. Activities addressing desertification, primarily concerning land degradation and also renewable energy have also been funded related to the two main focal areas. The priorities for the Sri Lanka programme are determined through a consultative process involving the NSC and NGO/CBO partner organizations. In selecting the grant awardees, projects addressing sustainable use of natural resources and the conservation and protection of threatened ecosystems with a direct contribution to biodiversity conservation and climate change mitigation are considered of priority concern. Partner organizations are also encouraged to take livelihood interests of communities as prerogative in designing of projects, to ensure sustainability and community responsibility of projects.

Executing modality: DEX Executing agency: UNDP

Other partners to be noted: National/local NGOs and CBOs

Contact details of the project team & counterpart in the Regional Centre and/or HQ

National Project Director

N/A

National Coordinator

Ms. Shireen Samarasuriya

(Details at the top)

Budget & financial status

Total Budget US\$ 1,750,000 (GEF)
Planned closing date December 2005

Small Grants Programme for operations to promote tropical forests

Short description

Executing modality: DEX Executing agency: UNDP

Other partners to be noted: National/local NGOs and CBOs

Contact details of the project team & counterpart in the Regional Centre and/or HQ

National Project Director
N/A
Mr Nimal Karunaratne
(Details at the top)

Budget & financial status

Total Budget US\$ 1,506,843 (EC)
Planned closing date December 2007

Community Water Initiative

Short description

Observations made during the recent time have led to the documentation of 20 species of invasive alien fauna and 39 species of invasive alien flora spreading in natural and semi-natural ecosystems in the different bio-climatic zones of Sri Lanka. There is lack of baseline information on their biology and ecology and policies, laws or strategies in Sri Lanka for managing the introduction and spread of IAS. The overall goal of this project is therefore to establish the mechanism needed to significantly reduce economic and ecological damage caused by spread of alien invasive species in Sri Lanka by ensuring that relevant institutions and stakeholder groups are able to take informed decisions and implement management measures based on scientific knowledge to control the spread of IAS. The PDF stage will focus in identifying the current legal and institutional settings, research needs and stakeholder assessment for the development of the Medium-Size project for GEF funding.

Executing modality: DEX Executing agency: UNDP

Other partners to be noted: National/local NGOs and CBOs

Contact details of the project team & counterpart in the Regional Centre and/or HQ

National Project Director
N/A
Ms. Shireen Samarasuriya
(Details at the top)

Budget & financial status

Total Budget US\$ 100,000 (UNDP)

2005 Budget US\$

c) Involvement in other projects and programmes UNDP

TITLE	RESPONSIBLE PO/NC & UNIT	ROLE OF E&E PO	Role of E&E PA	COMMENTS (INCLUDING AN UPDATE & SPECIFIC CONTRIBUTIONS)
Regional Envi- ronmental Gov- ernance Pro- gramme	Bangkok Regional Centre	CO Environment Focal Point	None	RR is a voting member of the Steering Committee; PO reviews all correspondence related to his tasks and provides advise for his inputs
Transition Programme	Nynke Kuperus, Transitional Recov- ery	Provide technical guidance in areas of environment and sustainable livelihoods	None	Contributions: Training of project staff on environmental mainstreaming and project document writing; Facilitating the NE Environmental Management Workshop; Provision of environmental criteria in project development and M&E
Transitional Re- covery Support to Flood Disaster	Ramraj Narasimhan, Transitional Recov- ery	N/A anymore	Managing budgets	
Emergency Response to Drought	Ramraj Narasimhan, Transitional Recov- ery	N/A anymore	Managing budgets	
Capacity Development (tsunami)	Devanand Ramiah, Transitional Recovery	Provision of envi- ronmental technical inputs	None	
GEF Small Grants Pro- gramme	Shireen Samara- suriya, E&E	Member of the NSC; M&E	None	
SGP – Promote Tropical Forests	Nimal Karunaratne, E&E	CO Focal Point for the programme; Member of the NSC; M&E	None	
Community Wa- ter Initiative	Shireen Samara- suriya, E&E	Technical guidance, M&E	None	

Non- UNDP

TILE	ROLES AND RESPON- SIBILITIES OF THE PO	COMMENTS (INCLUDING AN UPDATE)
Multi-lateral Environment Working Group	CO Focal Point	Chaired by the WB
Transition Strategy of the UN- Tsunami	Environment Focal Point	Coordinated by OCHA
Environmental Coordinating Group - Tsunami	CO Focal Point	Co-chaired by the Netherlands Embassy and WB

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Other donors

TITLE	Donor	AMOUNT US\$ MN.	START	END
Support the NDB in Environmental Protection	Government of Germany	5.6		
Natural Resources Management Project	Government of Australia	7.4		
Natural Recourses Management	Government of Australia	10.6	12\03\03	31\12\08
Lunawa Environmental improvement & Community Development	Government of Japan	6.9	28\12\01	26\04\10
Environmentally Friendly Solution Fund	Government of Japan	5.2	07\12\04	09\12\11
Regional Environment Energy & Urban	Government of USA	0.25	26\08\02	30\09\06
Walawe Left Bank Irrigation, Upgrading & Extension – Phase II	Government of Japan	14.0	23\10\96	25\12\05



Framework Contract AMS/451 Lot N°6
Request for Services N°2005/102913 – Version 2

Country Environment Profile of Sri Lanka

Final Report - Administrative Appendices

August 2005



This project is funded by the European Union



A project implemented by MWH

Appendix 5: STUDY METHODOLOGY/WORK PLAN

METHODOLOGY - SRI LANKA

1. Introduction

Sri Lanka is a poor country where development has been hampered by conflict and an unstable political situation. Many attempts at trade liberalisation and greater involvement of the private sector have been slowed down by the recent change of government. The tsunami has added a further burden on natural resources and economic development and will be a key issue in this profile

2. APPROACH

The commission sees environment as a crosscutting issue in the context of its policy with Sri Lanka. A guiding principle for the country environmental profile will be to see have environmental constraints and potentials will affect interventions in connections with resettlement of displaced persons, governance issues (especially in the North and East) and economic and trade related assistance. A key issue is the link between environment and poverty reduction. The participatory approach to be taken will be based upon document and policy review updated and highlighted by national and international stakeholder concerns. The performance of the country will be assessed against selected key local and international environmental indicators. This participatory approach will be continued by involving stakeholders in feedback on key recommendations for action where the EC can give added value in relation to its comparative advantage and interests as outlined by the Country Strategy and NIP. Additional specific issues raised by the EC are the environmental impact of the accelerated rebuilding programme, pollution linked to waste disposal and sewage, coral mining in coastal areas, and mangrove forests removal and damage. Sri Lanka has clear and distinct eco-geographical zones based on environmental and social variables. The profile analysis will be dis-aggregated in order to reflect this and may contain special development areas or regions as part of the recommendations

3. GENERAL METHODOLOGY

The final report structure and outputs required for each chapter are clearly outlined in the TOR. The five-day desk analysis of documents and internet resources will be focused on the identification of key environmental profiles, aspects of national and international (EC and non EC) policy and relevant government line departments at national and local levels. Analysis of key NGO and private sector stakeholders will be carried out alongside the review of government departments. Key outputs will be key indicators, key eco-geographical regions and a list of important donor activities. The outputs of this will be discussed at the briefing at the delegation in Colombo. The two days allocated for this may enable one day to be used for an initial stakeholder meeting. The main outputs from this will be a list of key issues of direct relevance to the EC, an outline itinerary and a list of key contacts. The 15-day field phase will be devoted to further document review and meetings with key stakeholders at strategic locations in order that key sites can be visited. The output of this will be a succinct, 5-page draft environmental profile with a prioritised list of recommendations stating key stakeholders and geographical areas. The prioritisation process will be based upon a matrix ap-

proach with key issues forming one axis and the other axis showing impact on a set of policies. This is vital in relation to the multidimensional nature of the task eg Mangrove loss has an impact on poverty, biodiversity, urban sewage discharge, fishing, firewood and loss of land or housing (coastal erosion). Each priority issues will have a link to key locations, beneficiaries, governance issues and responsible agents. In Sri Lanka, the linkage (economic and ecological) with urban environmental issues and the involvement of the municipalities will be important. Day 13 of the 15 day period will be set as a target date for the production of this draft to be discussed at a stakeholder workshop on day 15. The 3-day report writing period will involve analysis of feedback from the workshop and other editing and updating work. The 2-day debriefing period at the delegation could include a meeting with key officers and a final stakeholder meeting. A further 2 days will be spent on the production of a final document showing key issues and recommendations in relation to regions based upon functional attributes.

Appendix 6: Consultants' Itinerary

22/06/2005	Travel to Brussels
23/06/2005	EC Meetings
24/06/2005	EC Meetings
25/06/2005	Travel to Sri Lanka
26/06/2005	Travel to Sri Lanka
27/06/2005	Delegation meetings and briefing of local consultant
28/06/2005	Delegation meetings and collection of documents
29/06/2005	Meetings at Dutch Embassy and at UNDP
30/06/2005	Meetings at wildlife dept and at IUCN
01/07/2005	Meetings at dept of coast conservation
02/07/2005	Analysis of documents
03/07/2005	Analysis of documents
04/07/2005	Delegation, distribution of workshop invites, Field trip
05/07/2005	Ampara
06/07/2005	Baticoloa
07/07/2005	Evening GA stakeholder meeting Trincomalee
08/07/2005	Tricomalee Action Faim evening Kilinochchi
09/07/2005	Jaffna GA Jaffna field
10/07/2005	Return to Colombo via Puttalam Chilaw and Negombo
11/07/2005	Colombo Stakeholder meetings CEA
12/07/2005	Colombo report analysis
13/07/2005	Colombo Stakeholder meetings MENR and FD
14/07/2005	Workshop preparation
15/07/2005	Stakeholder workshop
16/07/2005	Draft report writing
17/07/2005	Draft report writing
18/07/2005	Day 20 Delegation debriefing 14.00
19/07/2005	Depart Colombo Arrive Heathrow
20/07/2005	Draft report writing
21/07/2005	Draft report writing
22/07/2005	Draft report writing

Appendix 7: LIST OF PERSONS/ORGANISATIONS CONSULTED WITH THEIR AFFILIATION AND CONTACT DETAILS

NAME	POSITION	AFFILIATION	Address	PHONE	EMAIL
Gilles Bertrand		EC Relex	170 Rue de la Loi, BE- 1040 Brussels, Bel- gium	+32 2 295 5512	Gilles.Bertrand@cec .eu.int
Ramon Mestres		EC Relex	170 Rue de la Loi, BE- 1040 Brussels, Bel- gium	+32 2 298 4126	Ramon.Mestres@ce c.eu.int
Roshan Lyman	Economic and trade ad- visor	EC Delegation	26 Sir Marcus Fernando Mawatha, Colombo 7, Sri Lanka	+94 11 267 4413	Roshan.Lyman@cec .eu.int
Bandula Hen- nadige	Senior pro- gramme offi- cer	Royal Nether- lands Embassy	25 Torrington Ave, Colombo 7, Sri Lanka	+94 11 2596914	Bandula.Hennadige @minbuza.nl
Nimal Karunaratne	PTF Coordi- nator EC small grants	UNDP	202-204 Bauddhaloka Mawatha, Colombo 7, Sri Lanka	+94 11 2580691	Nimal.Karunaratne@ undp.org
Darshani De Silva	Environment programme analyst	UNDP	202-204 Bauddhaloka Mawatha, Colombo 7, Sri Lanka	+94 11 2580691	Darshani.DeSilva@u ndp.org
Dayananda Kariyawasam	Director General	Dept of wildlife conservation	18 St Gregory's rd, Colombo 7, Sri Lanka	+94 11 2694241	Director@dwlc.lk
lan Deshmukh	TA team leader	ADB Protected area and wild- life manage- ment project	18 St Gregory's rd, Colombo 7, Sri Lanka	+94 11 2694241	Ideshmukh@ardinc.c om
Shirani Ya- saratne	Country rep- resentative	IUCN	53 Horton Place, Colombo 7, Sri Lanka	+94 11 2682416	Sey@iucnsl.org
R.A.D.B. Sama- ranayake	Director	Coast conservation dept	New Secretariat, Mali- gawata, Colombo 10, Sri Lanka	+94 11 2449755	Radbs@sltnet.lk
H M Herath Abeyweera	Government agent	District secre- tariat	Ampara		
M A C Najeeb	Assistant Di- rector	Central envi- ronment authority	Sub regional officr 1st Avenue Ampara	+94 63 2222192	
I L Thowfeek	Duputy Proj- ect Director	NECCDEP	District office Adeli- chena	+94 67 2279187	
V Shanmugam	Government agent	District secre- tariat	Government office Batticoloa	+94 65 2222236	
I G Punniy- mouthy	Additional Government agent	District secre- tariat	Government office Batticoloa	+94 65 2222236	
K Sristandarajah	District envi- ronment offi- cer	District secre- tariat	Government office Batticoloa	+94 65 2222674	

Name	POSITION	AFFILIATION	Address	PHONE	EMAIL
Dr M Mano- bavan	Natural re- sources planner	NECCDEP ADB Project	Government office Batticoloa	+94 65 6918/2	
L Navaretnara- jah	Officer	Central Envi- ronment Agency	Government office Batticoloa	+94	
NASN Nishanka	Officer	Urban devel- opment author- ity	Batticoloa		
S Rangarajah	Chief Secre- tary	North East Provincial Council	Inner harbour Rd Tri- comalee	+94 26 222012	Nepcs@sltnet.lk
C Patamangthan	Project Di- rector	World Bank- Funded Hous- ing Programme		+94 26 2224853	
A A Bawa	Director Planning	District secre- tariat	Ampara	+94 63 2223904	
P Ramanthan	Secretary and priject di- rector NEIAP	Ministry of ag- riculture and lands	Trincomalee	+94 26 2222468	
S Shanmugam	Government agent	District secre- tariat	Vavuniya	+94 24 2222235	
K Mahalingam	Secretary	Rehabilitation	Tricomalee	+94 26 2222136	
A Sivaswamy	Additional Government agent	District secre- tariat	District Secretariat Jaffna	+94 21 222 2236	
P Senthilnan- thanan	Divisional secretary (Kopay)	And Additional Government agent	District Secretariat Jaffna	+94 22 225711	
Mrs Suganiya Bhaskaran	Engineer	Regional Office North	District Secretariat Jaffna	+94 21 222374	
S Umapathy	Engineer as- sistant	Water Supply Scheme	Wilson rd Killinochi	+94 21 22285815	
P Caputo	Officer	Italian Civil Protection	Italy	077 6948241	
D Sbrocco	Officer	Movimondo	Jaffna	077 9112919	
Dr A S Sosai	Lecturer	Dept of Geog- raphy	University of Jaffna	+94 21 222 6512	Assooosai@yahoo.c o.in
PM Leelaratne	Secretary	Ministry of Environment and Natural Resources	82 Rajamalwatta Rd, Battaramulla	+94 11 2877290	Forest@sri.lanka.net
Mariam Momay- oun	Development Co-operation advisor	European Un- ion	26 Sir Marcus Fernando Mawatha, Colombo 7, Sri Lanka	+94 11 267 4413	Mariam.homayoun@ cec.eu.int

Name	Position	A FFILIATION	Address	Phone	EMAIL
Ms Ramani Elle- pola	Acting Di- rector Gen- eral	Central Envi- ronment Authority	82 Rajamalwatta Rd, Battaramulla	+94 11 2872388	Rellopola@cea.lk
A A Kulatanga	Director	Policy planning division MENR	82 Rajamalwatta Rd, Battaramulla	+94 11 2877290	
WRMS Wickra- masinghe	Additional secretary En- vironment and Policy	Ministry of Environment and Natural Resources	82 Rajamalwatta Rd, Battaramulla	+94 11 2875327	Addsecni@sltnet.lk
Sarath Fernando	Conservator General	Forest Depart- ment	82 Rajamalwatta Rd, Battaramulla	+94 11 2866616	Forliv@sltnet.lk
Ananda Wijeso- oriya	Deputy Con- servator of Forests	Forest inventory and management	82 Rajamalwatta Rd, Battaramulla	+94 11 2866627	Findef@sltnet.lk
Anura Sathu- rusinghe	Deputy Con- servator of Forests	Social forestry and extension	82 Rajamalwatta Rd, Battaramulla	+94 11 2866626	Tree@slt.lk
K P Ariyadasa	Conservator of Forests	Supervisor for- estry programs	82 Rajamalwatta Rd, Battaramulla	+94 11 2866624	Aridas@slt.lk
Steve Hunt	Team leader	Sri Lanka Australia natural resources management project	82 Rajamalwatta Rd, Battaramulla	+94 11 2885 874	Steveh@sltnet.lk
Alan Fitzgibbon	Team leader	EC trade consultancy mission	8 Dawson St Dublin Ireland	+353 1 287 8061	Afitzgibbon@indgo.i e

Appendix 8: LIST OF DOCUMENTATION CONSULTED

1. EC DOCUMENTS

- National Indicative Programme 2006
- The EC and Sri Lanka, Co-operation Strategy 2002-2006

2. KEY BASELINE DOCUMENTS

- MDG 7, Ensuring Environmental Sustainability UNDP August 2004
- State Of The Environment In Sri Lanka Ministry of Environment and Natural Resources January 2002
- Caring For The Environment 2003-2007 Ministry of Environment and Natural Resources September 2003
- Rapid Assessment of Damage to Natural Ecosystems in the Coastal and Associated Terrestrial Environments – Ministry of Environment and Natural Resources UNEP
- Rapid Environmental Assessment on Post-Tsunami Brown Environment University of Moratuwa – June 2005 UNEP

3. SRI LANKAN AND DONORS DOCUMENTS

- Administration Report of the Director Department of Wildlife Conservation Sri Lanka 2001
- Annual Report 2003 CEA, Ministry of Environment and Natural Resources
- Annual Report 2004 Central Bank of Sri Lanka
- Arjuna's Atlas of Sri Lanka Arjunas Consulting Co. Ltd. 1997
- Biodiversity And The Millennium Development Goals IUCN Balakrishna Pisupati, Emilie Warner – December 2003
- Biodiversity Conservation in Sri Lanka Ministry of Forestry and Environment 1999
- Directory on National Level Non-Government Organizations Ministry of Social Welfare
- Euro Link European Chamber of Commerce of Sri Lanka June 2005
- Guide for Implenting the EIA process, No 1, 1998. Central Environmental Authority, Sri Lanka – 1998
- International Workshop on Environmental Management in North-East, Sri Lanka UNDP –
 2003
- Johannesburg Summit 2002, Sri Lanka Country Profile UN 2002
- National Forestry Policy And Executive Summary Ministry of Agriculture, Lands and Forestry November 1995
- Natural Environmental Policy and Strategies Ministry of Environment and Natural Resources August 2003
- Performance Report For Year 2004 Forest Department, Ministry of Environment and Natural Resources 2004
- Post Tsunami Environmental Assessment in Sri Lanka Ministry of Environment and Natural Resources – June 2005
- Poverty Reduction Through Improved Natural Resource Management SLANRMP

- Progress Report 2004 And Action Plan 2005 Ministry of Environment and Natural Resources
- Review of Environmental Legislation in Sri Lanka (Volume 1) Central Environmental Authority, Ministry of Environment and Parliamentary Affairs
- Sri Lanka Poverty Assessment WB June 2002
- Sri Lanka Protected Areas Management and Wildlife Conservation Project Ministry of Environment and Natural Resources – June 2005
- Sri Lanka, Improving The Rural And Urban Investment Climate WB,ADB 2005
- Sri Lanka: New Development Strategy Ministry of Finance and Planning May 2005
- Sri Lanka: Sate Environment 2001 UNEP-RRC.AP 2001
- Sri Lanka's Middle Path to Sustainable Development in the 21st Century Ministry of Environment and Natural Resources – August 2002
- Statistical Abstract 2003 Department Of Cencus And Statistics, Sri Lanka

Appendix 9: Curricula vitae of the consultants

NAME Prof. Steven Mark Newman

EDUCATION BSc Environmental Biology, Oxford University, UK. 1979

PhD Agroforestry, Open University, UK. 1983

EXPERIENCE 22 years

SECTORAL EXPERIENCE

Biodiversity, Environment, Natural resources, Sustainable rural livelihood, Informa-

tion Technology, Engineering, Rural enterprise

COUNTRIES OF EXPERIENCE (* indicates team leader) Afghanistan, Bangladesh, Barbados, Belgium, Belize, *Brazil, Cambodia, Cameroon, Canada, *China, Colombia, Costa Rica, Cuba, Ecuador, Equatorial Guinea, Finland, France, Germany, Ghana, Greece, Hong Kong, *India, *Indonesia, Italy, Kenya, *Laos, *Malaysia, Malta, Mexico, Moldova, Nepal, Netherlands, Niger, *Nigeria, Pakistan, *Philippines, Portugal, Singapore, South Africa, *Sri Lanka, St Helena, St Lucia, Sweden, Switzerland, Tanzania, *Thailand, Turkey, UK, USA, *Vietnam,

EMPLOYMENT

1995- LEEDS UNIVERSITY Visiting Professor

Biodiversity agroforestry and natural resources (over 50 publication)

1994- BIODIVERSITY INTERNATIONAL LTD UK Managing Director

Overall direction and management of multinational management and technical consultancy company. Offices in UK Africa, and Asia. Many short term missions

overseas

1989-95 SILSOE COLLEGE, CRANFIELD UNIVERSITY, UK. Professor of Agroforestry

(Part time),

Initiation of University research, consultancy and training ventures. Courses included: environmental conservation, agroforestry (professional development course and MSc), plantation and forest management at both Postgraduate and Professional levels. Management of research farms on campus and farm network. Major research

contracts were obtained for work in China and Europe.

1989 -1993 FOUNTAIN RENEWABLE RESOURCES LTD., UK. Managing Director Overall

direction and development of multinational forestry consultancy company. Specialist overseas inputs on Ecology, Agronomy, Agroforestry, Forestry Research and Training.

Co-ordination of work by offices and agencies in UK., USA, Indonesia and the

Philippines.

Prof. Hemanthi Ranasinghe

Academic Qualifications:

Ph.D. in Forestry & Environmental Science University of Wales, Bangor, U.K. – 1989

M.Sc. (Forestry)University of Sri Jayewardenepura, Sri Lanka – 1985

B.Sc. (Honours) Botany Special University of Kelaniya, Sri Lanka, 1983

Present Position:

Professor of Forestry & Environmental Science

Department of Forestry & Environmental Science

University of Sri Jayewardenepura

Other positions:

Director/Sri Lanka Resource Centre for Indigenous Knowledge

Awards received:

Fulbright Fellowship from United States of America, 1995-1996

Professional Woman of the Year – 2000 granted by the Women's Chamber of Commerce affiliated to the SAARC Secretariat.

Academic experience:

About 20 years service as a university academic and a researcher. Pioneered in the establishment of the Department of Forestry & Environmental Science in the University of Sri Jayewardenepura. Significant contribution in shaping the academic teaching and training both at undergraduate and postgraduate levels to suit the development needs of the country. Published numerous research papers in both local and international journals and communications.

Consultancy and Contribution to national development:

Contributed ardently to the country's development process in shouldering numerous responsibilities in various capacities. Have carried out numerous environmental impact assessments (EIA) as Team Leader as well as Consultant on a variety of subject areas pertaining to environment for local as well as international organizations both directly (eg. UNDP, ADB) and projects funded by them through national institutions. Had served as Chairperson/Secretary/Committee Member in many professional organizations and national bodies.

Appendix 10: Terms of Reference for the Country Environmental Profile

TERMS OF REFERENCE

Country Environmental Profiles of Bhutan, Nepal, Nepal and Sri Lanka

1. Background

d) Bhutan

Bhutan is a small, landlocked kingdom in the eastern Himalayas, extending over an area of 46,500 square kilometres. The country is bordered by India and the Tibet region of China. With much of the land being rugged, only two to five percent of land is arable, with the majority of the population of approximately 700,000 living in the river valleys and practising subsistence agriculture and nomadic pastoralism.

Bhutan has cautiously avoided the trend of rapid growth maximisation by taking a unique approach reflected in the frequently cited words of King Jigme Singye Wangchuk: "Gross National Happiness is more important than Gross National Product." Bhutan has set a clear priority on preserving its cultural identity and natural environment, and has sought to encourage popular participation in the development process to reflect people's needs and priorities in the projects, with the government priorities in seeking development with a minimal impact on Bhutan's culture and environment.

Bhutan has always maintained a conservation-based policy concerning its natural assets. Although forests cover 65 to 70 percent of the land and offer vast economic potential through timber export and wood based industries, commercial logging has been banned since 1979. Environmental legislation requires that 60 percent of the country remain under forest.

Bhutan launched its Ninth Five Year Plan (NFYP) on 1 July 2002. The plan emphasises the strengthening of infrastructure, improving the quality of social services, ensuring good governance, promoting growth of the private sector, generation of employment, and preservation and promotion of culture and the environment.

The EC is one of the largest donors in Bhutan. Bhutan perceives the EC's ongoing cooperation as having matured over the years. The European Commission and its Member States have a strong presence in Bhutan and continue to play an important role in Bhutan's socio-economic development. EC assistance has contributed to a stable growth to the Bhutanese economy and has helped Bhutan to be on track in achieving the Millennium Development Goals. The Core sector of Support from the EC to date has been in the Renewable Natural Resources sector, which sustains some 80 per cent of the Bhutanese population, and is the highest contributor to GDP.

The European Commission's (EC) present National Indicative Programme for Bhutan 2002-06 makes available an indicative amount of € 15 million. The highest priority has been given to renewable natural resources with 64% of the budget, and consists of livestock production and integrated pest management. The other assistance areas are health/traditional medicine and trade development and export diversification.

e) Nepal

The Nepal is a chain of Indian Ocean islands spread over a distance of 900 kilometres, and located between northern latitude 4 to slightly south of the equator. The land area, which covers about 26 geographic atolls, is grouped into 20 administrative atolls. The population of the Nepal is about 300,000. The country faces two main geographic challenges: (a) the absence of a significant land mass, which has resulted in a highly dispersed population, and (b) the low altitude of the existing islands. The country has 1,190 islands, of which 198 are inhabited. Of these islands, only 33 have a land area greater than one square kilometre. One third of the inhabited islands have a population of less than 500 and 70 percent of the inhabited islands have a population of less than 1,000. This extremely low population density makes the Nepal unique, even among small island archipelagic states. It also raises the cost of delivering social services and of public administration, as there is hardly any scope to generate economies of scale. The altitude of most of the islands in the Nepal is very low, just above sea level. As a result, rising sea levels cause many islands to disappear. This has rendered some inhabited islands ecologically vulnerable, while other islands have become too densely populated to sustain their communities. The greater Male' area, already home to 70,000 people or almost a quarter of the population, is of specific concern, with increasing strain on social and public services caused by continuing in-migration from other parts of the archipelago.

The principal impact of the tsunami on the Government's development strategy will be to accelerate the process of population concentration. The tsunami lent new urgency to the policy of population concentration, which will go a long way to reduce diseconomies of scale in service provision and will provide protection against sea-level rise. Another impact of the tsunami has been a rethinking of environmental measures needed to defend focus islands—a new plan for creation of safe focus islands has been proposed. The proposed safe island design would involve elevated zones, high buildings, special drainage zones, and sloping revetments for environmental protection. The Government's population consolidation policy rules out forced resettlement. The Government has re-stated its policy against forced resettlement in a recent communication to donors.

f) Nepal

Nepal is a landlocked country in the Eastern Himalaya, bordered by China in the north and India in the east, south and west. It is classified as a least developed country (LDC). The population is estimated at about 24 million, living mostly in rural areas (88%). Nepal's GDP per capita is approximately 230 € in 2003. The country's socio-political situation is dominated by the Maoist's insurgency and King Gyanendra's decision on 1st February 2005 to shelve the democratic process to manage the country and take the "Direct Rule" by chairing himself the government. Social problems and social tensions are increasing as the poor, the Nepali women and the marginalised groups (i.e. Dalits, Kamayas, etc.) continue to face discrimination in various aspects of life.

EC assistance to Nepal dates back to 1977 and totals €200 million. Current aid activities operate within the 1996 EC-Nepal Framework Co-operation Agreement. Development aid has been granted in areas such as irrigation and watershed management, animal health, reproductive health, primary education, institutional capacity building, trade, democracy and human rights.

Environmental changes have been major concerns in Nepal particularly during the last five decades. Although human induced activities such as deforestation, soil erosion and landslides were considered major environmental concerns for the past several decades, impacts of global changes and atmospheric pollution have been realised since the 1980's. Rapidly retreating glaciers in high Himala-

yas, record of distinctly increasing air temperature at a few locations, and increasing hydrological extremes are typical burning environment issues facing Nepal. The other major concerns are desertification, sediment deposition, unplanned urbanisation, forest fire, dwindling water resources, loss of biodiversity and needs of alternate energy sources.

Government level policies show that Nepal realised the importance of environmental conservation in development plan only in its fifth five-year plan (1975-1980). Presently, environment assessment is a prerequisite for most development projects. Establishment of a specialised ministry "Ministry of Environment and Population" in 1996 is a major step toward proper monitoring and policy formulation required for environmental conservation for sustainable development. Although a few laws relevant to environmental protection existed in the last fifty years in Nepal, the existing constitution formulated in 1990 first time lucidly stated the need of environmental conservation and biodiversity preservation.

Tackling the challenge of environmental degradation is an urgent need in Nepal. Main areas of activities include the enforcement of the environmental laws that have already been enacted and the relocation of polluting industries. Development of skilled labour to carry out these activities represents a sector where the Commission can play a lead role through the implementation of the CSP/NIP 2007-2013.

g) Sri Lanka

The Democratic Socialist Republic of Sri Lanka is an island in the Indian Ocean, south of the Indian subcontinent.

The conflict waged by Tamil separatists in the northern and eastern regions of Sri Lanka since 1983 experienced a break with a cease-fire on the 22 February 2002. The donors support meeting on humanitarian aid, held in Oslo in November 2002 consolidated steps towards peace, with the donor conference in Tokyo in June 2003 resulting in pledges amounting to € 4,5 billion.

The tsunami that hit the countries around the Indian Ocean on December 26, 2004 was one of the worst natural disasters in recorded history. After Indonesia, Sri Lanka has suffered the most from the tsunami. The tsunami has destroyed or damaged: 130,000 houses, 168 public schools, four universities, 18 vocational centres; 92 local clinics, hospitals and drug stores; significant losses in power, transportation (roads and railways), water supply and sanitation. Sri Lanka's tourism industry has been very hard hit since the disaster occurred during one of their busiest periods of the year destroying key infrastructure. Environmental damage has also been significant 1

On the basis of the CSP, the 2006 NIP will focus on two components: i) support to the peace process, through the resettlement of Internally Displaced Persons (IDPs) and improving good governance in the North and East and ii) economic co-operation and trade-related technical assistance. The programming mission for the next NIP 2007-2012 will take place early June 2005. The E.C. is interested in taking stock of the present situation and integrating Environment as a crosscutting issue for all future reconstruction programmes.

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¹ UN has included US\$3 million in its Flash Appeal for short and medium term measures for assessment and recovery of natural resources and livelihoods.

2. Objective

The main objective of a Country Environmental Profile is to identify and assess environmental issues to be considered during the preparation of a Country Strategy Paper, which will directly or indirectly influence EC cooperation activities.

The Country Environmental Profile will provide decision-makers in the partner country and in the European Commission with clear information on the key environmental challenges, as well as policies, strategies and programmes designed to address them. This information will ensure that the EC cooperation strategies systematically integrate environmental considerations into the selection of priority focal areas and establish the necessary environment safeguards for all cooperation activities undertaken in the Country.

The Profile will establish the key linkages between the environment and poverty reduction. It will constitute an important source of baseline information and contribute to focusing political dialogue and cooperation with the Country on key areas of concern such as sustainable development as well as raising awareness among policy-makers.

3. Results

The assessment will deliver the following results:

- An assessment of the environment identifying key environmental factors influencing the Country's development and the responses to these.
- An assessment of national environmental policy and legislation; institutional structures and capacity, and the involvement of civil society in environmental issues.
- An assessment of past and anticipated future tends of environmental indicators.
- An overview of past and ongoing international cooperation in the environment sector.
- Recommendations and, as far as possible, guidelines or criteria for mainstreaming environmental concerns in priority development areas. These recommendations should support the preparation of the Country Strategy Paper and, as far as possible, include guidelines or criteria to be used for environmental mainstreaming in subsequent phases of the operation cycle.

4. Issues to be assessed

The consultants will assess the following issues:

4.1. The state of the environment

This chapter should identify key issues, including facts (pressures, current status and trends) and problems in the following areas:

- Physical environment: air and climate, land, water, and natural disaster risks.
- Biological environment: biodiversity, ecosystems, biological resources of cultural, social, or economic importance.
- The social and economical causes of the environmental situation and trends and their consequences on human well-being and sustainable development should be presented too.

a) Bhutan

Specific issues to be addressed include:

- It should be examined how environmental conservation has been integrated into Bhutan's development policy; what the impact of this has been, as per the mid term review of the 9th Five year Plan, and how it will be addressed in the 10th Five Year Plan, within the context of the socioeconomic impact of migration, urbanisation etc.
- The environmental impact of an increasing focus on resource extraction industries such as, mining (as these activities are energy intensive).
- Role of hydroelectric power in biodiversity conservation.
- Assessment of de-forestation/re-forestation targets (cutting and planting of forests).
- The impact on the environment following the emphasis on promoting economic self-reliance, (92 percent of the population is engaged in the agricultural sector with agricultural exports being seen to be an option to generate foreign currency revenue while at the same time working to enhance rural revenue and improve the standard of living). The Bhutanese government in recent years has been encouraging production of cash crops such as apples, oranges, potatoes and cardamom, aimed at neighbouring markets such as India and Bangladesh.

b) Nepal

Specific issues to be addressed include:

- Environmental Impact of the Safe Islands Policy.
- Improving governance: improvements in institutional capacity in environmental monitoring and enforcement. Reform the provision of environmental infrastructure to meet the challenges of delivery mechanisms and develop a good public accounting system.
- The environmental impact of population concentration and reconstruction, following the government's development policy post tsunami (UNEP report February 2005)
- The increasing stress on the environment due to larger volumes of untreated sewerage and solid waste disposal.
- Depletion of water resources and lack of clean water supply.
- Strengthening of Atoll administrations as well as Island communities facilitating effective decentralised management of natural Resources.

c) Nepal

Specific issues to be addressed include:

- Environmental degradation in urban and peri-urban areas has become a matter of serious public concern, particularly in the Kathmandu Valley. Its population, estimated at 1.5 million people, is growing at an annual rate of about 10%. Existing infrastructure facilities are unable to cope with such a rise. The high use of harmful chemicals, the lack of solid wastes facilities and increasing fuel emissions following mass imports of and plying of old vehicles are a growing danger to public health. An appraisal of the current trends and policy options has to be examined.
- In the mid-1990s, the liberalisation of industrial policy led to the haphazard establishment of industries in urban areas, with few health and environmental safety measures taken. A critical review of the policy with impact assessment is needed.

An assessment of skilled labour and capacity building required to tackle these issues.

d) Sri Lanka

Specific issues to be addressed include:

- How the accelerated rebuilding programme will take into account the environmental impacts of reconstruction interventions, in a situation where there was severe stress on natural resources, even prior to the environmental destruction caused due to the Tsunami. With the support of UNEP, the Government has commissioned two teams of national experts to produce Brown and Green Environment studies to assess the extent of damages caused by the tsunami (to be published end May 2005). The report will provide a series of recommendations, notably with regards to coastal regeneration and housing policy.
- An assessment of the pollution due to the haphazard solid waste and sewer disposal, excessive
 extraction of sand in the rivers, destruction caused to sand dunes, coral mining in the coastal areas, removal of mangrove forests which were key environmental issues prior to the Tsunami.
 These issues should be revisited post Tsunami.
- Reference should be made to local and internationally recognised environmental indicators and
 quality standards to establish a consistent basis for comparison of environmental and sustainable
 development performance. The indicators selected should facilitate future monitoring and evaluation of the extent of environmental integration and be useful for future environmental assessments. Attention should be paid to the rate of change of indicators where information is available.
- If appropriate, the information could be organised according to eco-geographical subdivisions with the scale (regional, national, local) of the issues indicated.

4.2. Environmental policy and legislation

A brief description and a review of strengths and weaknesses of the following:

- National policies, environmental strategies and action plans (including, if possible according to the results of 4.1, an assessment of the environmental performance in meeting the objectives and targets).
- Legislation, current and in preparation, by the National Institutions covering development control, requirements for environmental assessments, sustainable use or conservation of natural resources, pollution control, land tenure and land reform. The effectiveness of legislation enforcement. The provision for public participation in environmental issues, procedures for public participation in development control and environmental planning and public access to environmental information.
- National approaches to key international or regional environmental conventions such as those concerning climate change, biodiversity and desertification.

4.3. Environmental institutional framework

- The Institutional structures and responsibilities of the authorities dealing with environmental issues in policymaking, legislation, planning, environmental protection, monitoring and enforcement.
- The level of co-ordination between sectoral institutions or ministries involved in environmental or natural resources management issues.
- The major NGOs, institutes or other institutional stakeholders.

- The capacity and financial resources of authorities responsible for environmental management.
- The extent and quality of protected areas (and, if relevant, other land use measures).

4.4. Integration of environmental concerns into the main sectors

The assessment should examine the integration of environmental concerns in the main sectors that have key linkages with environmental issues and might be identified for EC support. Following the country specific issues, further sectors may emerge during the mission, which can be identified for EC support.

4.5. EU cooperation with the Country from an environmental perspective

This should cover experience relating to interventions with specific environmental objectives as well as the integration of environment into other sectors, including the application of environmental æsessment procedures. Where information is available the environmental impacts of EU cooperation or potential risks should be identified for the benefit of future programmes. The results of existing evaluations/reviews should be incorporated and lessons should be drawn for the future.

4.6. Cooperation funded by other agencies from an environmental perspective

This should cover involvement of other funding agencies and their experience in the Country and include a list of recent and planned projects/programmes, with an environmental focus or anticipated impact.

5. Conclusions and recommendations

The key aspects of the state and trends of the environment in the Country including policy and institutional constraints and challenges should be clearly stated. This may be presented in a matrix, crossing environmental concerns and the main sectors or policies.

Based on a comprehensive assessment of available information and consultation with stakeholders recommendations on how best to address environmental issues should be elaborated. Individual recommendations should be clearly articulated and linked to the problems to be solved and grouped according to the involved sector or institutional stakeholder. Recommendations should be easily used in the preparation of the Country Strategy Paper, taking into account the existing Country Strategy Papers (which will provide general guidance on the style and detail required) and already pre-identified options for the next CSP. Nevertheless, useful recommendations can also be made for the Government, other donors (particularly EU Member States) and the use of EC horizontal budget lines.

The relative priority of the recommendations and an indication of the challenges to their implementation should be given.

Recommendations are likely to cover direct environmental interventions as well as the provision of environmental safeguards for other activities.

Recommendations should also be made as to how best the Commission and the Government can mainstream environmental issues into the next cycle of country strategy papers. Guidance should be

given regarding Strategic Environmental Assessment in major sectors and performance indicators if budgetary supports are foreseen.

The constraints to preparing the profile caused by limited information should be described, and an evaluation of the need for additional studies, such as Strategic Environment Assessments or others, should be made.

6. Work plan

The work plan should include but not necessarily be limited to the following activities:

- Consultation with EC country desk officers and other relevant officials, EC Delegation in the Country, a selection of national and local authorities, key international funding agencies operating in the Country, plus key national, international civil society actors operating in the environmental field.
- Review of previous Country Environmental Profiles and Country Strategy Papers; evaluation reports with respect to environmental issues on development and economic co-operation produced by government, EC or other agency sources.
- Review of environmental literature, evaluation reports, environmental policy and legislation framework, legislation and regulations and enforcement relating to environmental issues, action plans, and progress in implementation.
- Review of environmental performance indicators selecting appropriate indicators from those suggested by organisations such as EEA/OECD/Eurostat.
- On the basis of the proposed work plan and time schedule outlined in these Terms of Reference, the consultants should provide a detailed work plan in their offer.

7. Expertise required

Four (4) Category I (EU Nationals) Environmental Experts (one per country), who should have the following profile:

- Expert level I with at least 15 years wide experience in environmental issues, including institutional aspects; international environmental policies and management; environmental assessment techniques and experience in rapidly assembling, assessing information and developing recommendations.
- A capacity for rapidly assembling and assessing information and developing recommendations is called for.
- Previous working experience in the region would be preferred.
- An understanding of EU environment and development policies is required, and experience in the preparation of environment development programmes would be an asset.

In addition:-

- Experts should have an understanding of the EU environment and development policies;
- Experience in undertaking environmental analysis and preparation of development programmes would be an asset;
- Familiarity with Commission guidance on programming, country strategies, PCM, policy mix and integration of environmental issues into other policy areas is desirable;

- Experience of participatory planning processes would be an advantage;
- The experts should have excellent skills in English as the final report must be presented in English.

For each specialist proposed, curriculum vitae must be provided of no more than four pages setting out the relevant qualifications and experience.

8. Reporting

The study conclusions must be presented in the Country Environmental Profile report in the format given in Appendix 1.

One draft report per country in (5) hard copies, and one in electronic format (pdf or word format) are to be presented to the EC Delegation in New Delhi, India, and a supplementary copy of the CEP Nepal and Sri Lanka to respectively the EC Delegation in Nepal and in Sri Lanka. Within three weeks, comments on the draft report will be received from the EC Delegation New Delhi, India.

The consultants will take account of these comments in preparing the final report (maximum 40 pages excluding appendices). A final report (one per country) in English (10) hard copies and one in electronic format (pdf or word format) is to be submitted to the EC Delegation in New Delhi, India, and a supplementary copy of the CEP Nepal and Sri Lanka to respectively the EC Delegation in Nepal and in Sri Lanka.

9. Presentation of the offer

The consulting firms should present their offer by providing the CVs of the experts (not more than 4 pages each), and the proposed methodology (not more than 4 pages).

10. Time schedule

Indicative start date of the activities: Mid June 2005 Indicative end date of activities: Mid August 2005

	EXPERT I CATEGORY 1 BHUTAN	EXPERT 2 CATEGORY 1 NEPAL	EXPERT 3 CATEGORY 1 NEPAL	EXPERT 4 CATEGORY 1 SRI LANKA
Desk analysis. Meeting with country desk officers in Brussels	5	5	5	5
Briefing in EC Delegation New Delhi, India – including travel	2	2		
Briefing in EC Delegation Sri Lanka, Nepal			2	2
Field phase including travel	15	15	15	15
Draft Report	3	3	3	3
Debriefing in EC Delegation New Delhi, India – including travel	2	2		
Debriefing in EC Delegation Sri Lanka, Nepal-including travel			2	2
Final report	2	2	2	2
Total days	29	29	29	29

11. Appendices

I. Report format for a Country Environmental Profile

Standard Report Format

Report Format for a Country Environmental Profile

Maximum length (excluding appendices) 40 pages.

The following text appears on the inside front cover of the report: "This report is financed by the European Commission and is presented by [name of consultant] for the ... (National Institution) and the European Commission. It does not necessarily reflect the opinion of the ... or the European Commission.

1. Summary

This is an executive summary of the key chapters of the Country Environmental Profile clearly indicating priority challenges and areas for action at the country level.

2. State of the environment

This chapter will also set out an assessment of the state and trends of the environment as outlined in Section 4.1 of the TOR.

3. Environmental policy, legislative and institutional framework

This chapter will provide an assessment of the Country's environmental policy, regulatory and institutional framework for pollution control, natural resource use and sustainable development. It will be divided into sections as follows:

3.1. Environmental policy and legislation

This chapter must include an assessment of the key issues outlined in Section 4.2 of the TOR.

3.2. Environmental institutional framework

This chapter should review the roles and capabilities of the main national institutions as outlined in Section 4.3 of the TOR.

3.3. Integration of environmental concerns into the main sectors

This section must include an assessment of the key issues as outlined in Section 4.4 of the TOR.

4. EU and other donor cooperation with the Country from an environmental perspective

This section must include EC and other donor assistance within the Country from an environmental perspective covering the issues outlined in Sections 4.5 and 4.6 of the TOR.

5. Conclusions and recommendations

This chapter will present the conclusions on the state and trends of the environment in the Country, including a summary of the key environmental issues in a table form. Recommendations will be made for major stakeholders (including the Government, the Commission and other donors) with a particular emphasis on how best the Commission can mainstream environmental issues into the new country strategy paper.

6. Technical appendices

I. Environmental maps of the Country

II. Reference list of environmental policy documents, statements and action plans, and other relevant technical information.

7. Administrative appendices

- I. Study methodology/work plan (1–2 pages)
- II. Consultants' Itinerary (1–2 pages)
- III. List of persons/organisations consulted with their affiliation and contact details (1–2 pages)
- IV. List of documentation consulted (1–2 pages)
- V. Curricula vitae of the consultants (1 page per person)
- VI. Terms of Reference for the Country Environmental Profile.