APPENDICES

With the Advisory review of the environmental impact assessment report and feasibility study of the Coastal Resource Management Project, Sri Lanka

(appendices 1 to 7)

Letter from the Royal Netherlands Embassy Colombo dated 29 November 1999, in which the Commission has been asked to submit an advisory review.

AMBASSADE VAN HET KONINKRIJK DER NEDERLANDEN

Royal Netherlands Embassy

25, Torrington Avenue Colombo-7, Sri Lanka Tel. (00.94.1) 596 914 Fax. (00.94.1) 502 855 e-mail: nethemb@sri.lanka.net

Colombo, 29 november 1999

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Committele voor de m.e.r.

No. COL/

FAXBERICHT

: P.J.Kuperus Hoofd OS/Colombo

: Commissie voor Milicuessectrapportage

Aantal blz.

Van

Λan

:12 (incl. deze blz)

Onderwerp

: Sri Lanka, milieusector, ondersteuning Cie MER

Faxnummer

: 0031 30 2304382

cc

DML/A.Wevers

Geachte Heer Scholten,

Op advies van dhr Reinaud Post van uw Cie, en na overleg met Mw A. Wevers van DMI/BuiZa, richt ik mij tot U met het verzoek om advies van de Cie MER over de volgende onderwerpen. Zoals besproken met dhr Reinaud Post zijn aan dit verzoek geen kosten voor de post verbonden.

- 1. AsDB Coastal Resources Management Project (CRMP). Op 29/11 stuurde ik dhr Post reeds een copiefax van dzz brief aan AsDB/Colombo waarin de elementen voor een Nederlandse missie zijn neergelegd gericht op nader onderzoek naar de participatieve en institutionele dimensie van het CRMP (componenten 2 en 4). Graag ontvang ik uw advies op basis van deze brief en de bij u beschikbare projectdocumentatie m.b.t. een mogelijke ToR voor een dergelijke missie, evenals namen van mogelijke deskundigen die voor de missie in aanmerking zouden kunnen komen. Wij stellen ons voor dat de missie plaatsvindt in januari 2000.
- 2. Tevens treft u aan dzz aanzet voor een ToR voor een milieusector analyse, toegespitst op de voor Nederland specifieke aandachtspunten in de sector. Uw advies over de ToR zal ik graag ontvangen, evenals de namen van deskundigen die voor deze missic in aanmerking zouden kunnen komen. Het ligt in de bedoeling dat de opdracht voor deze missic uitgaat van de Ambassade. Ook deze missic is voorzien in januari 2000.
- 3. Voorts ontving de Ambassade het verzoek van A.H.Ruthenberg, Task Manager bij de

AsDB voor het "Protected Area Management and Wildlife Conservation Project", om na te gaan of Nederland een deskundige wil leveren voor een TA-missie van de AsDB in februari 2000. Ik sluit het Memorandum of Understanding bij van een recente gezamenlijke AsDB/WB (GEF) missie. Nederlandse belangstelling wordt vooral gevraagd om de 'leverage' van donoren te vergroten gezien de grote veranderingen die in de sector dienen te worden doorgevoerd. AsDB en WB/GFF hebben beide reeds \$10 mln toegezegd, waarmee de financiering van dit project min of meer rond is. Nederland is benaderd vanwege de belangstelling en deskundigheid die Nederland traditioneel voor dit gebied heeft. Dhr Ruthenberg heeft aangegeven desgewenst een ToR voor Nederlandse deelname te kunnen aanreiken, een meer vrijblijvende deelname is ook mogelijk. Graag verneem ik of u, in overleg met DML, in beginsel mogelijkheden ziet voor Nederlandse deelname aan de betreffende missie.

Uw reactie zie ik met belangstelling tegemoet.

Met vriendelijke groet,

Hoogachtend,

P.J.Kuperus

Hoofd OS/Ambassadcraad

Aan de Heer Jules Scholten Algemeen Secretaris Commissie Milieueffectrapportage Postbus 2345, 3500 GH Utrecht Fax: 0031 30 2304382

Copie: DML/Mw A.Wevers

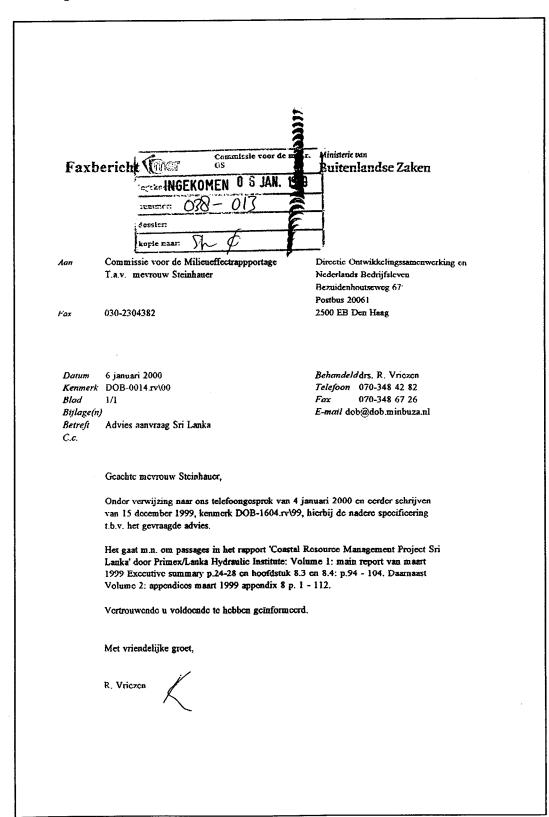
APPENDIX 2A

Letter from the DGIS dated 15 December 1999, in which the Commission has been asked to submit an advisory review.

	,	Ministerie van Buitenlandse Zaken	
Commissie voor de Milieueffectrapportage T.a.v. mevrouw Steinhauer		Directie Ontwikkelingssamenwerking en Nederlands Bedrijfsleven	
Postbus 2	345	Bezuidenhoutseweg 67 2: m.e.Postius 20061 2500 EB Den Haag	
	Company of the Compan	The Control of the Co	
	Secular 078 - 001 Regio Kraut S. R. R. K. S. Mo. 1	Pres Q	
Datum Kenmerk Blad Bijlage(n) Betreft C.c.	15 december 1999 DOB-1604.rv\99 1/1 1 MER/ORET-aanvraag Sri Lanka DML/MI	Behandeld drs. R. Vriezen Telefoon 070-3484282 Fax 070-3486726 E-mail dob@dob.minbuza.nl r bijgaand rapport in het kader van het Lanka. Er zijn meerdere Nederlandse lit project.	
	Geachte mevrouw Steinhauer, Hierbij verzoek ik u advies uit te brengen over bijgaand rapport in het kader van het		
	Coastal Resource Management Project' in Sri Lanka. Er zijn meerdere Nederlandse bedrijven geïnteresseerd in de uitvoering van dit project.		
	Mocht er nog nadere informatie benodigd zijn, dan verneem ik dat graag. In afwachting van uw advies.		
	R. Vriezen		

APPENDIX 2B

Letter from the DGIS dated 6 January 2000, in which is specified which parts of the feasibility study are part of the ORET-request



Project information

Proposed activity: The Coastal Resource Management Project (CRMP) aims at four goals. First of all physical interventions will be introduced to address the problem of coastal erosion. A shift from a reactive/defensive approach to coastal erosion management to one that is proactive/preventive is promoted. Secondly, the sustainability of the coastal resources will be enhanced and environmental degradation alleviated through national- and local level activities using the special area management approach. Part of this approach is the mobilization and organization of coastal communities into associations trained and equipped to undertake cooperative, income-generating endeavours that will help them achieve a better quality of life. Thirdly, activities are implemented intended to prevent fisheries resource depletion in coastal waters, including licensing and regulation, community based fisheries resource management, fishing effort diversification, and fish quality enhancement. Finally, various units and key agencies of the Ministry of Fisheries and Aquatic Resources Development (MFARD) will be strengthened and the capacity of coastal communities in resource management will be improved.

Categories: Environmental Protection activities, DAC-CRS code 92100, Erosion control, DAC-CRS code 92019

Project numbers: Royal Netherlands Embassy, Colombo COL 29-11-99, Ministry of Foreign Affairs, Directorate Private Sector and Development, DOB-1604.rv\99 and DOB-0014.rv\00, Commission for EIA 038

Progress:

Letter with request to submit an advice: 29 November 1999 and 15 December

Site visit: 23 February-2 March 2000 Advice submitted: 17 March 2000

Significant details: While reviewing the EIA-report and the draft final report, the Commission kept in mind that the CRMP is essentially a feasibility study and that the designs and layouts of the various coastline stabilization works are (and can be) only conceptual at this stage. The same is applicable to the EIA-report, which was prepared in conjunction with the draft final report. The latter is comprehensive but not site-specific and does not allow for identification and formulation of site-specific adverse environmental impacts and mitigation measures. The Commission is of the opinion that at this stage the draft final report and the EIA-report give a good description of the problems and possible solutions.

The Commission concludes that although the environmental impacts and possible mitigation measures are dealt with rather generally, the project is environmentally sound and technically feasible and no constraints are expected, which cannot be solved. Provided detailed site-specific EIAs will be prepared as part of the design studies of both the Coastline Stabilization component and the CERM activities, and provided these EIAs will meet the standards required for environmental clearance (to be reviewed according to the rules of the Coastal Conservation Act and the National Environmental

Act), there is no reason to believe that serious adverse environmental effects will undermine or hamper the achievement of the Projects' objectives.

With regard to project implementation, the Commission recommends to adopt a phased approach. This is justified because on the one hand a number of proposed project interventions have not yet been worked out in sufficient detail to be properly assessed, but on the other hand, a number of interventions need urgent follow up (e.g. coastline stabilization works in certain areas, implementation of completed Special Area Management plans).

Composition of the working group of the Commission for EIA:

Mr E.W. Bijker
Mr L.P. van Lavieren
Mr J.W. Overbeek
Mr J.W. Kroon (chairman)
Mr N.T.S. Wijeskera (local working group member)

Technical secretary:

Mrs I.A. Steinhauer

Programme site visit

23 February	20.00	Introductory meeting, briefing by the Netherlands Embassy
20 1 cordary	20.00	
24 February	08.30	Asian Development Bank
	09.30	Secretary Ministry of Fisheries and Aquatic Resources
		Development
	10.00	Central Environmental Authority
	10.00	Lanka Hydraulics
	11.00	Department of Wild Life Conservation
	14.30	Coastal Conservation Department
	16.00	Chairman/Ceylon Fishery Harbour Corporation
	18.30	Meeting Embassy-staff
25 February	07.00	Colombo – Hambantota
,	12.30	Hambantota Divisional Secretary and presentation of the
		Hambantota Integrated Coastal Resource Management Project
	15.00	Meeting with Rekawa Development Foundation and Tangalle
		Divisional Secretary
	16.00	CERM-site visits (Mawella, Rekawa, Kalametiya and site visits
		to harbours and anchorages)
	17.00	Meeting with village representatives
		(overnight stay) – Kalametiya
26 February	07.00	Hambantota - Hikkaduwa, visiting CERM and coastal stabili-
•		zation sites
	12.00	Hikkaduwa
	14.30	Payagala - Kalutara, visiting CERM and coastal stabilization
		sites and harbour and anchorages
27 February	10.00	Working group meeting
2	12.00	Drafting report
28 February	07.00	Palliyawatta to Dickowita
,	09.30	Wetlands Centre - Briefing/or Muthurajewela SLRDC Office
	11.00	Negombo, Kudapaduwa
	13.30	Waikkal
	15.00	Maha Oya - Lansigama
	17.00	Chilaw
	19.30	Return to Colombo
29 February	09.30	Meeting with project designers
<i>,</i>	11.00	Working group meeting
	13.30	Lunawa site visit
	14.00	Meeting with CCD-director and drafting report
	18.30	Cocktail with Embassy representatives and project parties
1 March	08.15	Working group meeting
	10.00	DG/External Resources, Ministry of Finance
	11.30	Debriefing at the Embassy
	15.00	Wrap up meeting – MFARD officials

Review framework for the Environmental Impact Assessment Report and Feasibility Study of the Coastal Resource Management Project, Sri Lanka

I. EXECUTIVE SUMMARY

The summary must address the major subjects of the EIA-REPORT¹ and be written in such diction that it provides non-technicians with a clear insight in the issues treated. The use of maps and tables may considerably increase comprehensiveness and is therefore recommended.

II. PROBLEM ANALYSIS AND PROJECT OBJECTIVES

The EIA-REPORT must state in clear terms the problems, which are expected to be solved following implementation of the project.

At least the following aspects should be addressed:

- An analysis of the coastal erosion and its environmental impacts.
- Undue population increase and migration to the coastal areas.
- Overutilization of natural resources and transformation of natural areas to other uses.
- Pollution of lagoons and estuaries.
- Declining fisheries productivity due to overharvesting and loss of habitat.
- Institutional constraints.

The EIA-REPORT must contain a clear and unambiguous definition of the objectives, locality and nature of the proposed interventions in the coastal and near-shore ecosystem (and the relationship between them, e.g. coastal stabilization and coastal management) to enable identification and formulation of alternatives and to furnish criteria for monitoring and evaluation. These objectives should logically ensue from the problem analysis.

The objectives should be as specific as possible and where possible quantified (e.g. percentage reduction of erosion, improvement of water quality meeting certain standards). The objectives of CRMP are stated as: "to alleviate environmental degradation" and "to promote sustainable coastal resource management". Does the project really aim at achieving these objectives and would the proposed approach be conducive to these goals?

IIa. PROJECT SETTING

Legal setting:

The legal framework has to allow for an effective and efficient implementation of the project. Therefore, the EIA-REPORT must describe legislative and regulatory considerations and policies governing the proposed activities, such as:

¹ EIA-REPORT includes the underlying feasibility study.

- policies, legislation, regulations and standards governing environmental quality (water, soil, air, noise and solid waste), health and safety, protection of sensitive areas (at regional and/or local level) and land control/ownership or land administration;
- EIA-prescriptions and procedures from Sri Lanka and AsDB; are provisions made for EIA as part of the final design study of structures?
- an assessment of compliance with above-mentioned rules and regulations and of lawenforcement;
- a description of policies, programmes on the development of the coastal zone e.g. the Coastal Zone Management Plan (1997), Coastal 2000, National Fisheries Development Plan etc.

These descriptions must lead to the formulation of limiting conditions (standards, requirements, criteria) for the project and its components.

Institutional:

The EIA-REPORT must give a clear description of the institutional framework on the national and local level, including competent authorities directly involved in the execution of the project and the control and maintenance of the executed works.

The EIA-REPORT has to describe the organisation of the administration of the MFARD and must give a general appraisal of its capacity. More specifically, an assessment is needed of its capability (and in particular of CCD) to implement bottom-up, community based and participatory planning techniques and to introduce an approach to integrated natural resource management.

The proposed overall project management structures and coordination mechanisms have to be described and assessed, with special regard to the CERM-component and the relationship between the hardware and the software components in the project.

Are the proposed measures in the Institutional Strengthening Component of the project likely to result in achieving the formulated project objectives in this field? In this framework:

- the institutional aspects of the methodology underlying the project approach to develop sustainable livelihoods in sensitive biosystems has to be assessed as well as;
- the effectiveness of the methodology, measures and organisation which have been proposed in order to ensure a consistent and comprehensive approach to integrated resources management (IRM);
- close cooperation with the Department of Wildlife Conservation to enhance the success of the project has to guaranteed;
- an assessment has to be made whether or not the conditionalities identified by the AsDB as mentioned in the RRP report have been by the Government of Sri Lanka.

Public involvement:

The EIA-REPORT must identify the stakeholders (e.g. communities, affected groups and local NGOs) in the project and how their opinions and interests did influence the contents of the EIA-REPORT (e.g. project design and the development of alternatives as well as the proposed project execution). Therefore the process of stakeholder and community participation has to be described. Also an assessment has to be made whether project implementation schedules and arrangements are sufficiently flexible to allow for involvement and participation of local interest groups, communities and stakeholders.

III. DESCRIPTION OF THE PROJECT AND ALTERNATIVES

General:

The project activities and the alternatives must lead to a realisation of the objectives formulated.

- Does the EIA-report, in addition to the intended activities, observe possible alternatives sufficiently?
- The EIA-REPORT has to describe if other locations and techniques have been considered and if not, give arguments why these alternatives were not considered. Other alternatives which have to be considered in the EIA-Report are the 'no action alternative' and the alternative most friendly to the environment2.
- To what degree do the quality and design of the intended activities (and their alternatives) contribute to an improvement of the condition of the environment on a short term basis and may it be preventive for structural (long term) improvement of the environment?
- Is the integrity of important coastal wetlands and beach formations guaranteed? This refers to impacts on biodiversity, fish and wildlife habitat, disturbance of hydrology, effects on water quality, effects on production- and buffering functions?
- Is the project flexible and adaptable enough to attune to future developments?
- Do mitigating measures form an integral part of the description of the intended activities and alternatives?

Specific:

Coastal Protection (7 sites):

- Is coastal erosion quantified by locality and are priorities for treatment (7 sites) correctly set?
- Are the selection criteria applied in site priority ranking sound and comprehensive?
- Would location, type and design of proposed coastal defence structures not adversely interfere with coastal morphology in adjacent areas?

CERM (9 sites)

- Are objectives for CERM site development clearly and unambiguously defined? Are SAM sites well demarcated (geographically and socially)?
- Is the participatory approach to CERM through SAM-sites sufficiently worked out, and is it likely to result in sustainable coastal resource management?
- Are criteria applied for priority CERM-site selection comprehensive?
- Does the project address the main development and environmental constraints in the nine selected CERM sites?

Special attention has to be paid to the technical feasibility of the proposed activities in terms of:

- effectiveness and structural integrity of the coastal defence works. Therefore, underlying information is required in the form of charts, bottom profiles, wave data and computations, and computation and design drawings of structures;
- aspects related to the construction phase should be considered. This regards also the
 dredging for sand suppletion and the quarrying activities. More specifically, concerning dredging the following aspects must be addressed: selection of the borrow
 site and justification of its location (also in relation to other borrow sites needed for
 e.g. the construction of a road from the airport to Colombo), description of techniques
 and equipment to be used to withdraw, transport and deliver the required material;

The alternative most friendly to the environment must be described in the EIA-REPORT. It is a combination of the environmentally most favourable implementation and the environmentally most favourable management method, completed with the execution of all desired mitigation measures.

The 'no action' alternative describes the situation that develops if the intended project will not be executed. The EIA-REPORT must describe if the objectives of the project can be achieved without the initiative and how the coastal zone will develop in that case (autonomous development). In case the 'no action' alternative is not a realistic alternative it must be considered as a reference situation ('no action' situation, see chapter IV).

 attention should be paid to the durability of the proposed solutions (maintenance) and sustainability.

IV. DESCRIPTION OF THE ENVIRONMENT AND ITS AUTONOMOUS DEVELOPMENT

This description serves as basis for comparison of the environmental effects of the alternatives. The description must be limited to those aspects that may be influenced by the activities or influence the activities and must cover the complete affected area.

The following aspects must be addressed regarding the natural environment:

- the climate, including the occurrence of extreme situations (e.g. hurricanes);
- an analysis of the coastal (estuarine) geology and morphology;
- · geotechnical studies;
- a description of the stability of the coastline;
- hydrography (currents, tides, river water levels);
- (geo)hydrology (ground water and surface water quantity);
- surface water and sediment quality (including salinity, suspended solids, organic matter, presence of sulphides, microbiological activity of sediments, pH/conductivity/redoxpotential, mineral oils);
- flora and fauna:
 - ecosystems and their characteristic flora and fauna (terrestrial, tidal zone and marine environment, with special emphasis on the mangrove areas, coral reefs);
 - identification of vulnerable ecosystems and environmentally valuable areas (e.g. spawning sites for fish or rest sites for migratory birds);
 - listing of commercial, subsistence and endangered species characteristic for aquatic environments;
 - protected areas.
- landscape (vulnerable elements and areas) and its development.

The EIA-REPORT must contain a brief description of the socio-economic environment:

- total population in the area;
- population density, increase, pressure on land;
- economic active population and kind of activities (e.g. fishery, tourist industry);
- formal and informal land ownership in the area;
- health indicators such as:
 - availability of fresh water;
 - current status of treatment and discharge of sewage;
 - current status of waste production of the area, solid waste treatment and disposal;
 - health situation in similar areas along the coast without pollution.
- spatial structure, land use and physical planning of the area;
- · accessibility and (public) transport;
- gender-relations in the area, if relevant;
- sites of historical/cultural significance.

V. IMPACTS

The descriptions of the impacts on the coastal environment can be distinguished for impacts during and after finishing the activities, e.g.:

• impacts from dredging on flora and fauna and primary production (destruction of bottom habitat and turbidity);

- impacts of the proposed works, may it be structures or suppletion operations. These
 impacts regard the coastal zone (e.g. marine protected areas) as well on sea as on
 land:
- impacts from coastal stabilization works on the productivity of coastal ecosystems;
- noise hindrance;
- changes and impacts of flow-patterns and erosion-sedimentation pattern;
- · impacts on delta morphology;
- impacts (as a result of pollution or disturbance) on near-shore marine ecosystems, including seagrass beds, coral reefs, spawning and nurturing areas for fish and other animals and benthic communities;
- impacts on dune ridges, lagoons, estuaries, mangrove forests and other coastal wetlands;
- changes and impacts of the geohydrological situation;
- impacts on water quality of the coastal environment.

Impacts on the socio-economic environment must be described in terms of:

- impacts on the health situation (impacts of vector borne diseases);
- impacts on living conditions: noise, risks (accidents) in relation to the activities;
- impacts on safety and health;
- impacts on land ownership and land prices and social effects;
- impacts on employment and income levels (increase or decline in possibilities for tourism and fisheries);
- impacts on historic and cultural values and places of worship in the coastal and near shore marine zone;
- impacts on gender-relations, if relevant (e.g. workload).

VI. COMPARISON OF ALTERNATIVES

It is recommended to present the comparison in the form of tables and diagrams. In the comparison the current environmental situation, including expected autonomous developments have to be presented as well. The EIA-REPORT must indicate the criteria for comparison (e.g. results at short term or at long term, to which extent the objectives of the initiative can be met). All alternatives must be compared to international and commonly accepted standards as much as possible (see also chapter IIa.).

The comparison must yield the preferred alternative for implementation.

VII. GAPS IN KNOWLEDGE, MONITORING AND EVALUATION

The EIA-REPORT must identify lacking information. The importance of this information for decision-making must be evaluated. The EIA-REPORT has to indicate in which way and through which means serious knowledge gaps can be filled in or alleviated.

In the EIA-REPORT an environmental monitoring plan must be presented. This plan must include pre-, during and post-monitoring of:

- · effectiveness of mitigation measures;
- impacts which are irreversible or unavoidable;
- development of coastal erosion, socio-economic indicators.

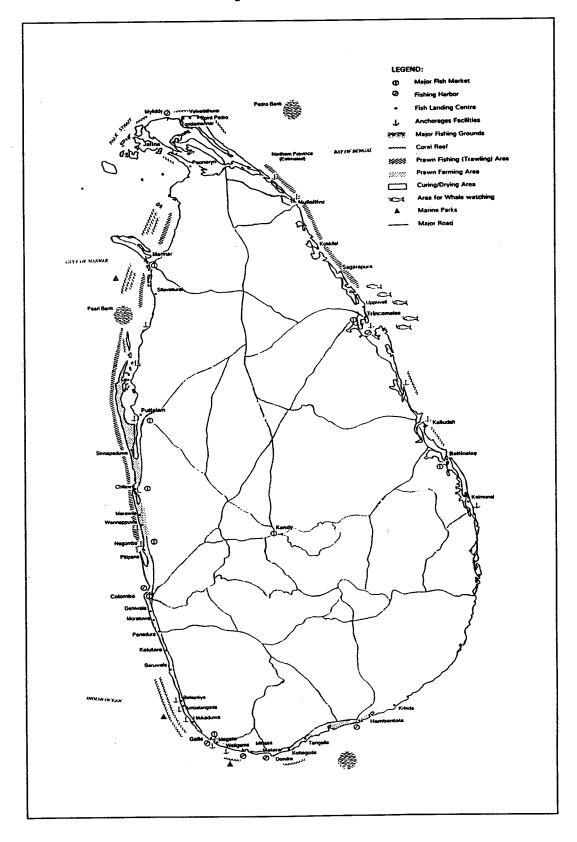
The monitoring plan must indicate the institutions responsible for its implementation and the way implementation is funded. The monitoring plan must also include a description of where, how and when the sampling and monitoring should be conducted and include environmental indicators in the defined set of indicators.

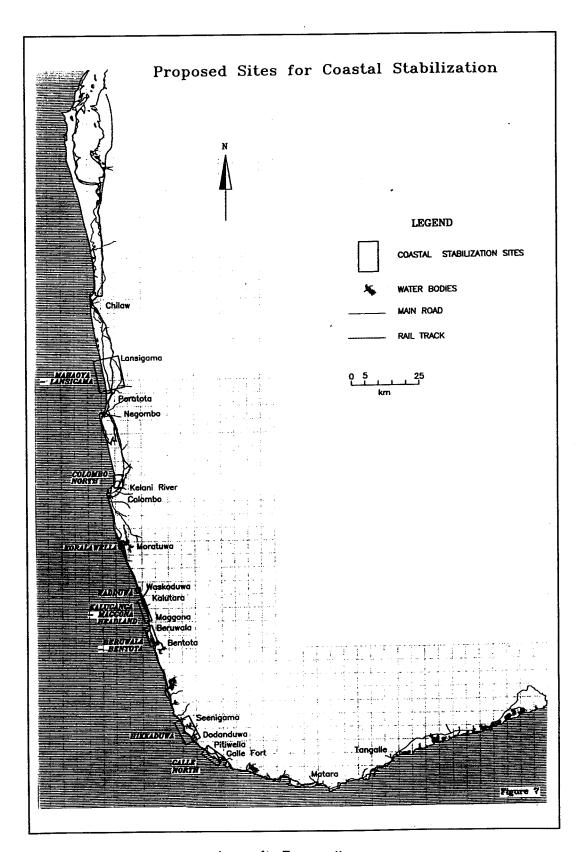
A project evaluation plan has to be included in the EIA-REPORT, indicating which institution will be responsible for the evaluation. The main item of evaluation will be to which extent project objectives have been fulfilled and if no other problems have emerged.

Documents reviewed

- Coastal Resource Management Project Sri Lanka (TA no. 3034-SRI), Draft Final Report, Volume 1: Main Report, March 1999, prepared by PRIMEX and Lanka Hydraulic Institute
- Coastal Resource Management Project Sri Lanka (TA no. 3034-SRI), Draft Final Report, Volume 2: Appendices, March 1999, prepared by PRIMEX and Lanka Hydraulic Institute
- Coastal Resource Management Project Sri Lanka (TA no. 3034-SRI), Environmental Impact Assessment Report, July 1999, prepared by PRIMEX and Lanka Hydraulic Institute
- Memorandum of the Embassy, dated 22-7-99
- Memorandum of the Embassy, dated 18-5-99
- Review of Technical parts of ORET-proposal (Constatin Steere, Haskoning)
- Supplementary Appendix A, B, C, D (belonging to draft final report)
- Country paper Sri Lanka, Sri lanka EIA Association, December 99
- Jaarplan 2000, Nederlandse Ambassade (environmental part)
- Report of EIA and the gender issue, November 99
- Wetnews Integrated Resources Management Programme in Wetlands July
 99
- Advisory Guidelines by the Commission for EIA on similar projects
- EIA-profile Sri Lanka
- Guidance for implementing the EIA process, no. 1: A General guide for Project Approving Agenceis, CEA, 1998
- Guidance for implementing the EIA process, no 2: A General Guide for Conducting Environmental Scoping, CEA, 1995
- Guidance for implementing the EIA process, no 3: Public Participation Handbook, CEA, 1998
- Review and assessment of EIA legal and generic procedures, June 1999
- Review of donor assistance for environment South Asia Env. Unit, World Bank, May 1999
- AsDB. Promoting the environment for growth, country operational strategy (Dec. 1998)
- National Environmental Action Plan 1998-2001
- Revised Coastal Zone Managment Plan, Sri Lanka, 1997, CCD
- Special Area Management Plan for Rekawa Lagoon, Sri Lanka, 1996
- Coast Conservation Act 1981, an update and proposal for 1999
- The Report and Recommendations of the President (RRP) to the Board of Directors of November 1999, AsDB
- Technical drawings, Aereal Photography, CCD

Maps of the area





Appendix 7 page -ii-

