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*ECONOMIC DEVELOPMENT PROJECTS:
AN ANALYSIS OF LEGAL PROCESSES
AND
INSTITUTIONAL RESPONSES*

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FOR

**The Natural Resources and Environmental Policy Project/
International Resources Group, Ltd.
Sri Lanka**

APRIL - 1993

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LALANATH DE SILVA

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FOREWORD

The underlying purpose of the Natural Resources and Environmental Policy Project of USAID and the Government of Sri Lanka is to improve the environmental capability and performance of key public and private institutions. This study, undertaken by Lalanath de Silva, examines the critical role of law in shaping the institutional, staff, and resource requirements for sound environmental management. By focusing on three case studies of development project planning and decision making, and examining the ways in which the then applicable laws were or were not applied, the study highlights two key facts: first, that laws need far better understanding within government institutions if they are to achieve their objectives, and second, that Sri Lanka's new environmental impact assessment and environmental pollution licensing requirements offer significant opportunities to make environmental law compliance more effective and, at the same time, administratively more efficient. The report offers recommendations for more efficient application of environmental impact assessment and licensing requirements.

We believe that this report adds significantly to the knowledge base required by environmental managers and planners in Sri Lanka. It highlights the need for continued staff training and institution building both in the public and private sectors in the fields of environmental law, science, engineering and economics in order to comply with laws that are critical to sustainable development. Although it is not an administrative study of government agencies, it also highlights the continued importance of work toward administrative reforms and rewards for good staff performance -- careful impact analysis, sound planning, and effective coordination. In Sri Lanka, as in so many countries, rewards for good management fail to receive adequate attention.

This study adds impetus to the ongoing effort to improve environmental management performance in Sri Lanka. It explains the administrative efficiency opportunities that are presented by Sri Lanka's 1988 amendments to the National Environmental Act, which require impact assessment and environmental pollution licensing. It offers ways to make law and environmental compliance more efficient and effective. Toward this end we hope that the study will be used in academic as well as government training programs concerned with Sri Lanka's efforts to improve environmental quality and management.

Malcolm F. Baldwin
Chief of Party, NAREPP/IRG
March 1993

ABBREVIATIONS AND ACRONYMS

AEC	- Atomic Energy Commission (USA)
AGA	- Assistant Government Agent
ASC	- Agrarian Services Committee
ASO	- Assistant Settlement Officer
BOI	- Board of Investment
Cap.	- Chapter
CCA	- Coast Conservation Act
CCAD	- Coast Conservation Advisory Council
CCD	- Coast Conservation Department
CEA	- Central Environmental Authority
CEB	- Ceylon Electricity Board
CECB	- Central Engineering Consultancy Bureau
CEO	- Chief Executive Officer
CEQ	- Council of Environmental Quality (USA)
Cf.	- Compare
CFHC	- Ceylon Fisheries Harbours Corporation
CIR	- Commissioner of Inland Revenue
Cir.	- Circular letter
CISIR	- Ceylon Institute of Scientific and Industrial Research
COC	- Certificate of Conformity
CPC	- Central Planning Commission
CRS	- Chemical Recovery System
CS	- Committee of Secretaries
DAC	- District Agriculture Committee
DCC	- Director, Coast Conservation
DDC	- District Development Council
DGS	- Department of Geological Survey
DLO	- District Land Officer
DPS	- Detailed Planning Scheme
DRO	- District Revenue Officer
EFL	- Environmental Foundation Limited
EIA	- Environmental Impact Assessment
EPL	- Environmental Protection License
EPZ	- Export Promotion Zone
et seq.	- and the following (pages etc.)
FFPO	- Fauna and Flora Protection Ordinance
FTZ	- Free Trade Zone
GA	- Government Agent
GCEC	- Greater Colombo Economic Commission (Now known as Board of Investment)
GSN	- Grama Seva Niladhari
HTIO	- Housing and Town Improvement Ordinance
ibid	- In the same book or passage etc.
IEE	- Initial Environmental Examination

JEDB	- Janatha Estates Development Board
JICA	- Japanese International Cooperation Agency
kg	- Kilograms
km	- Kilometers
LAA	- Land Acquisition Act
LDO	- Land Development Ordinance
LGA	- Land Grants (Special Provisions) Act
LIAC	- Local Investment Advisory Committee
LLAC	- Local Land Advisory Committee
LO	- Land Officer
LRC	- Land Reform Commission
LRL	- Land Reform Law
LSO	- Land Settlement Officer
LUPPD	- Land Use and Policy Planning Division (of the Ministry of Lands)
MC	- Municipal Council
MCO	- Municipal Councils Ordinance
MEPA	- Ministry of Environment and Parliamentary Affairs
mg/d	- Million gallons per day
MLMD	- Ministry of Lands and Mahaweli Development
MOH	- Medical Officer of Health
MPPA	- Marine Pollution Prevention Act
MPPB	- Marine Pollution Prevention Board
MPPI	- Ministry of Policy Planning and Implementation
MW	- Mega Watts
NARA	- National Aquatic Resources Agency
NAREPP/IRG	- Natural Resources and Environmental Policy Project/International Resources Group
NEA	- National Environmental Act
NEAP	- National Environmental Action Plan
NEPA	- National Environmental Policy Act (of USA)
NGO	- Non-Governmental Organization
NLC	- National Land Commission
NLR	- New Law Reports
NPC	- National Paper Corporation Also National Planning Council
NPCA	- National Planning Council Act
NPD	- National Planning Department
NRDC	- Natural Resources Defense Council (USA)
NWPC	- North Western Provincial Council
ODA	- Overseas Development Administration (UK)
Op. cit.	- In the work already quoted
OPS	- Outline Planning Scheme
PAA	- Project Approving Agency
PC	- Provincial Council
PEA	- Provincial Environmental Authority
PI	- Preliminary information

PIP	- Public Investment Program
PIR	- Project Identification Report
PP	- Prescribed Project
RDC	- Resources Development Consultants
RPC	- Regional Planning Committee
RPS	- Regional Planning Scheme
SIPI	- Scientists' Institute for Public Information (USA)
SLO	- State Lands Ordinance
SO	- Settlement Officer
SPC	- State Plantations Corporation
SSLL	- Sale of State Lands (Special Provisions) Law
t/a	- Tons per annum
TC	- Town Council
TCPO	- Town and Country Planning Ordinance
TOR	- Terms of reference
UC	- Urban Council
UDA	- Urban Development Authority
VC	- Village Council
Vs.	- Versus (against)
WLO	- Waste Lands Ordinance

EXECUTIVE SUMMARY

Many development projects in Sri Lanka undertaken in the recent past failed to complement other environmental protection efforts. This situation developed in large part because of inadequate management skills, ill-defined or ill-informed project planning, and poor law enforcement coupled with confusing procedures. But one key reason, often neglected, is that understanding of legal requirements was absent, leading to confused, overlapping, and inefficient administrative processes.

This study brings to light important administrative and legal issues relating to development project decision making. Based on case studies of three development projects and the environmental problems that surfaced due to short-comings in the processes adopted (Section A), the study first assesses the existing procedures and institutions involved in the approval of development projects (Section B). It then analyzes the pending environmental assessment and the current licensing procedures that were established under the 1988 National Environmental Act amendments (Section C). It concludes with a section on needs and ways to integrate environmental information, issues and concerns into the development project decision making processes. Each section is well supplemented by analysis and discussion of the relevant issues and concerns.

The case studies, which are based on reports prepared under previous NAREPP contracts, deal with three development projects initiated at different times: (1) The Embilipitiya Paper and Pulp Mill; (2) the Kirinda Harbour Project; and (3) the Samanalawewa Hydro-electric Project. Each project was launched after feasibility studies, but each ultimately caused unintended environmental problems of varying magnitudes. Failure to foresee these problems resulted from a variety of causes, including poor use or understanding of environmental data, poor management and planning coordination, and lack of experience with project planning. The failures in institutional capabilities and personnel skills embrace Sri Lankan officials as well as foreign consultants.

The full range of causes of development project failure, which include lack of adequate administrative management incentives and economic disincentives, are beyond the scope of this report. However, many of the project failures could have been anticipated and avoided through stricter regard for existing legal requirements, which this report examines in detail. Most especially, these mistakes could have been avoided had Sri Lanka applied the impact assessment and pollution control requirements that now exist.

Because the feasibility studies were so deficient in assessing the environmental and other related economic and social issues connected with each project the result was waste of money both in terms of initial investments and corrective/remedial measures. This results is most pronounced in the case of the Samanalawewa Hydro-electric Project, but had there been informed and rational decision making, it is possible that all three projects might have been sited elsewhere. The three case studies lead to constructive conclusions; the most basic is that Sri Lanka needs, and has an opportunity, to streamline its administrative and legal processes by integrating EIA and pollution control requirements into its project planning cycle.

In particular, the weaknesses inherent or associated with the existing procedures and institutions involved in development project decision making demonstrate the need to strengthen the environmental/economic analysis capabilities of Project Approving Agencies (PAAs). The past absence of transparency in the decision making process apparently contributed -- as it has in other countries -- to planning that was neither rigorous nor comprehensive. Lack of public accountability and public disclosure, which will now be required, appear to have contributed in a major way to poor analysis and costly mistakes. The three cases demonstrate how the state and local communities were made to bear significant environmental costs that could have been avoided.

As Sri Lanka embarks on implementation of its EIA requirements, it is useful to understand that many statutes affecting project development decisions were in force during the colonial era. Interestingly, they contained significant provisions for transparency and public participation. In contrast, post-independence amendments to these statutes contributed to gradual withdrawal of such provisions, leading to less transparent decision making and diminished public accountability by government agencies. The recent introduction of the EIA process, however, reinstates many of these withdrawn privileges.

The EIA process has weaknesses that need attention, and these are discussed in the study. Integrating the EIA and the EPL processes with other statutory and administrative procedures assumes greater importance in the light of past experience. This, however, depends on the delegation of authority by the CEA. Once this is done, PAAs can integrate the EIA/EPL process into their own planning and approval exercises. Before delegating such authority, it is important to ascertain, through systematic management analysis, whether the agencies likely to assume these authorities have adequate administrative and scientific capabilities to handle the EPL scheme. Obviously, all agencies eligible to receive the delegation of powers will not have the required capabilities. In such situations selective delegation can be considered, tailor-made to suit each receiving agency.

The Board of Investment (formerly GCEC), which is the only agency delegated with this authority so far, is in a position to integrate both the EPL and the EIA into its own planning and approval processes. Delegation of authority by the CEA and the resultant integration should result in substantial administrative and substantive benefits.

The timing of the IEE/EIA in the project planning cycle is crucial if it is to become a useful tool in decision making. Otherwise important decisions may be made without vital information and the IEE/EIA serves simply to justify decisions already taken. The rationale for an EIA is to provide decision makers with economic, social and environmental data so that they can make informed and rational decisions. Its purpose is negated by resort to the process of "decide, announce, and justify."

ECONOMIC DEVELOPMENT PROJECTS: AN ANALYSIS OF LEGAL PROCESSES AND INSTITUTIONAL RESPONSES

I. STRUCTURE OF THE REPORT

This report is divided into three broad sections as follows:

- A) a discussion and an analysis of the three case studies developed for NAREPP/IRG;
- B) a discussion and an analysis of some existing procedures and institutions involved in the approval of these development projects;
- C) a detailed discussion and an analysis of the recently established environmental assessment and licensing procedures; and
- D) suggestions as to how these mechanisms can be used effectively to integrate environmental information, issues and concerns into project development decision making.

Each of these three sections will be divided into several sub-sections as enumerated below.

SECTION A: PROJECT DEVELOPMENT CASE STUDIES

This section summarizes the three case studies as listed below, developed by NAREPP to illustrate the environmental issues raised by economic development projects. The cases are summarized briefly, with the basic chronology of events and decisions listed according to available information. The summary describes project goals, the institutions involved, the environmental impacts (foreseen or otherwise), the use (or non-use) of environmental information in decision making, institutional and community responses to each project and its impacts, the administrative and other procedures applied (or not applied), criteria used in decision making and their distinguishing features.

The three case studies are:

- (i) the Embilipitiya Paper and Pulp Mill,
- (ii) the Kirinda Harbour Project, and
- (iii) the Samanalawewa Hydro-Electric Project.

The discussion leads to identification and description of legal steps, institutions (public and private) and information required but omitted or poorly applied in the decision making processes as illustrated by the three case studies. In this sub-section other cases are used to illustrate important procedural and institutional issues that affect environmental evaluation and decision making relating to development projects.

SECTION B: EXISTING LEGAL PROCESSES

Drawing upon interviews, existing procedures and institutions involved in decision making relating to development projects are briefly described. Particular emphasis is laid on the following institutions and procedures:

- a. National Planning Department (NPD) planning process;
- b. land allocation/designation/siting processes in particular of the Ministry of Lands, Irrigation and Mahaweli Development and the Land Commissioner's Department;
- c. local government and Urban Development Authority approval processes and in particular those dealing with building approval, zoning, industrial and commercial siting and trade and industrial licensing.

SECTION C: THE NEW EIA AND EPL REQUIREMENTS

This section discusses the legal requirements of the National Environmental Act, which introduced new environmental and public review requirements into the project approval process. The section includes:

- a. a detailed analysis of the Environmental Impact Assessment (EIA) process, focusing particularly on the regulations, legal issues, and procedural requirements and
- b. a detailed analysis of the Environmental Protection Licensing (EPL) process, focusing on the regulations, legal issues, procedural requirements, enforcement problems, monitoring, and information needs.

SECTION D: CHANGES IN DEVELOPMENT PROJECTS UNDER EIA AND EPL

A brief discussion follows relating some of the issues, concerns or problems identified in Section A concerning the three case studies. The cases are used to illustrate the procedures that are set out in the preceding section. The section develops two scenarios of what happened and what should legally have happened, followed by an analysis of the reasons for the failure of the existing or the established processes. This section concludes with a third scenario of what ought to happen under the new EIA and EPL procedures.

Then using the third scenario, the report suggests how these processes (in particular EIA and EPL), institutions (in particular the listed project approving agencies and local government authorities) and data can be effectively used to integrate environmental issues, concerns and information into development project decision making.

SECTION A: PROJECT DEVELOPMENT CASE STUDIES

2. EMBILIPITIYA PAPER AND PULP MILL

This case study, referred to as the "Embilipitiya case", concerns a paper and pulp mill situated in Embilipitiya, in South Sri Lanka. The mill is located south of the Embilipitiya town and the Chandrika Wewa (tank) and is on the side of the right bank of the Walawe River¹. A study on the mill was prepared by Dr. J.A.P. Mathes and much of the data and material referred to herein are taken from this report². A short case study of the human and technological dimensions and interactions illustrated by this development project and, prepared by Vasantha Siriwardena, is included in Appendix A. These same kinds of dimensions should be considered in the discussion of the other two cases.

Until 1956, Sri Lanka imported all her paper and board requirements. In 1956, the first paper mill was commenced in Valaichchenai³ with a production capacity of 10,500 t/a. In 1973 the production capacity of this mill was increased to 22,500 t/a which was a third of the country's demand. The raw material used was rice straw pulp and this was supplemented by wood pulp and waste paper.

Presumably because of needs to meet the country's demand for paper and board, a feasibility study was commissioned following up a proposal to establish an integrated paper and pulp mill in the Southern Province⁴. The process of writing the feasibility study is unclear but, it recommended that paper production should be increased by a further 15,000 t/a and that a new mill should be established for this purpose.

A tentative location for the mill appears to have been chosen close to the Walawe river sea outfall at Ambalantota. Though the feasibility study had made this tentative site selection, the impact of the newly constructed Uda Walawe Reservoir⁵ and the resultant flow control of the river at the selected site was not considered. Silting and saline intrusion at the river outfall pre-empted the use of the selected site for the proposed mill.

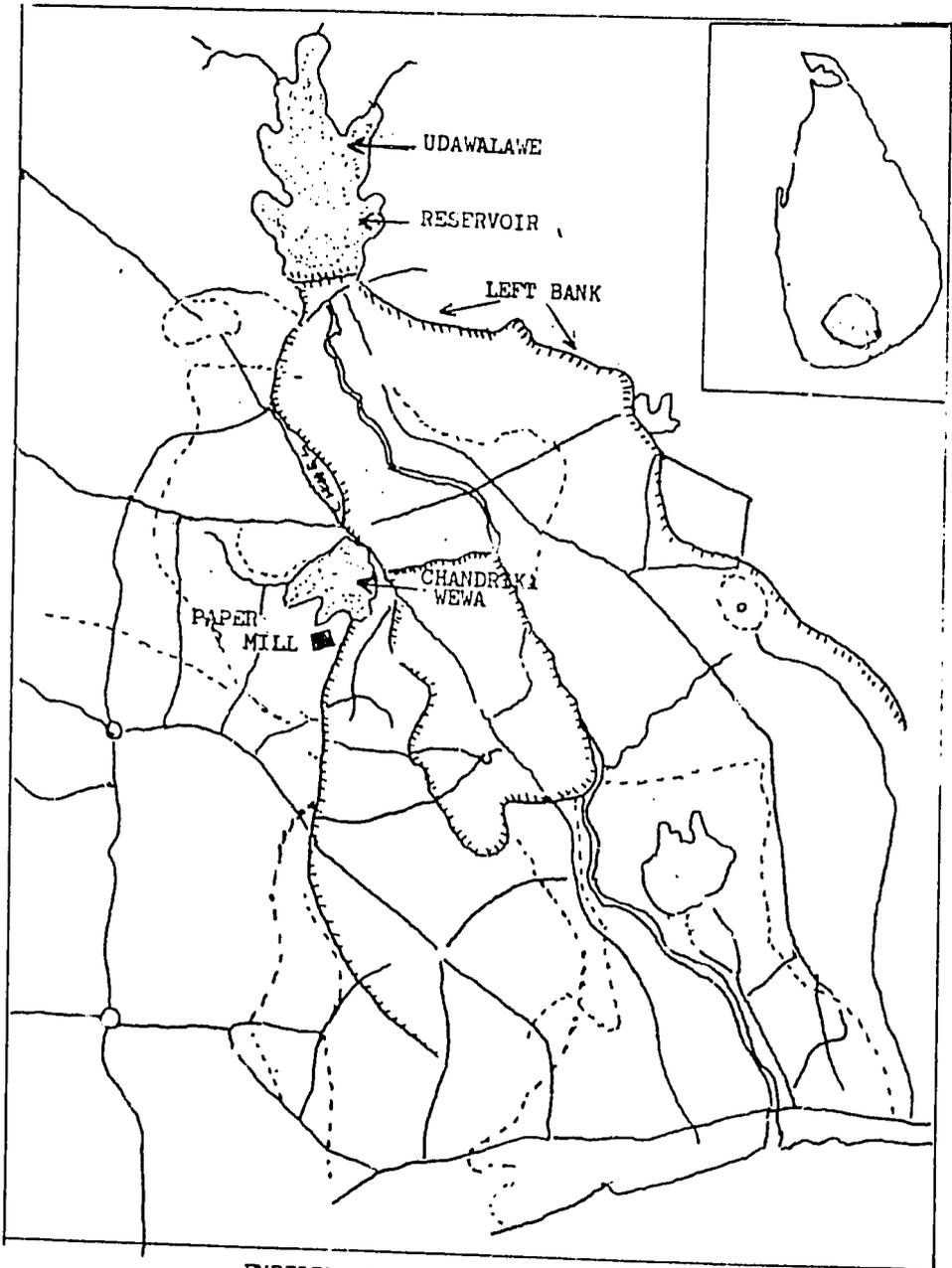
¹The Walawe, called the Vana-Nadi by ancient Sri Lankans is one of the three major rivers of the island.

²Environmental Impact Study of Industrial Pollution of Pulp and Paper Mills, Embilipitiya, Sri Lanka, prepared by Dr. J.A.P. Mathes, for NAREPP/IRG, 16.12.91. (unpublished).

³East Sri Lanka near Batticaloa.

⁴The report was completed in 1969. New Mills Survey, Embilipitiya Mills, by Sandwell, Technical Report No. P2246/1.

⁵The reservoir was constructed in 1969 and is located upstream of Embilipitiya.



EMBILIPITIYA

EMBILIPITIYA PAPER MILL

The need for an ample supply of water for the proposed mill resulted in a new site being selected at Embilipitiya, 24 km north-west of the original tentative site. The Chandrika Wewa (tank) and the Kachchigala tank were chosen as the sources of water supply for the proposed mill. Approximately 2.9 mg/d of water would be used on the average by the mill. The water would be pumped to the mill from these two sources.

A total quantity of 30,000 t/a of rice straw were to be used as the raw material in the mill. The expectation was that this quantity of rice straw would come from the 150,000 acres of paddy land already under cultivation and to be brought under cultivation under the new Uda Walawe irrigation scheme. It was estimated that if rice straw was collected from paddy lands located within a 30 mile radius the raw material requirements of the mill would be met.

Rice straw as a raw material for the mill was clearly within the contemplation of planners at the outset. The mill was commissioned in 1977 expecting to use the caustic soda process and have an annual production capacity of 15,000 t/a, thereby increasing the country's production capacity to 37,500 t/a⁶. No further additions have been made to the production capacity of the country, and the current levels of production have dropped to 23% of the demand.

The Embilipitiya case demonstrates three major reasons as to why a particular industry was established:

1. as a result of the thrust of the state's general industrial expansion program;
2. to save foreign exchange; and
3. to make the venture profitable.

The expected gross return on the investment was estimated at either 17.2% (before interest, depreciation and taxes) or at 10.4% (after interest and taxes). Though this return was unattractive the estimated annual foreign exchange savings amounted to an attractive Rs. 20.35 million.

The two major environmental problems that surfaced subsequently are both inextricably linked to the industrial process that was adopted and the raw material used. The two problems were:

- 1) a fairly localised problem to residents caused by air pollutants and emissions from the treatment ponds and stacks; and
- 2) a serious water pollution problem caused by the discharge of waste into the Walawe Ganga.

⁶This represented 37% of the country's demand.

Both problems have their genesis in "process", "raw material", and "waste recovery" issues. The basic pulp and paper process involves the cooking of raw natural fibres (usually wood, but in the Embilipitiya case mostly rice straw) in a chemical solution, the main component of which is caustic soda. The resultant pulp is then separated and the remnant liquid is called "black liquor". Thereafter the pulp is bleached through chlorination and other processes and subsequently rolled into paper. The bleaching process also results in the discharge of the wash which contains chlorine compounds and other known toxics. This wash is called "white water".

Normally, the black liquor is not thrown away but rather concentrated through a chemical recovery system (CRS). The purpose of doing so is to recover as a significant quantity (75%) of the caustic soda as possible for re-use in the process. The economic viability of the process is generally increased by the use of a CRS. Unfortunately, straw has a relatively high silica (14 - 17%) content. The silica which gets into the black liquor then causes scaling in the evaporator tubes forcing frequent shut-downs of the CRS.

Frequent shut-downs of the CRS led to:

- 1) the gradual conversion of the raw material used from the originally planned straw to wood and later a mixture of both; and
- 2) the establishment of large aeration lagoons to store the black liquor and white water and later to discharge this waste into the Walawe Ganga 7.6 km away.

The impact of this action caused the environmental and human health problems described above, but it also made the industry less economically viable. The discharges into the Walawe Ganga caused adverse impacts on the river ecosystem, evidenced by major fish kills and the closure of the Hambantota water supply scheme downstream. These symptoms manifested themselves each time the black liquor was released into the river. Such releases were common occurrences, but have been reduced after public and press protests.

There were several pollution control measures that were possible. Some of them have since been adopted. The use of waste paper as a raw material, the operation of the CRS, and better management of the waste are but a few. The siting of the Embilipitiya complex could also have been done in an environmentally sensitive way.

Though somewhat sketchy, the case serves to illustrate several important legal, procedural and institutional points.

- ◆ A fairly substantial feasibility study was carried out by Sandwell in 1969, eight years before the mill was commissioned. This study had recommended the establishment of the mill near the mouth of the Walawe river. Had this been done, the impact on the upstream ecosystem may have been avoided though it may have created marine-related environmental problems. The change of the site was forced by other events which pre-empted the use of the original site. These events were predictable.
- ◆ Both the feasibility study and the change of the site do not seem to have taken environmental considerations into account.

Like most feasibility studies the Sandwell report considered the "economic" justification for the mill, made a technical evaluation of the process and raw materials for use in that process and in the light of these two, made a tentative site selection. Although **alternative** processes, sites and industrial options were considered, environmental impacts and alternatives were not. The original site became unavailable because of environmental changes caused by another development project upstream. These changes should have been foreseen and taken into account in the site selection.

- ◆ Even in the analysis of the "process" for the mill, the Sandwell report was defective in as much as it did not investigate the special features of rice straw as a raw material and the impact of its use on the CRS. At the heart of the present environmental problem is the failure to investigate the chemical properties of rice straw and its effect on the CRS. Had this been done, industrial process solutions could have been recommended to avoid or mitigate the resultant "economic" loss.
- ◆ There appears to have been a near total absence of consultation with the affected people in the area and other relevant state and local agencies. The Hambantota water supply scheme has been affected and traditional fishing grounds destroyed. Agencies involved in the management of the river system (except the Irrigation Department) do not appear to have been consulted.
- ◆ No compensation has been paid to the affected parties nor has the cost to the Hambantota water supply scheme been defrayed. In short, the environmental costs of the mill have been externalized and passed on to the people of the area and to the state.
- ◆ The extent to which political expediency played a role in decision making is unclear, although there appears to have been an industrialization thrust and a need to develop new industries in the Southern Province following the 1972 insurgency.
- ◆ A subsequent study by Arel (1991) has recommended an action program to rehabilitate the mill, but whether the mill has committed itself to carry out the program and fund it is unknown.

3. KIRINDA HARBOUR PROJECT

This case study, prepared by M.H. Gunaratne⁷ concerns the Kirinda Harbour project. It is a project undertaken eight years after the Embilipitiya mill and is therefore more recent and better documented.

⁷Environmental Impact Assessment Study of the Kirinda Harbour Project, by M.H. Gunaratne, NAREPP/IRG, December 1991 (unpublished).

The project appears to have had its origin in the Master Plan of the Ministry of Fisheries (1979-1983)⁸. The plan highlighted the need for fisheries harbours in the South-eastern coast. It also drew attention to the need to provide fishermen with harbour facilities, transport, repair and maintenance services. In this context the plan proposed an intermediate scale investment program to recondition and upgrade a number of harbour sites.

Kirinda was one of seventeen sites identified⁹ for this program. The breakwater construction at Kirinda was estimated at Rs. 10 million and scheduled for completion in 1982. The Master Plan itself had reference to an earlier report prepared by a government appointed committee in October 1979¹⁰.

The Minister of Fisheries made a request for funding for four harbours, including Kirinda, in December 1979¹¹, but the Cabinet desired a reconsideration of the request. A high-powered committee was then appointed to study and report on the subject of constructing new harbours¹². The report of this committee became the basis for the government's request to the Government of Japan for grant aid.

In response to the request for grant aid, the Government of Japan, acting through the Japan International Co-operation Agency (JICA), sent a survey mission to make a preliminary study. The mission spent just seven days in Sri Lanka¹³. The team visited ten sites, did some field surveys, held a series of discussions with officials and chose Kirinda as the site for the project. The decision was taken on the basis of a priority expressed by the Sri Lankan authorities and on the basis of the field survey.

⁸published in 1980.

⁹"Proposed Investment in New Harbours, Anchorages, Access Channels and Shore Facilities, 1979 - 1983".

¹⁰The Committee was headed by Mr. Seneviratne, Deputy Director, External Resources, 31.10.79.

¹¹Cabinet Paper of 21.12.79.

¹²Committee appointed by the Minister of Fisheries on 19.5.80 headed by Mr. R.M. de Silva, Chief Engineer, Ceylon Fisheries Harbours Corporation. The committee also included the Director of Coast Conservation, Mr S.P. Amarasinghe. The constitution of the committee is significant, as the environmental problem that surfaced later had to do with coastal dynamics. One issue that needs to be answered in this report is the role played by agency officials in decision making. Another question that comes to the mind is why an EIA was not recommended for the project by the Director of Coast Conservation. One possible reason is that the Coast Conservation Act (1981), which introduced the concept of EIA for the first time into the statute book, had not yet been enacted. The other is perhaps due to the "intermediate" nature of the project possibly not appearing to have "significant" impacts.

¹³From May 20th to 27th, 1982.

Without in any way doubting the thoroughness of the mission's work, it must be observed that seven days constitute an extremely short period in relation to the vast schedule, itinerary and the quantum of data that had to be gathered. This process would undoubtedly have been assisted by the existing reports and by the information available with officials. Yet it is a surprisingly short period in which to make a proper site selection. It is clear that environmental considerations did not play a role in this decision making process nor was there consultation with fishermen, the ultimate beneficiaries of the project. Arguably, the latter had been done by officials in the course of previous studies though the case study does not reveal this.

A further month-long design study was carried out by a team headed by a Japanese official in August/September 1982. A field survey of the Kirinda area was also carried out. Discussions with officials were held but the case study makes no mention about any discussions with fishermen. The design study covered details of the breakwater and connected works as well as harbour facilities. A summary of these decisions was presented to representatives of the Ministry of Fisheries and the Ceylon Fisheries Harbours Corporation. It must be borne in mind that the Coast Conservation Department (CCD) was under the Ministry of Fisheries at that time and the Coast Conservation Act and the permit system had become operative.

The design criteria seemed to have satisfied the government representatives and so further design studies were carried out in Japan. Several issues that this case study raises must be interposed at this juncture. What was the role of the CCD? Why did the CCD not raise the possibility of coastal erosion and sedimentation either with the Ministry of Fisheries or with the JICA team? On the other hand were these issues raised and yet ignored? The case study is silent on this issue. Could the CCD have asked for an EIA? Did the CCD have legal authority to do so and was this a fit case in which that discretion should have been exercised? In short, how effective were the CCD and the Coast Conservation Act in the decision making process?

In November 1982 a final report incorporating the preliminary survey, the field survey, and the design study was presented to the government by JICA¹⁴. Construction began in September 1983 and was completed in April 1985. The harbour was officially declared open in July 1985. Within two months the use of the harbour began to decline and an year later (August 1986) it was silted at the mouth and was not being used at all. The short lead time for the manifestation of the coastal environmental problem raises the question as to whether this was an obvious error of judgement and a failure of the decision making process or both.

¹⁴Basic Design Study Report on the Fisheries Harbour Construction Project in the Democratic Socialist Republic of Sri Lanka, November 1982.

By May 1987 the government asked the Government of Japan for a technical study on sand siltation¹⁵. The study was carried out in consultation with local officials from April 1988 to December 1988 and two reports were submitted in March 1989 and October 1989. These were accepted by the Ministry after discussions and modifications and a final report was issued in January 1990.

Based on this report the Ministry of Fisheries requested the Director External Resources to pursue the matter of rehabilitation with the Government of Japan. After much delay on the part of Sri Lankan officials, a JICA team conducted further field surveys in October/November 1990. Several new construction works were proposed under the rehabilitation program. The Government of Japan had accepted the recommendation and grant aid is being pursued.

The original estimate for the harbour was Rs. 10 million (1979 estimate projected for 1982). As at 1990, a total of Rs. 283 million had been expended by the Japanese Government. Rehabilitation costs are estimated at Rs. 600 million resulting in a total project cost of Rs. 1400 million¹⁶. The case study points out that three harbours could have been built with this sum of money.

Even in 1990, the CCD had not called for an EIA although the project manifestly had "significant" impacts and the study does not indicate whether the original construction had a permit from the CCD under the Coast Conservation Act. As the rehabilitation of the harbour would probably have beneficial impacts, was an EIA necessary?

The dangers of not carrying out the necessary environmental investigations ahead of time and of not incorporating the data into the decision making process are clear. Perhaps public consultations¹⁷, if held, might have helped to identify this issue as local fishermen usually have an intimate knowledge of the coast and the sea¹⁸. General sand drift and erosion patterns might have been identified sufficiently to raise an issue as to whether this was an area requiring investigation and study. In any event, the CCD might have raised the possibility of siltation due to interference with coastal dynamics. These points emphasize the importance of popular participation and consultation.

¹⁵Was the sand siltation and drift problem one which should have been part of the pre-design or even the design studies? Why was such a basic issue overlooked in the decision making process? Were there adequate data on the problem which could have been used or did the insufficiency of data compel decision makers to ignore the problem?

¹⁶This figure is doubtful and needs to be checked?

¹⁷Some consultations appear to have been the basis upon which the government identified the need for harbours in the South east (vide case study at end of Chapter IV).

¹⁸The case study highlights the fact that local fishermen and officials of the CCD had knowledge of the sand drift (vide Chapter V).

The case study brings to light a common institutional failure; the fact that an officer from the relevant agency sits on a committee does not guarantee that information, data and institutional learning will be brought into the decision making process. Nor does the fact that a department is within a particular Ministry ensure that the Ministry has consulted the agency in arriving at or agreeing to decisions. Transparency of decision making and wide consultative processes involving different levels of the same agency are effective checks on such institutional failures. Time constraints can act against good decisions, but a transparent and consultative process, however short, can militate against such carelessness and inadequate use of available information.

Given the project goal of selecting and constructing a fisheries harbour, the options of siting, design and mitigation were manifold. An EIA would have been the ideal tool for such comparative environmental and economic analysis. The EIA process would have enabled informed discussion among the agencies and the public thus minimizing the unnecessary expenditure now being incurred on rehabilitation work. Was the sand drifting and siltation predictable? If so what prevented the problem from surfacing within the agencies and from being addressed in the design phase of the studies? If the CCD had called for an EIA, it would have set the issue identification and the consultative process in action. Why was an EIA not called for?

The only criteria that appear to have been applied relate to economics¹⁹ and engineering. The need for a harbour having been justified on economic grounds, siting became an engineering and economic choice only. Had environmental criteria also been used, two options could have been considered:

- ◆ Kirinda may not have been the best possible site²⁰;
- ◆ Even if Kirinda was the best site, an alternative design was still possible ensuring avoidance or mitigation of the sand siltation problem.

The case study makes the point that "the failure to conduct a proper wave climate study was the contributory factor for the siltation of the Kirinda harbour and the consequent environmental degradation"²¹. Anemometer readings taken over a period of one year were unreliable and the importance of studying the wave climate was obviously underplayed by the contractors²². Both the timeframe and data adopted for the decision making were inadequate because such a study would have entailed a long period of time.

¹⁹Economic justification is set out in Chapter III of the case study.

²⁰The specific reasons for selecting Kirinda are set out in Chapter II(b) of the case study, but they do not include any environmental criteria.

²¹Chapter V.

²²Ibid.

The use of meteorological data to predict wave climate, though done, was an inadequate way to assess the problem. The best way to define a wave climate profile was to have used directional wave riders, but this was an expensive technique available only at the Galle harbour.

The wave climate constructed through inadequate data and surrogate methods gave an inaccurate picture both to decision makers and to designers. The importance of the role of waves in sediment transportation has not been foreseen because of the belief that waves in Sri Lanka do not rise high and are therefore unimportant²³. The presence of sediment emptied into the sea from the nearby Kirindi Oya should have received the attention of investigators.

The case study raises an important issue about the generation and use of appropriate data. Decision makers must constantly beware of the tendency of contractors to downplay the need for data or the significance of data available or to overplay the reliability and accuracy of substituted data, particularly when the future of the contract or the project itself is at stake. These are problems that only transparency and strict professional scrutiny can overcome. The sand drift problem did pose difficulties of measurement prior to construction.

The contractors operated a nearby stone quarry for construction purposes. The impacts from the quarry have affected residents in the area damaging their houses and property and have also damaged the nearby natural forest. Neither an EIA nor an Initial Environmental Examination (IEE) was carried out in respect of this activity; nor have the affected people been compensated for their loss.

Beach seining (Madel fishing) has been adversely affected, resulting in income losses to fishermen. The beach to the Northwest towards the Yala sanctuary has been eroded and the impact on the Kirinda Lewaya (lagoon) was not assessed at all. A reawakened village called Kirindagama was built in 1987 behind the harbour. However there is growing tension between the Kirindagama settlers and Kirinda fishermen due to the reduction of beach frontage of Kirindagama.

If the Kirinda site is considered on an open slate, were there other options available for its development? Kirinda is an ancient place of religious and historical significance. It is the place at which King Dutugemunu's mother landed after she was set afloat in a boat from Kelaniya by her father King Kelinitissa. It is the place where an ancient temple was established by King Kavantissa to commemorate this event. The Yala National Park is almost "next door". The area is surrounded by several bird sanctuaries such as Weerawila and Bundala. Kataragama is no more than 15 miles away. Was ecotourism or cultural tourism an option that should have been considered for Kirinda? What kind of impact would this have had on the fisherfolk?

Obviously, expected benefits from the harbour construction did not materialise. Could this have been avoided by an EIA? These are some of the issues this study will address.

²³Ibid.

4. SAMANALAWEWA HYDRO-ELECTRIC PROJECT

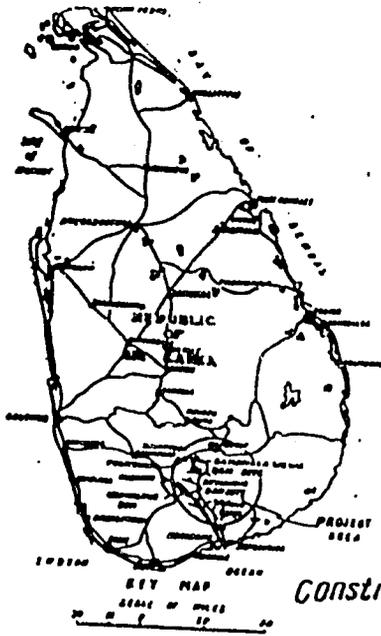
This case study is hereinafter referred to as the "Samanalawewa case". It is based on a study by Tissa Herat, I.A.U.N. Gunatilleke, and P.B. Karunaratne²⁴.

Post-independence national planners, hindered by the lack of information and data, were prompted to recommend that a natural resource survey be carried out. The National Planning Council (1959), the Land Commission (1957) and the World Bank made recommendations to the government to conduct a natural resource survey in order to assess the nature, extent and distribution of these resources. A survey was carried out with Canadian aid by the use of aerial photography (1957-1960) in the Walawe basin area²⁵. The Samanalawewa area was included in this survey.

This survey then became the basis for preliminary plans for the Walawe river basin. The survey identified ample scope for agricultural and hydro-power development in the Walawe basin. A number of hydro-electric dam sites were identified in the upper reaches while the tributaries were identified for irrigation. The Samanalawewa scheme was one of those identified in the survey.

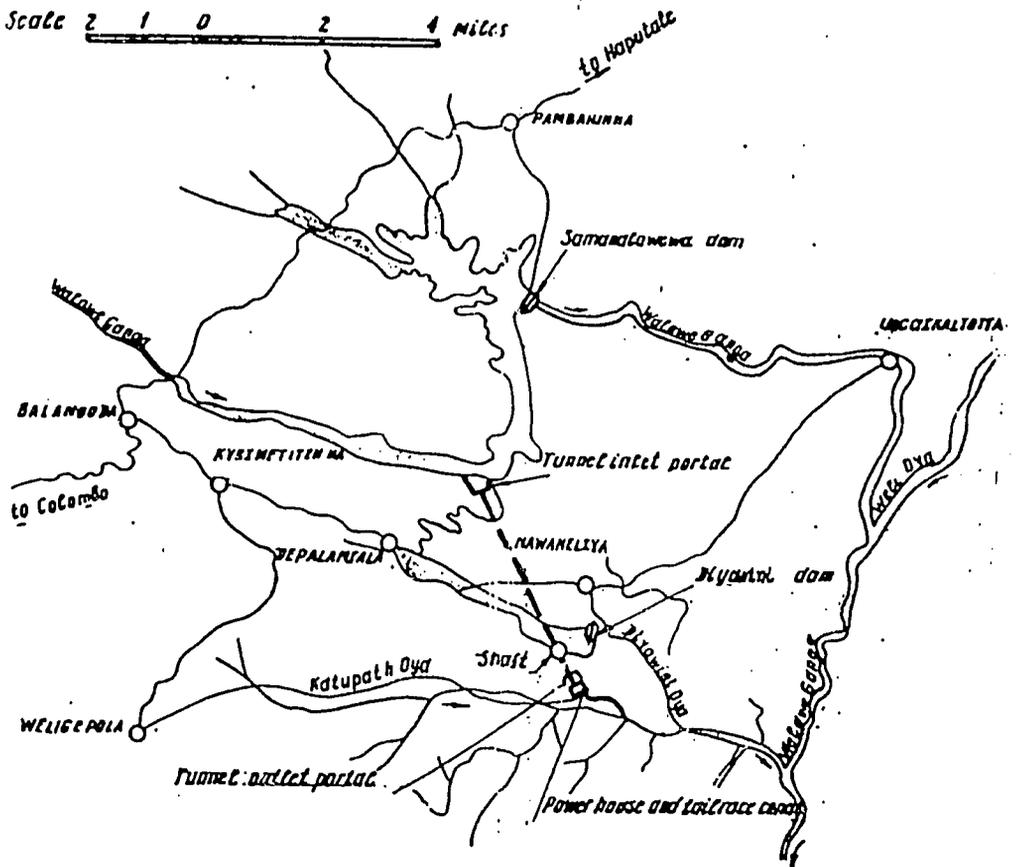
²⁴Environmental Effects of the Samanalawewa Hydro-Electric Project, NAREPP/IRG, by Tissa Herat, I.A.U.N. Gunatilleke and P.B. Karunaratne, February 1992. (unpublished).

²⁵A Report on a Reconnaissance Survey of the Resources of the Walawe Ganga Basin, Ceylon. Photographic Survey Corporation Ltd. Toronto, 1960.



Construction area map

Scale 2 1 0 2 4 Miles



Samanalawewa Hydro-electric project.

The irrigation potential of the river coupled with the fertile coastal plains lying in its basin made agricultural expansion an obvious choice. In 1967, a 4 km earth dam was constructed across the Walawe creating the Uda-Walawe irrigation reservoir and scheme. An extensive area around the reservoir was declared a national park and development in the Walawe basin has since respected this boundary.

At this time the Samanalawewa scheme was seen as a further development of the basin that would help regulate the flow of the Walawe for irrigation purposes. The generation of electricity was still a secondary, or perhaps an equal, objective. Several studies and feasibility reports were done during the four decades that followed. In 1966 a technical report was prepared which demonstrated that Samanalawewa should be a multi-purpose scheme²⁶. The irrigation of 13,500 ha. of land, 30 km downstream near the Uda Walawe reservoir and the generation of 120 MW of electricity were set down as the objective.

By 1970, the project had taken a different turn. A new report prepared by an American firm of consultants recommended that the project should be a single-purpose one for the provision of hydro-electric power with irrigation being only a spin off benefit of power generation²⁷. Subsequent reports differed on the issue of whether the project should be multi-purpose or single-purpose. However by 1984 the project had become a distinctly electric power-oriented one.

The current project is based on two reports prepared by British²⁸, German²⁹ and Japanese³⁰ firms. The Samanalawewa case study highlights this important point of departure in the objectives of the project. Yet the case study finds that there was "little or no consideration of ways to realise the potential for further irrigation development downstream or of possible detrimental effects upon the environment or the existing downstream irrigation schemes"³¹.

²⁶Samanalawewa Project: Technical Report prepared for the Government of Ceylon. Engineering Consultants Inc. (ECI, 1966), Colombo.

²⁷Samanalawewa Project for Development of Hydro-power: Technical Report. Snowy Mountain Engineering Corporation, 1973.

²⁸Samanalawewa Hydro-Electric project: Engineering Review and Recommendations. Balfour Beatty Ltd., 1984.

²⁹Samanalawewa Hydro-Electric Scheme: Additional Studies - Main Report for the Ceylon Electricity Board. Electrowatt Engineering Services Ltd., Zurich, 1985.

³⁰Samanalawewa Hydro-Electric Project: Design Review Report. Nippon Koei Co. Ltd., Tokyo, 1987.

³¹Op.cit, p. 2.

Once the sole objective of the project became power generation, its implementation and management fell entirely into the hands of the Ceylon Electricity Board (CEB), the state monopoly on electrical energy.

Pausing at this juncture to consider the process that was involved in the change of project objectives would be illuminating. How and why did a project that was originally conceived of as a multi-purpose project come to be designated as a single-purpose project? Was the change due to economic considerations or was it political or both? Although the project costs were analysed in relation to a thermal generation option³² and shown to be economically more efficient³³, there does not appear to have been any analysis, economic or otherwise, of designating the project as a power generation project only, leaving out irrigation altogether.

This issue will be considered in greater detail later as it helps to illustrate the importance of assessing "alternatives" to project development and also illustrates the issue of "timing" an EIA in the decision making process.

The case study gives a good description of the project area prior to and after the project³⁴. It identifies the major impacts³⁵ which are summarised below:

1. Irreversible loss of the rare intermediate zone riverine forest, a few remnants of which still exist below the dam and should be protected;
2. Though the impact on terrestrial fauna was not identified as serious, several amphibian and reptile species with possible genetic traits adapted to the very special climatic conditions would be lost;
3. Significant impacts will occur threatening the survival of at least five species of endemic fish due to inundation, and many species of endemic fish would be threatened unless studies are carried out and water flows regulated downstream;
4. Failure to provide back-up agricultural support services has already resulted in detrimental land use practices adversely affecting sustainability;

³²Samanalawewa Project: Detailed Project Report: Volume II. Hydroproject Institute, Moscow, USSR. Technopromeexport, 1978.

³³The case study demonstrates the flaws in this economic reasoning. If this reasoning was available for public scrutiny in a more transparent decision making process, was there a greater chance that the flaws would have been identified and corrected?

³⁴Op.cit, Chapter 2.0.

³⁵Op.cit, Chapter 4.0.

5. Water allocation and connected land use practices have become a major issue for farmers in the project area, particularly after the de-watering of their lands by leaks on the dam side;
6. Mineral resources in the form of gem stones have been inundated;
7. Quarrying activities for the dam resulted in adverse impacts on the houses and property of residents;
8. The destruction of crops due to de-watering of the hillside by leaks in the tunnel and later from the dam-side;
9. The importance of subsistence farming and its relationship with resettlement issues were ignored in evacuating some 428 persons with little or no socio-economic planning and in violation of the CEB's own guidelines contained in the Electricity Master Plan; and
10. There have been serious social impacts where one time land-owning farmers have now become landless labourers.

The construction work was completed during 1989/1990 and impoundment of the reservoir began in July 1991. For the first time a new impact manifested itself. Major leakages of water were observed from the right bank of the reservoir downstream of the dam. Impoundment was discontinued after a few weeks to investigate and rectify the problem. The case study points out the existence of subterranean hydraulic passages (karst) indicating extensive deep-seated weathering which could result in substantial reservoir leakage³⁶.

The case study also points out³⁷ that the leakage from the reservoir observed after trial impoundment in 1991 "suggest(s) that even the detailed geological investigations carried out and laying the grout curtains" were "inadequate to seal the banks of the reservoir". The hydrological studies have been carried out with the limited objective of assessing engineering needs, but have excluded reservoir-induced hydrological changes. It is likely that such changes would have adverse impacts on the hydro-project itself apart from its environmental impact.

Following public protests after the de-watering of the hillsides, the Overseas Development Administration (ODA) of UK commissioned a "post"-event EIA³⁸. Although the usefulness of such an EIA is questionable, the report identified some of the issues that ought to have been addressed before the project.

³⁶Op.cit, page 42.

³⁷Op.cit, page 35.

³⁸Environmental and Social Studies: Samanalawewa Hydroelectric Project. Environmental Resources Limited, 1990.

The report also assessed some of the impacts that had surfaced after the project. The report described the Samanalawewa project as one that "slipped through the net" in terms of an EIA. It must be borne in mind that there was a Cabinet directive of 1984 that all major development projects should have an EIA.

A further report was prepared for the Central Engineering Consultancy Bureau (CECB) in 1991 to assess the environmental and social impacts of the project³⁹. Even as this last study was underway, the forest was being removed from the area designated for inundation. The study was therefore limited to gathering data available from the upper regions of the project site. The two "ex-post-facto" environmental studies revealed the existence of rare and endangered fish and reptile species and disclosed that the vegetation of the project site was a uniquely adapted climatological type.

The case study points out the need for immediate mitigatory measures though there is no evidence that these are being taken. It demonstrates a clear need for an EIA before vital project decisions are taken. The rationale for such an EIA is to assist decision makers and policy makers with economic, social and environmental data so that they could make informed and rational decisions.

Had the hydrological problems and other socio-economic problems been known beforehand, would the project have been undertaken? If so, would the project have taken a different shape? Were the deciding agencies including the CEB and the government adequately informed about relevant data and impacts when they took decisions concerning the need for, objectives, design and siting of the project? If an EIA was carried out, would the data that came to light have become known, or were the data and issues such (e.g. hydrological problem) that by their very nature they did not lend themselves to pre-assessment? Would prior consultation with other agencies such as the Department of Geological Surveys⁴⁰ and affected people of the area have changed the project or pushed it to being abandoned? Would the project have been more efficient, economically and environmentally, if an EIA had been carried out? Were there other environmentally benign options that could have been chosen instead of the project?

5. CASE STUDIES AND INSTITUTIONAL/PROCESS ISSUES

Needs to match institutional capabilities with legal requirements are basic to law as well as predictable environmental management. The discussion that follows identifies and describes the legal steps and information required by public and private institutions, but omitted or poorly applied in the decision making processes as illustrated by the three case studies. In this section other cases are also used to illustrate important procedural and institutional issues that affect environmental evaluation and decision making relating to development projects.

³⁹Samanalawewa Electric Project: Environment Study. Samanalawewa Environment Study Group, CECB, 1991.

⁴⁰It would appear that the Department of Geological Surveys had warned about the problem that surfaced later at the project site.

The undermentioned legal statutes were applicable in the respective cases:

Embilipitiya paper mill:

1. State Industrial Corporations Act 1957
2. State Lands Ordinance
3. Irrigation Ordinance
4. Nuisances Ordinance & the Common Law of Nuisance
5. National Planning Act 1956

Kirinda harbour:

1. State Industrial Corporations Act 1957
2. Coast Conservation Act 1981
3. State Lands Ordinance

Samanalawewa hydro-electric project:

1. Ceylon Electricity Board Act 1969
2. Electricity Act 1950
3. State Lands Ordinance
4. Land Acquisition Act 1950.

Without delving into each of these statutes in detail at this stage each statute and its relevant provisions are placed in the context of the project and its special problems. Doing this helps us identify the institutions involved, the information required in the processes, the processes themselves and their adequacy, and finally whether the relevant information was used or not.

EMBILIPITIYA CASE:

The Embilipitiya mill, as stated earlier, was constructed for the National Paper Corporation (NPC) established by the government under the State Industrial Corporations Act 1957⁴¹. Such corporations are set up by the government by means of a gazette notification published by the Minister of Industries. Once established, such a corporation is managed by a Board of Directors appointed by the Minister. The initial and some future capital of the corporation is voted by Parliament and the Minister can transfer such state property as the corporation may require for the purposes of its business⁴².

The accounts of such a corporation are subject to audit by the Auditor General and profits are payable into the Consolidated Fund unless otherwise determined by the Minister. Such corporations are liable to pay taxes.

⁴¹State Industrial Corporations Act No. 49 of 1957.

⁴²Op.cit, Sections 2, 23 and 25.

Private property may be acquired for the purposes of such corporations through the procedure laid down in the Land Acquisition Act⁴³. The Minister of Lands has the power under the Act to exempt any such corporation from the operation of, among others, the State Lands Ordinance, the Fauna and Flora Protection Ordinance and the Forest Ordinance⁴⁴.

The NPC was established in time for the Valaichchenai Paper Mill to be vested and operated. Under the parent Act it was possible for the state to have vested the land required for the Embilipitiya Mill in the NPC. It was also possible for the state to have acquired private property for the purposes of the project. Finally, it was possible for the NPC to have been exempted from the operation of the several statutes mentioned above. The case study does not reveal the precise position in respect of these matters⁴⁵.

Being a commercial enterprise, the NPC would have arrived at its decisions on normal business data. The non-operation of the CRS has resulted in an economic loss to the NPC. Perhaps it was this factor that first led the corporation to take a close look at the mill and its operation. Public protests from the neighbourhood as well as from Hambantota, where the water supply was affected, would have been the other factor which prompted the corporation to take a closer look at the pollution problem. In fact, the Environmental Foundation Ltd. (EFL), a public interest environmental law and advocacy NGO had threatened legal action on several occasions.

It is therefore fairly clear that the outstanding reasons for the NPC to study and take mitigatory measures against pollution were public outcry, economic loss and the threat of litigation. How much of this could have been avoided if a pre-project EIA had been carried out with transparent and participatory processes of decision making? Perhaps all of these catalytic reasons would have been negated and a better mill in a better site might have been built.

The two statutes that should have involved the NPC in permit procedures were the State Lands Ordinance⁴⁶ and the Irrigation Ordinance⁴⁷. The case study states that the water requirements for the mill came from two irrigation tanks, the Chandrika Wewa and the Kachchigala tank. The waste water was discharged into the Walawe Ganga. The Chandrika Wewa was built in 1963 across the Hulanda Oya, a tributary of the Walawe⁴⁸.

⁴³Op.cit, Section 33.

⁴⁴Op.cit, Section 38.

⁴⁵Investigations and interviews are necessary for this information to be ascertained.

⁴⁶State Lands Ordinance (Cap. 286), 1980 ed.

⁴⁷Irrigation Ordinance (Cap. 285), 1980 ed.

⁴⁸Water Resources of Ceylon, by S. Arumugam. Water Resources Board, Colombo, 1969, p. 112.

Although the Chandrika Wewa itself, being an artificially created tank, would be under the jurisdiction of the Irrigation Department, the feeder oya is a "public stream" as defined in the State Lands Ordinance (SLO)⁴⁹.

Section 77 of this Ordinance prohibits the diversion of water from a public stream without a permit from the Government Agent or the Irrigation Department. The Government Agent may be assisted by an advisory board appointed by the Minister for that particular case or for the province⁵⁰. The Government Agent is required by the law to take into consideration the right of riparian owners, interests of the state and local authorities and other prescribed matters. If the NPC had applied for the requisite permit for the use of water from Chandrika Wewa, the permit procedure ought to have involved an inquiry into impacts on other water uses and should also have raised water allocation issues. The case study being silent on such a procedure, we must conclude that no such application was made or that even if it was made, the permit was granted without a proper inquiry.

The right of the Hambantota local authority to draw water for the town, the use of the water for irrigation and fishing, and the likelihood that the mill would pre-empt other uses of the Walawe Ganga were all relevant and salient matters for consideration at a water permit inquiry. One possibility is that the NPC was exempted from the operation of the Ordinance by the Minister of Lands as stated earlier. If, however, this had not been the case, a permit was required and should have triggered, at the least, a minimal impact inquiry. Had this process been used, environmental and social information could have become relevant and could have been used in the decision making process.

On the other hand, unless the process was invoked early enough, it is likely that it would have disintegrated into a superficial staging exercise where the information became irrelevant and justification for decisions taken and already announced became paramount. Additionally, unless there were active interest groups such as farmers' societies or fisheries societies or environmental groups, it is unlikely that transparency would have enriched the decision making process.

The use of water from the Chandrika Wewa also required the consent of the Irrigation Department which ought to have been granted through an amendment to the approved irrigation scheme for that tank⁵¹. Such an amendment was possible, if at all, only through a consultative process involving the Agrarian Services Committees (ASCs) of the farmers affected, the concerned Irrigation Department officers, the Director of Irrigation and the Minister in charge of the subject of Irrigation. Here again is a process that was transparent and participatory and ought to have been followed.

⁴⁹Section 70 of the State Lands Ordinance defines a public stream as any stream other than a private stream. A private stream is one which has its source and entire course within a private land.

⁵⁰Op.cit, Section 79.

⁵¹Irrigation Ordinance, Part V.

It would have enabled relevant data to be used in the decision making process concerning the mill. It appears from the case study that this was not done.

However, perusal of the Irrigation Ordinance raises another major legal issue. Was it open to the state to allow the NPC to obtain water from an irrigation tank established for an irrigation scheme? The Irrigation Ordinance seems to contemplate the use of such water **only for the purpose of cultivation of crops** and not for other industrial purposes. If this is an accurate construction of the law, then it was not open to the mill to use water from the Chandrika Wewa or Kachchigal a tank and may have compelled the state to look for alternative sites.

So far this examination has been confined to the legal processes available and the institutions responsible for the management of the use of water from public waterways. What of the discharge of waste into public waterways? At the time the mill was set up, the National Environmental Act was not available. Apart from a bare permit system established under the Nuisances Ordinance⁵², there was no comprehensive statutory scheme available for controlling pollution of public inland waters.

The provisions of the Nuisances Ordinance prohibit the "fouling or corruption" of the water of any stream by the discharge of any "offensive liquid, matter or thing" and impose a fine on the offender. The problem is that the penalty is only Rs. 50/- for each offence and Rs. 10/- for each day it is continued after conviction. A similar statutory provision in the U.S. was used effectively to prevent pollution of Federal waters until the advent of the Clean Water Act⁵³. Additionally, the provisions of the Criminal Procedure Code⁵⁴ allow for the abatement of public nuisances such as the pollution of public waterways in a manner that causes danger to public health and comfort.

These provisions of law could have been activated against the mill by the Police, by a local authority or by any citizen. In fact, this was precisely what EFL was proposing to do when the NPC decided to restart the CRS. However, if an action had been commenced under the Nuisances Ordinance, it may have been economically viable for the NPC to have paid the fine and continued to pollute the Walawe. This raises an important economic/law issue -- how high should a penalty be before it can induce a behavioral change?

There was also the civil law remedies of damages and injunctions available to affected parties. However, the question whether a private citizen has locus standi to sue for damages to a public river is an open question. Although the Attorney General could undoubtedly do so, a citizen's right is dependent on showing some special damage over and above the rest.

⁵²Nuisances Ordinance (Cap. 562) 1980 ed. was first enacted in 1862 and last amended in 1946.

⁵³The Rivers and Harbours Act had a very similar provision which was used effectively against pollution.

⁵⁴Section 98 of the Criminal Procedure Code.

One other institution was involved in the decision making process. The National Planning Council (NPC) and the National Planning Department (NPD) are responsible, under the National Planning Council Act 1956, for advising the Cabinet of Ministers on national economic planning including industry.

The NPD functions as the planning secretariat to the NPC which consists of 17 members headed by the President and the Minister of Finance. Though the NPC has wide powers to obtain information, it is insulated from transparency by a confidentiality provision⁵⁵. The NPC however does have the power to establish consultative bodies and engage experts to inquire into and report on aspects of planning of the national economy⁵⁶. Such bodies and experts could be involved in a more transparent and consultative process to facilitate decision making and to bring relevant information to bear on the policy makers. It is very likely that the decision to establish the mill became the subject of deliberation before the National Planning Council.

The precise shape and line of decision making are not manifest in the case study. For this reason it is difficult to make precise evaluations. Hypothesis has therefore been used in the foregoing discussion to illustrate possible decision paths.

KIRINDA HARBOUR:

The Ceylon Fisheries Harbours Corporation (CHFC) which is the executing agency for the Kirinda Harbour project has been established as a state corporation under the State Industrial Corporations Act 1957. This institution is in a similar position to the National Paper Corporation which was the agency involved in the discussion relating to the Embilipitiya case. An important issue is whether the Minister of Lands has granted an exemption from the operation of the State Lands Ordinance, the Fauna and Flora Protection Ordinance and the Forest Ordinance⁵⁷. If so, the provisions of the State Lands Ordinance applicable to the state's power of disposition over the foreshore will have no application. The discussion proceeds on the hypothesis that such an exemption was not granted.

For convenience and reasons of synthesis, the effect of the State Lands Ordinance and the Coast Conservation Act⁵⁸ are discussed together.

⁵⁵Op.cit, Section 13.

⁵⁶Op.cit, Section 11.

⁵⁷Vide Footnote 44

⁵⁸Coast Conservation Act No. 57 of 1981.

The administration, control, custody and management of the foreshore were vested in the state⁵⁹ by the SLO and this was extended to the coastal zone by the CCA⁶⁰. Sri Lankan law makes it explicit that the title to the seashore is vested in the community/public and is held in a public trust by the state for the community/public.

The state thus has the right to lease or grant temporary occupation rights to the seashore, but cannot grant title as this is vested in the public. Under Section 61 of the SLO, the President can lease the foreshore provided he is satisfied after due inquiry that the lease will "not substantially prejudice the rights of the public thereto". Section 60 authorizes the President to construct quays, wharves, jetties or other public works along or out from the foreshore.

This analysis assumes that the part of the foreshore required for the construction of the Kirinda Harbour was "leased" or otherwise disposed of to the Ceylon Fisheries Harbours Corporation which would have administered the harbour. Once again the law requires an inquiry to be conducted to decide whether public rights are prejudiced by the granting of the disposition. Such an inquiry can and should become the forum for the evaluation of relevant economic, social and environmental information. The adoption of a transparent and participatory process would undoubtedly have helped in making the Kirinda project a better one or in facilitating the evaluation of alternatives to the project.

In any event, even assuming that the CFHC had a lease or other vesting or disposition of the harbour, it still required a permit to carry out construction work along the coastal zone. This permit system was established under the CCA in 1981. Although the CCA was not in force when the Minister of Fisheries took the proposal to the Cabinet in December 1979 or when the committee appointed by him re-evaluated the project in 1980, it was operative when the first JICA mission came to Sri Lanka in 1982.

In any event, the Director of Coast Conservation was on the committee and it was possible for him to have drawn attention to the need to study wave climate and sand drift. Clearly, at the time construction began in 1983, a permit under the CCA was a legal requirement.

⁵⁹By Section 58 of the State Lands Ordinance. Part VIII of this Ordinance deals with the foreshore. The "foreshore" is defined in Section 110 as the shore between the high and low water mark. The courts have consistently applied the Roman Dutch Law concept of res communis to the seashore holding it to belong to the public/community, but held in trust for them by the state. The limit of the seashore in Roman Dutch Law extended upto the point reached by the sea during winter storms. In applying the principle to the seashore of tropical Sri Lanka, the Supreme Court decided that the limit of the shore extended upto the highest point reached by the sea during the monsoons (vide Fernando vs. Kalutara Police. NLR Vol. 45, p. 49).

⁶⁰The landward boundary of the coastal zone is 300 meters from the mean high waterline and the seaward boundary is 2 km from the mean low waterline (vide Section 42 of the CCA).

Part III of the CCA deals with the permit system⁶¹. Basically, no development activity in the coastal zone is permissible except under a permit issued by the Coast Conservation Department (CCD) or where the activity is exempted by regulations. The CCA however was a unique statute. It introduced the concept of an EIA into Sri Lankan law for the first time. Section 16 gave the CCD a discretion to request the developer to provide the CCD with an EIA before the permit application could be processed. Although the CCA did not specify how and when this discretion should be exercised, the CCD interpreted the provision as requiring an EIA where the impacts of the project were significant.

For the purpose of making a determination as to whether the development activity had significant impacts or not, several relevant questions had to be answered in the application form. Once an EIA was called for, the CCA required the CCD to make it available for public inspection and to entertain public comment thereon. The CCD was also obliged to refer the EIA to the Coast Conservation Advisory Council which was an inter-departmental, inter-disciplinary body (including academics and NGOs) for comment. Once the public and the Council inputs were received, the CCD had to make a decision regarding the permit.

Of course, an applicant could circumvent this transparent and participatory decision making process if the CCD exercised its discretion in favour of not requesting an EIA. Such an instance did arise in 1987 when a private enterprise applied for a permit to construct a commercial saltern in the Karagan Lewaya near Hambantota. The CCD was about to issue a permit without calling for an EIA when EFL filed action in the Court of Appeal challenging the exercise of the CCD's discretion. EFL's position was that the CCD had been dictated to by the Prime Minister's office and that the project had very significant impacts including possible flooding of the Hambantota town. The permit was stayed by court and the case is still pending⁶².

Was this what happened in the Kirinda harbour case? What was the precise position of the CCD? Did the CCD entertain and issue a permit at all? If so, did the CCD decide that no EIA was required? Were there adequate data for the CCD to decide that an EIA was not required? If so, what were these data? These questions remain unanswered in the case study⁶³.

An analysis of the case study shows that the data were both insufficient and unreliable on which to come to a decision as to whether there would or would not be significant impacts. The wave climate was simulated on unreliable measurements and surrogate methods and did not give a true picture.

How must a decision maker act when there is insufficient or unreliable data to decide whether an EIA is needed or not? This is the situation in which the precautionary principle should be applied.

⁶¹Sections 14 to 22.

⁶²EFL Vs. Amarasinghe and others, CA application 500/87.

⁶³This needs to be answered

When in doubt, decide for the environment or for doing an EIA. The principle enunciates the age-old wisdom that teaches -- "do not take a risk when you cannot assess it". Had the EIA procedure provided for in the CCA been used, proper environmental evaluations would have been made by the government and JICA. Public scrutiny and agency comments would likely have highlighted the defects that the project fell into.

The question still remains as to whether the CCD had granted a permit for the rehabilitation work and if so why an EIA was not called for even after significant impacts were manifested. Perhaps it could now be validly argued that the net impact of the rehabilitation of the harbour is beneficial and therefore does not trigger the EIA process. The question which the CCD must answer is whether there is sufficient data even now, on which the rehabilitation work has been designed and if not, whether an EIA would enable such information to be made available to the decision makers.

SAMANALAWEWA HYDRO-ELECTRIC PROJECT:

The Ceylon Electricity Board (CEB) became the sole executing agency of this project after the irrigation option was dropped. The CEB was established as the state electricity monopoly in 1969⁶⁴. All government electricity undertakings were vested in the CEB⁶⁵. The CEB is managed by a Board appointed by the Minister of Energy. The main object of the CEB is to "maintain an efficient, co-ordinated and economical system of electricity supply for the whole of Sri Lanka"⁶⁶. Special provision has been made for private property required for the purposes of the CEB to be acquired under the Land Acquisition Act where such acquisition is approved by the Minister⁶⁷. Compensation payable for such acquisition must be re-imbursed by the CEB.

The generation, distribution and supply of electricity are governed by the Electricity Act⁶⁸. The generation, transmission and supply of electricity for non-private use require a license from the Minister in charge of the subject of energy. The Minister can issue such a license only when he/she is satisfied that it is in the "public interest" to do so. A license when issued remains valid for 21 years unless revoked earlier⁶⁹. The CEB is, however, exempted from the licensing requirement and is treated as if it had all the licenses necessary⁷⁰.

⁶⁴Established by the Ceylon Electricity Board Act 17 of 1969, (Cap. 538), 1980 ed.

⁶⁵Op.cit, Section 18.

⁶⁶Op.cit, Section 11(1).

⁶⁷Op.cit, Section 57.

⁶⁸Electricity Act 19 of 1950, (Cap. 537), 1980 ed.

⁶⁹Op.cit, Section 2.

⁷⁰Op.cit, Section 2(1)(i) and 81.

For this reason the CEB is not obliged to seek permission and justify its electrical generation projects as being in the "public interest" though such justification is probably required to gain government and donor approval. The point, however, is that the public do not have the right to hold the Minister accountable for his licensing decision as the CEB is exempted.

Under normal circumstances, an applicant for a license would have to justify the project as being in the public interest. The Act further states that once a license is granted, land required for the licensee must be obtained by private treaty with the owners and where it cannot be done, will be acquired under the Land Acquisition Act, but compensation must be paid by the licensee. If such an inquiry is held, then once again there is a statute forum where relevant information and data can be used for informed decision making. However, this has been pre-empted in the case of the CEB.

In the case of the Samanalawewa project, the CEB would still have to obtain the permission of the Government Agent to divert and use water from the public streams across which the dam is constructed. This, as was already seen in the Embilipitiya case, is a requirement under the SLO. The failure to do so has resulted in the loss of a forum where relevant information could have been used for informed decision making. The reason why such a permit was not sought is because the Electricity Act states that a licensee may be granted the right to use natural water supplies and the CEB is deemed to have all the powers that a licensee has in terms of Section 81 of this Act. Thus no permission is required by the CEB to use the water of the Belihul Oya or to construct a dam across it⁷¹. Manifestly, the CEB has been granted a *carte blanche* to carry out construction, generation, distribution and supply without public scrutiny or transparency.

Even for land acquisition proceedings under the Land Acquisition Act 1950⁷², where ordinarily the government is required to justify the purpose of compulsory acquisition as being for a "public purpose", the CEB is placed at an advantage. Land required for the purposes of CEB's projects are "deemed" to be for a public purpose and, as such, no inquiry or accountability on this count arises. The only intervention possible is to seek "market" compensation in subsequent compensation proceedings under the LAA. Villagers in the vicinity of the project area who were under threat of having pylons taken over their lands were able to successfully resist this proposal by challenging the same under the Electricity Act. But these are very limited amendments to the main project.

Unlike in the other cases, the Samanalawewa case demonstrates the need for the creation of statutory fora for transparent and participatory decision making in energy projects. In the final analysis, the CEB, the nation, the public, the affected people and the environment have all been losers on this project. This is an economically quantifiable loss as the more significant impacts are now identifiable.

⁷¹SLO Section 77 states that bodies which have power to use the water or construct works under other statute law need not apply for the permit.

⁷²Land Acquisition Act No. 9 of 1950 (Cap. 295), 1980 ed.

Had this quantification been done earlier in a cost-benefit analysis as part of an EIA process, Sainanalawewa would probably never have been built. Perhaps the project might have looked very different--even multi-purpose and at a different site-- perhaps as a community-owned small head hydro-scheme.

It is obvious that environmental and sociological data were not collected nor thought of as relevant. It is only after the public outcry and the manifestation of adverse impacts that environmental and sociological studies were undertaken. Even then, the suggested mitigatory measures are not in place. The case study draws attention to the great need for both legal and institutional responses to pre-project evaluation of environmental, social and cultural impacts. Even as the reservoir is impounded and the water has begun to rise for the second time, a single man sits out alone in his hut on the waterfront, refusing to leave his birth land, and vowing to drown himself in the rising waters. This scene is symbolic of another interrelated issue which will surface later in this discussion--the right to life, to livelihood and the environment as a fundamental human right.

SECTION B: EXISTING LEGAL PROCESSES

In this section existing institutions and procedures relating to decision making involving development projects are examined. The institutions and procedures examined, in particular, are the following:

- a. National Planning Department (NPD) planning process;
- b. a summary of land allocation/designation/siting processes in particular of the Ministry of Lands, Irrigation and Mahaweli Development and the Land Commissioner's Department;
- c. a summary of local government and Urban Development Authority approval processes and in particular those dealing with building approval, zoning, industrial and commercial siting and trade and industrial licensing.

6. NPD PLANNING PROCESS

The National Planning Department (NPD) functions under the Ministry of Planning and is the key institution responsible for the evolution of government development projects. The department does not appear to be governed by any statute and therefore enjoys a certain degree of administrative freedom the other departments and agencies do not have. Also, the NPD has wide powers within the government's decision making structure to delay, seek clarification, call for accounting and guide the project cycle.

Originally, the idea was to establish the NPD under the National Planning Council (created by the National Planning Council Act 1956). However, this idea has not taken root and the NPD has evolved to its present status outside any statutory control or guidance. Currently, the NPD serves several administrative functions, the most important of which are to act as the secretariat to the Committee of Secretaries (CS) and as one of the key agencies responsible for the government's Public Investment Program (PIP), a rolling five year plan for government capital spending. The National Planning Council is now defunct and has not operated for some time.

The CS is an administrative arrangement whereby the Secretaries of all the Ministries come together every fortnight or as desired, to make decisions about what government projects are ready to go before the Cabinet for approval and to coordinate government proposals and functions. The CS has functioned since 1980/81. The Cabinet of Ministers has absorbed the functions of the National Planning Council and become the policy making and project approving body in respect of government development projects. The change has taken place after 1978 with the introduction of the Executive Presidential system.

The evolution of the current decision making path is essentially linked to the Executive Presidential System which contemplates the vesting of executive power in an elected President outside the Parliament. Although this system has similarities with the U.S. system, the same degree of separation of powers contemplated in the U.S. constitution does not exist.

The President functions with a Cabinet drawn from the Parliament unlike in the U.S. where the Cabinet is drawn from people handpicked by the President as Secretaries (outside the Congress). This hybrid situation necessitates that the Cabinet as presently constituted (by Ministers and headed by the President) becomes the body that decides national policy and approves government development projects. As a result, a high degree of politicisation of these decisions is inevitable. The Cabinet is ultra-sensitive to the electorate and less prone to bureaucratic influence.

The CS was an attempt to depoliticise the decision path by interposing the highest bureaucratic rung between the NPD, Ministries, agencies and other departments on the one hand, and the Cabinet on the other. The NPD thus becomes the "technical arm" to the CS which is the bottleneck through which most projects must pass before reaching the Cabinet. In reality, however, this is not a hard and fast rule. Political expediency dictates which projects and which criteria will receive priority at any given stage and it would appear that "flexibility" is a term used to describe this process. Generally, economic and financial feasibility are two factors that the NPD scrutinizes. Although environmental assessment and feasibility is touched upon, it is not an integral part of the NPD decision making or project evaluation cycle.

Most government development projects commence with a Project Identification Report (PIR) which is a simple document describing the intended project. This brief document is submitted through the relevant Ministry to the CS and is referred to the NPD for a report on conformity with government policy and strategy. Once cleared on these points by the NPD, the project goes back to the CS and is cleared in principle. Project preparation proper begins thereafter. It is at this stage that institutional, physical, programme and other relevant studies are carried out by the line agency. The Environmental Impact Assessment should have its proper place at this stage while an IEE should take place at the PIR stage.

Once these studies are complete, the NPD undertakes a full appraisal of the economic and financial viability. The NPD is reasonably well equipped to carry out this function. In recent times, the NPD has introduced shadow pricing techniques and has improved its analytical skills. Once the NPD clears the project, it goes back to the CS and thence to the Cabinet. Once the Cabinet approves the project, it is sent to the Ministry of Finance to negotiate funding with donors and to execute the relevant agreements for same.

Private sector projects do not require Cabinet approval except where state land or other subsidies are sought. Private sector projects were approved by the Local Investment Advisory Committee (LIAC) set up under the Ministry of Industries, but the LIAC has since been closed down. Now local investment projects do not need any approvals apart from the environmental approvals or clearances or licences required under the NEA.

Private sector projects involving foreign investment are now handled by the GCEC (the combined FIAC/GCEC) with its widened mandate. As a result, many private sector projects are planned and finalised before any environmental assessments are carried out. The EIA and the EPL process then becomes one which is tagged on at the end. Decide, announce and justify is the unfailing characteristic of most private sector projects. There is a great need to establish training and consultancies to service this lacuna in the private sector.

The NPD is manifestly a key institution within the government project approval cycle and must be strengthened in capacity to include environmental assessment as part of its regular project appraisal. At present, the NPD lacks the necessary personnel and training for this purpose. Additionally, there is a need for the integration of the EIA process into the NPD's project cycle. At present IEE/EIA is tagged on at the end of the project cycle. Environmental factors do not play a significant role in the government decision making cycle. National environmental resource accounting together with the integration of the EIA process into the NPD's project cycle and strengthening the NPD are crucial for the successful and meaningful implementation of the NEA.

The current project cycle has been codified in a two-volume report by M.D. Veitch⁷³. The second volume of this codification contains detailed questions that the agencies must answer in the course of project preparation. These include environmental mitigation and protective measures. In reality, however, these questions are not given the same serious attention that the other questions receive. Perhaps, donor pressure has pushed the agencies to give more weightage to these questions. However, no project has ever been abandoned or substantially thought of again on environmental grounds. As observed by personnel at the NPD, government projects have been abandoned or altered on environmental grounds only because of public pressure and lobbying.

This study does not propose to repeat the details of the procedure set out in the Veitch study apart from what has already been described. There is also confusion within the governmental decision making cycle as to the exact role of the Project Approving Agencies (PAAs) under the new EIA regulations now being developed and the role of the CEA vis-a-vis the government project cycle. These grey areas require to be clarified and guidelines issued on how the institutions relate to each other. Macro level guidance for the NPD and the government comes from the PIP which has its own cycle. Most long term projects are listed in the PIP which is a rolling five year plan. Integrating the EIA process into the PIP would be a difficult task and doing so indirectly through the project cycle would be more prudent. There also appears to be some uncertainty as to the exact role of the NPD vis-a-vis the policy and management role of the Ministry of Policy Planning and Implementation (MPPI). The NPD is a well established government department which has been involved in the budgeting and design of government projects for several decades.

There is a new thrust to introduce management criteria and project development and evaluation techniques within the MPPI. Finally, only time will enable these grey lines to be clearly demarcated.

7. STATE LAND DISPOSITION AND UTILIZATION PROCESSES

What is attempted under this heading is only a summary of the processes relating to the allocation/designation/siting of state lands under the Ministry of Lands, Irrigation and Mahaweli Development and the Land Commissioner's Department.

⁷³Project Planning, Appraisal and Implementation in Sri Lanka, M.D. Veitch. Project Planning Center for Developing Countries, University of Bradford, February 1986.

An exhaustive study of these procedures and institutions is well beyond the ambit of this study. The most relevant statutes are:

1. State Lands Ordinance 1947 (Cap. 286)
2. Land Development Ordinance 1935 (Cap. 300)
3. Land Settlement Ordinance 1931 (Cap. 299)
4. Land Reform Law 1972 and the Land Grants (Special Provisions) Act 1979 (Cap. 286).

STATE LANDS ORDINANCE (SLO)

The grant and disposition of state lands is mostly governed by this statute. Part I deals with grants, leases and dispositions of state land. Part II deals with authentication, execution and registrations of instruments of disposition. Parts III and IV deal with the vesting of state lands in military and local authorities including Pradeshiya Sabhas. Part X covers the recovery of payments due to the state and the cancellation of instruments of disposition. The administration of the Ordinance is vested in the Land Commissioner⁷⁴ and the Minister in charge of the subject of lands has the power to supplement the enactment by regulations⁷⁵.

The power to make grants and dispositions of state lands is vested in the President⁷⁶. The powers of the President have been delegated to other public officers in terms of Section 105 of the Ordinance. The power to execute instruments of disposition has also been delegated to other public officers⁷⁷. The President is empowered to make grants of state land while the power to lease, sell, exchange and issue occupation and mining permits has been delegated.

All grants and long term leases of over 30 years must be preceded by a survey of the land⁷⁸. All instruments of disposition of state land for more than 50 years must be executed by the President, while dispositions for shorter periods may be executed by officials listed in Table 1.

The regulations under the Ordinance specify standard conditions that should be included in special grants and leases. Apart from soil conservation and prohibitions against the felling of trees no specific environmental safeguards are provided for. Such conditions, however, can be introduced on a case by case basis.

⁷⁴Part XI of the Ordinance.

⁷⁵A compendium of regulations under the various statutes listed has been published in Sinhala called "Land Orders". An English version is in press.

⁷⁶Op.cit, Section 2.

⁷⁷See Table 1.

⁷⁸Op.cit, Section 9 and Regulation 5, Crown Land Regulations 1948.

In practice however, the SLO is hardly ever used for issuing permits for the occupation of state land. Occupation permits are almost always dealt with under the Land Development Ordinance (LDO) except in the rare case of permits to occupy the foreshore and streams and other reservations. The SLO is used mostly for the making of grants, sales and leases of state lands. Conceptually, the SLO is flawed in as much as there is no requirement that such dispositions must be in the public interest nor is there a requirement that they be in accordance with some pre-ordained land use plan or allocation/distribution/use scheme. In fact, no such plan or scheme exists for the entire island though plans and schemes do exist for restricted areas.

The regulations do, however, prohibit the making of dispositions of state land above 5000 feet except for building, afforestation, recreation, horticulture and public purposes⁷⁹. These regulations also lay down a transparent procedure for making preferential leases of state land. The Land Commissioner is required to publish a gazette notice stating the purpose for which the land is required, the reasons for making the grant or lease on preferential terms and calling for public objections, if any⁸⁰. In practice, however, these provisions are not regularly observed. In the 50-year lease of land granted to Aitken Spence Hotel Managements Ltd. to construct a 350-roomed hotel at the Kandalama tank was not notified by gazette notwithstanding public protests. Subsequently EFL filed a writ application in the Court of Appeal (C.A. 573/92) which resulted in the Land Commissioner publishing the requisite gazette notification. In response to the gazette notification thousands of objections were received and public hearings held. After the public hearings, the Land Commissioner decided to grant the lease subject to conditions.

LAND DEVELOPMENT ORDINANCE (LDO)

The LDO was enacted for the purpose of "systematic development and alienation of state land"⁸¹. The statute was enacted in 1935 (12 years before the SLO and three years after the Land Settlement Ordinance) and is the main law under which the Land Commissioner's Department is instituted. A category of officers called Settlement Officers (SOs) and Assistant Settlement Officers (ASOs) had been appointed under the Land Settlement Ordinance in 1931. The LDO created a cadre of Assistant Land Commissioners and Land Officers. The latter would function at the provincial and district level. The Settlement Officers and Assistant Settlement Officers appointed under the Land Settlement Ordinance were also designated as Land Officers for the purposes of the LDO.

The LDO contemplates the administration of state land through the network of Government Agents (GAs) and Assistant Government Agents (AGAs). In cases where special reasons demanded, Land Officers now called District Land Officers (DLOs) can also be appointed.

⁷⁹Op.cit, Regulation 22.

⁸⁰Op.cit, Regulation 21.

⁸¹Preamble to the LDO.

However, for all other purposes, the SOs and ASOs would fill the network. For the purpose of the LDO, Land Officers (LOs) and GAs rank equal and are vested with the same powers and duties. The Land Commissioner's Department therefore became the center through which the LDO is administered, the actual administration being done by GAs, AGAs, LOs, LDOs, SOs and ASOs, all of whom have similar powers and functions.

State land can be disposed of in one of two ways under the LDO:

1. on a permit, or
2. on a grant.

Apart from standard conditions included in permits or grants, the Land Commissioner can order the insertion of other conditions in special cases or classes of cases. Such conditions then run with the land and bind all subsequent owners or rights of holders. Land disposed of under the LDO is protected against execution proceedings except that such proceedings originate upon a mortgage authorised under the LDO.

An alienee of state land on a grant (but not a permit) can dispose of the holding in terms of the grant and in keeping with the LDO. The holding can be leased only in terms of regulations under the LDO and can be mortgaged only to specified institutions such as the State Mortgage and Investment Bank or the People's Bank⁸².

Land held on a permit is subject to more tight regulations. Such land cannot be sold or disposed of in any manner whatsoever except by way of a mortgage to a registered credit society with the prior approval of the GA⁸³. Usually, a permit is issued on the payment of an annual rent.

Both grant and permit lands are subject to special provisions regarding succession following the death of the permit holder or the owner⁸⁴. The LDO provides for the procedure for nominating a successor as well as for succession when no nomination has been made. Provisions exist in the LDO for the cancellation of a grant by the President only where there is a failure of succession. In the case of a permit, it may be cancelled by the GA, after a full inquiry, for failure to comply with the conditions. The LDO provides for a right of appeal to the Land Commissioner against orders of the GA. It also has special procedures prescribed for the ejection of persons whose grants or permits are cancelled⁸⁵.

As would be evident from the scheme of the LDO, there was an overall strategy that sought to "systematise" the alienation or development of state land. The LDO was conceived of as both an enabling statute as well as a policy and land use formulation statute.

⁸²Op.cit, Sections 42 & 43.

⁸³Op.cit, Section 46.

⁸⁴Op.cit, Chapter VII.

⁸⁵Op.cit, Chapter IX.

The original version of the statute embraced two chapters each dealing with the mapping out and the alienation of state land⁸⁶. Chapter II mandated the GA to map out state land within his jurisdiction for multiple purposes set out in the Ordinance. These purposes included village expansion, forests and pastures, chena cultivation, colonization, protection of water sources and courses, prevention of soil erosion, establishment of forest reserves, public works and government buildings, preservation of archaeological sites, development of towns and alienation for Sri Lankans⁸⁷.

Once the mapping out was completed, the GA was mandated to prepare a land use scheme supported by a diagram showing the land zoning and uses. These two exercises were subject to the general and special supervision of the Land Commissioner. The Minister could then appoint a five-member Local Land Advisory Committee (LLAC) to examine the scheme and make recommendations to the GA. No government employee could serve on this committee. In spirit, the committee was one which represented local interests. The GA convened and presided over the meetings of the committee.

The GA was also obliged to exhibit a notice at the Kachcheri to the effect that the scheme was available for public inspection and members of the public have a 30-day period to inspect and make representations to the GA⁸⁸ on the scheme and the diagram. The GA could then modify the scheme and the diagram in the light of recommendations made by the Local Land Advisory Committee and representations made by the public. The modified scheme, diagram, representations and recommendations were then required to be sent to the Land Commissioner and the latter could confirm the scheme and the diagram or ask the GA to take further action in respect of the same. If and when the scheme and the diagram were confirmed by the Land Commissioner, such confirmation must be published in the prescribed manner⁸⁹. Confirmed schemes became public documents available for inspection by the public free of charge. Once confirmed the scheme was fixed. The Minister of Lands had limited power to allow changes where land designated for village and chena use was required for alienation and where alienation for middle class citizens was required for other classes as well.

Alienation of state land on a grant could only be done at a "Land Kachcheri"⁹⁰. Land Kachcheries were held after due notification and persons could apply for grants of state land at the Kachcheri.

⁸⁶Chapters II and III of the 1935 Statute.

⁸⁷Op.cit, Section 8.

⁸⁸Op.cit, Section 11.

⁸⁹Op.cit, Section 15 read with Regulation 2 of the Land Development Regulation 1935 states that where the scheme involved land use for colonization, archaeological sites, and alienation publicity must be by gazette notification while in other cases local publicity would be sufficient.

⁹⁰Op.cit, Section 20.

The GA could select or reject an applicant at the Land Kachcheri and persons resident in the neighbourhood of the land had preference. Appeals to the Land Commissioner against the decisions of the GA were possible.

In 1973, the Sale of State Lands (Special Provisions) Law⁹¹ (SSLL) swept away the two chapters of the LDO dealing with mapping out and alienation⁹². The effect of this repeal was to free the LDO permit and grant making process from a pre-determined and planned land use scheme or map. The SSLL made provision for the sale of state land for **agricultural development** when the GA made a report to the Land Commissioner on the availability of state land for such sale⁹³. The sale had to be advertised and the GA made the selection on determined criteria. The GA's decision was subject to appeal to the Land Commissioner.

Once selected, a prospective purchaser could make a decision as to whether he would make full payment and receive a grant or make payment in instalments in which case he received a conditional permit until the payment was completed. Grants and permits under the SSLL were subject to much the same conditions and rights of succession as in the case of permits and grants under the LDO.

The SSLL remained operative till 1981 when it was repealed⁹⁴. The old LDO provisions relating to mapping out and alienation were more or less reintroduced. The mapping can now include reservations for climatic and environmental purposes also⁹⁵. The LLAC was replaced by the District Agriculture Committee (DAC) established under the Irrigation Ordinance. The provision for public inspection and comment on draft schemes was dropped leaving the DAC with the sole right of comment on draft schemes. The Land Commissioner was given wide powers to amend and modify approved schemes.

The policy relating to the alienation of state land was also changed. Alienation had to commence with a permit for occupation⁹⁶ and a grant was made only after 10 years during which the permit holder was required to pay the purchase price in determined instalments. The grant was also conditional on the permit holder developing the land to the GA's satisfaction and being in occupation thereof. The selection of allottees had to be at a Land Kachcheri but the Land Commissioner was given a wide discretion to allot even otherwise upto eight acres and the Minister was granted power to exempt persons from this requirement altogether.

⁹¹No. 43 of 1973.

⁹²Op.cit, Section 53.

⁹³SSLL Section 2.

⁹⁴By Act No. 27 of 1981.

⁹⁵Op.cit, Section 3.

⁹⁶Cf. the earlier situation where either a grant could be made following a Land Kachcheri and permits could be issued otherwise. Both had to conform to an approved scheme.

The nett impact of the 1981 reforms was to re-introduce the mapping and land use schemes on the one hand and grant equal flexibility for the Land Commissioner and the Minister⁹⁷ to over-ride the schemes and the selection process for alienation. It is clear that since 1973 when the SSLL did away with the need for land mapping and alienation, it also did away with transparency and participation in the planning and alienation process. In 1981 though mapping and Land Kachcheris were brought back, these provisions have been negated by vesting too wide a discretion in the bureaucracy as stated above and the former transparency and participatory planning and alienation process has not been restored.

Practically, these statutory amendments have led to abuses which have been driven by parochial politics, corruption and non-use of data or use of irrelevant and incorrect data. Many a time, political exigencies have determined how, where and to whom state land was to be alienated. The almost 20-year gap in mapping and land use planning has resulted in a poor data base and a bureaucratic mentality that tends to accommodate political exigencies easily. Even as it stands, the LDO does create the necessary legal framework and forum (DAC) within which relevant environmental and social information can be effectively used in making land use decisions. Although this may be inadequate, yet it is one which can serve as a good starting point.

While on the one hand, the need for a comprehensive land mapping, land use planning and land allocation and alienation statute must be recognized, on the other, the need to ensure the working of the existing institutions to their full advantage in spirit and law cannot be over-stressed. The first should not become the excuse for not performing the latter.

If the question were to be posed about the role of the Land Commissioner in the administration of the SLO and the LDO, it can safely be concluded that he lacks both capacity and institutional support for effectively doing so. Land mapping, land use planning and land information and data are crucial if the LDO and the SLO are to be worked to the general benefit of the people and the environment. However, the Land Commissioner is hampered by the lack of competent personnel and funds in the performance of his multifarious functions and tasks. Although mandated in the 1981 LDO reforms, an attempt to establish a Land Use and Mapping Unit within the Land Commissioner's Department was hampered by the establishment of the Land Use and Policy Planning Division (LUPPD) within the Ministry of Lands. A long standing territoriality battle ensued with competition for funding and personnel. The LUPPD won through because of Ministry support. However, in the long term, the establishment of the LUPPD within the Ministry would be worthwhile if the 13th Amendment to the Constitution is retained and the Provincial Council administration is retained. If not, the LUPPD should be absorbed into the Land Commissioner's Department where it could play an intrinsic role in the functions of state land management and disposition.

⁹⁷representing the permanent and political bureaucracy.

LAND SETTLEMENT ORDINANCE (LSO)

The term "settlement" in reference to the LSO does not signify the act of occupying but rather the act of quieting state title where it is uncertain or "unsettled" or disputed. The forerunner to the LSO was the dubious and draconian Waste Lands Ordinances⁹⁸. All lands not specifically granted to individuals belonged to the Sinhalese Kings as "bhupathi" or lord of the earth. This included forests and uncultivated lands⁹⁹.

The British succeeded to these lands immediately in the Kandyan provinces and as successors to the Dutch in the maritime provinces too. The Dutch established land registers called "Thombos" in the maritime settlements. By proclamations of 1800-1803, the British made provision for the registration of titles and recognition of occupiers in the maritime provinces. Thus, as far as the maritime provinces were concerned, there was a strong presumption that those who did not have a "thombo" or a new title register was a trespasser on crown land.

The situation was substantially different in the Kandyan provinces. The unsettled state of early colonial rule in these provinces led to the abandonment of many private estates and the confiscation of others. Furthermore, there were large areas of land covered by common property rights. All of these lands reverted to the crown and it became an impossible task for the colonial government to establish its titles.

The first major step towards settling the titles came in 1840 with the passing of the Waste Lands Ordinance¹⁰⁰. Several devices were adopted, but these are now of academic and historical interest for the purposes of the present study¹⁰¹. The nett impact of the Ordinance was to vest in the crown large tracts of land held in common, or upon ancient titles and rights which were obscure. Some of the early cases centered round the right to chena lands. As chenas were, for the most part, cultivated at intervals of several years and as they were appurtenant to paddy lands and home gardens, a question arose as to whether they were "unoccupied and uncultivated". In the light of the crown having thrown the burden of establishing title and rights to occupation upon its subjects, many such lands came to be vested in the crown by default.

⁹⁸Of 1840 and No. 1 of 1897.

⁹⁹A treatise of the Laws and Customs of the Sinhalese, F.A. Hayley. Colombo, 1923, p. 267. See also Kiri Banda Vs. Booth, 5 NLR 284.

¹⁰⁰Ordinance No. 12 of 1840.

¹⁰¹Some of the devices included a summary inquiry by the District Court into claims and occupation, a certificate of no claim by the Government Agent, both supported by a presumption in favour of the Crown that "all forest, waste, unoccupied or uncultivated lands" belonged to the Crown.

In 1897 a further amended Waste Lands Ordinance accorded more privileges to the crown in respect of disputed lands¹⁰². Under the new Ordinance, a Government Agent could by a notice compel any claimant to "forest, chena, waste or unoccupied land" to establish title before a District Court or an appointed Commissioner and in default to declare such land as crown property. A further presumption was created in favour of the crown whereby chena lands which were cultivated periodically were to be treated as crown land until and unless the contrary was established. The problem of proof for the native citizen was compounded by the abolition of service tenures and land taxes in 1890. A convenient form of proof of occupation being the production of tax receipts was therefore removed altogether.

It is important for the purposes of this study to recognize the net impacts of these policy and legal changes, although they were in operation at the turn of the century. The major impacts were:

1. To vest in the British crown large extents of land which were in one form or another the subject of occupation, use, or claim by native citizens;
2. A considerable amount of this land was chena lands cultivated from time to time and "common"¹⁰³ lands such as common pastures, forests and village lands;
3. The vested lands became available to the British colonial government for disposition which included sale, grant or exchange to British entrepreneurs for plantation agriculture and residence;
4. The vested lands were taken away from traditional managers and controlled by "alien"¹⁰⁴ managers unacquainted with the nature of such lands;
5. The colonial government ended up having more land than it could properly manage, resulting in encroachment, neglect and the general belief that it was "no one's" land available for plunder;¹⁰⁵ and

¹⁰²Ordinance No 1 of 1897.

¹⁰³The term "common" is used in this study to mean rights to use land held in common by a determined number of persons who constituted a class. It is not used in the popular sense of lands available to all free and on the basis of open access. The preferable term would be "communal" but the author has decided to avoid this term as it can also connote communalistic groups in an ethnic sense.

¹⁰⁴This term refers to managers who were brought in from outside to manage the lands. They include both native and non-native managers.

¹⁰⁵The restricted access communal or individual ownership regimes that were in place gave way to open access regimes with an enforceable sanction against violation but one that was hardly enforced.

6. Traditional native owners, managers and users were not compensated for the resultant expropriation of land and were subjected to an evidentiary handicap in title proceedings.

Many of the principles and provisions of the Waste Lands Ordinance were re-enacted in the Forest Ordinance.¹⁰⁶ The LSO became the successor to the Waste Lands Ordinance and its legacy.

It repealed and replaced the Waste Lands Ordinance 1897. This Ordinance is to be administered by Settlement Officers and Government Agents were to be treated as SOs under the Ordinance.¹⁰⁷ The SO could by a settlement notice require any person having claims to any "forest, waste, unoccupied or uncultivated land or chena or other land which can only be cultivated after intervals of several years"¹⁰⁸ or land which was "cultivated or otherwise improved.....within the period of twenty five years" before the notice, or land of the type described earlier, to lodge them within three months of the notice. The LSO then provides for the investigation of claims and making determinations in respect of such land.

A Settlement Officer could do one or more of the following if a claimant produced evidence of a claim:

1. declare that the land is not state land;
2. declare that an unknown person was entitled to a particular interest or share in the land; and
3. enter into an agreement with the claimant whereby the land is declared to be that of the claimant or whereby the claim is withdrawn and the land settled for the state or whereby the land is set aside as "communal chena"¹⁰⁹ land reserved for the use of inhabitants of a named village.

The SO can also offer a compromise which has to be communicated through the District Court. Communal chena lands once declared are protected from being used for other purposes without the consent of the inhabitants of the village¹¹⁰. Persons dissatisfied with the offer can insist on the matter being referred to a Board consisting of an officer from the SLAS¹¹¹ and an Attorney-at-Law appointed by the Minister.

¹⁰⁶Ordinance No. 16 of 1907.

¹⁰⁷LSO, Section 3(2).

¹⁰⁸LSO, Section 4(1)(a).

¹⁰⁹Here is statutory evidence of the existence of communal titles and rights which the crown had to recognise.

¹¹⁰LSO Section 10.

¹¹¹Sri Lanka Administrative Service.

The LSO also allows for references of claims to the District Court¹¹². A settlement once made is published and must be registered in the Register of Lands kept under the Registration of Documents Ordinance¹¹³.

The LSO does create a more transparent procedure for the establishment of crown title to disputed land. It also removed the burdensome presumptions in favour of the crown. Title when claimed had to be established by the claimant failing which the land was settled for the crown. The LSO therefore placed claimants to lands which were forest, waste, unoccupied, uncultivated or chena lands within the last 25 years in peril of settlement in favour of the crown unless they established title or rights or interests with proof. Thus, though the presumptions were ostensibly removed, they were latent and very much operative through procedure.

LAND REFORM LAW (LRL)

Major land reforms took place in 1972 and 1975¹¹⁴. In 1972, a ceiling of 50 acres was imposed upon "agricultural land" and a 25-acre ceiling in the case of paddy land¹¹⁵. Agricultural land was defined as land used or capable of being used for agriculture¹¹⁶. Land in excess of the ceiling was vested in the Land Reform Commission (LRC) established under the law¹¹⁷ and continued to be held by the former owner on a "statutory lease"¹¹⁸ from the LRC.

The LRL permitted an inter-family transfer of excess land with the permission of the LRC¹¹⁹. The annual rent for the statutory lease was fixed at 1/15th of the compensation payable to the former owner and in the case of paddy land 1/10th. The former owner was required to make a declaration under the LRL stating the extents etc. of the land and expressing preferences for the extent which was to be retained in ownership.

¹¹²LSO, Section 12.

¹¹³LSO, Section 9.

¹¹⁴By Law No. 1 of 1972 and Law No. 39 of 1975.

¹¹⁵LRL, Section 3(1).

¹¹⁶LRL, Section 66.

¹¹⁷Incorporated under Section 43 of the LRL.

¹¹⁸This legal fiction made the former owner an unwilling lessee of his own land holding. The economic disincentive to the proper management of land created by the resultant situation and the uncertainty manifested itself in the neglect of otherwise productive lands.

¹¹⁹LRL, Section 14.

The LRC would then make a determination of which land and where the owner would be allowed to have his entitlement and the remaining land could be taken over by the LRC and disposed of¹²⁰.

Land vested in the LRC could be used for one of the several purposes described in Section 22 of the LRL. These included alienation for agricultural development or animal husbandry to those who did not own such land or to co-operatives or collective farms, alienation for housing, use for a farm or plantation managed by the LRC, use for public purposes, alienation to those who were minors at the time the ceiling was imposed, alienation to corporations established under the State Agricultural Corporations Act or to the State Plantations Corporation¹²¹.

Compensation for vested lands was payable according to a formula in the LRL and by government bond with 25 year maturity periods. The quantum of compensation rested on the higher of two factors:

1. 15 times the annual profit of the land over the past five years as decided by the Commissioner of Inland Revenue (CIR); or
2. the value of the land as at 31 March 1971 as assessed by the CIR¹²².

As the tendency was to have undervalued property or profits for income tax purposes, the compensation was always lower than the true market value. Also, lands which were neglected received much less compensation as did forested lands and lands with homesteads. The compensation was not designed to ascertain market value nor to internalise other costs such as environmental costs.

The 1975 reforms vested in the LRC all estates belonging to companies. The owner companies became managers under a "statutory trust" for the LRC¹²³. The LRC could terminate the trust, take possession and hand over the management and title to the SPC or the JEDB or to others for any of the purposes set out above. In the final analysis, the LRL vested large extents of land in the state including those that had been alienated under the SLO and the LDO. No mapping or land use planning was mandated prior to alienation of the newly vested lands.

¹²⁰LRL, Part II.

¹²¹Most lands vested in 1975 and viable estates vested in 1972 were alienated to the State Plantations Corporation (SPC) and the Janatha Estates Development Board (JEDB). Most tea, rubber and coconut plantations vested in the LRC are now controlled by the SPC and the JEDB and have become the subject of new management agreements with private companies under the government's privatization program.

¹²²LRL, Section 28.

¹²³LRL, Section 42A.

The resultant chaos in titles and management of productive lands has had a lasting impact on the lands. Some estate lands were abandoned and have never been rehabilitated. Other lands were encroached upon by landless villagers, and peasants and estate employees. The management of estates became a routine with no incentives for good management. Just as some semblance of systematisation was coming into the management and the alienation of state lands, the LRL reversed the clock.

The abuses under the LRL were so great that in 1977 a Special Commission was appointed by the President to inquire into and remedy complaints. A large number of abuses were uncovered and remedied. Notwithstanding, the Commission's intervention, much litigation is still pending in the courts. The LRC itself was an ill-equipped and under-staffed institution incapable of handling the LRL administration efficiently and effectively. The LRC is now being wound up.

LAND GRANTS (SPECIAL PROVISIONS) ACT

The LRL enabled the vesting of private lands in the LRC which was a statutory corporation. The LRC could alienate the vested lands only for limited purposes, to limited persons and by limited instruments. Generally, the LRC could only sell, exchange, lease or rent-purchase lands vested in it. The purposes were either housing, agriculture or public. The political climate after 1977 appears to have created a need for some of the vested land to be turned over to the state for alienation by grant for distribution. It would appear that the purpose for which the LRC had been established, namely to take excess land from the haves and give it to the landless have-nots, had not taken place.

The Land Grants (Special Provisions) Act¹²⁴ (LGA) was enacted to remedy this need. The Act provides that the Minister of Lands, in consultation with the Minister in charge of Land Reform could vest any LRC lands in the state for distribution¹²⁵. The land was required to be surveyed by the Surveyor General. The state was required to pay the LRC compensation for such land in an amount equal to that payable by the LRC to the original owner.

The President can, by an instrument of disposition, grant free of charge to any person such land vested in the state. The landlessness, the family income and the capacity to develop the land are factors that have to be considered in selecting allottees¹²⁶. The Land Commissioner is designated as the officer who should administer the Act. Alienated lands can be disposed of by the alienee only with the prior approval of the Land Commissioner and succession to such land is as per the statute¹²⁷.

¹²⁴Act No. 43 of 1979.

¹²⁵LGA, Section 2(1).

¹²⁶LGA, Section 3.

¹²⁷LGA, Sections 5(1)(a), 12, 9 and 10.

DEVOLUTION AND THE 13TH AMENDMENT

The 13th Amendment to the Constitution introduced a devolution package which is similar to the system operating in India. Three legislative lists were established, one for the Provincial Councils, one for Parliament and one which is concurrent. Provincial Councils (PCs) have been established in all the provinces with the exception of the North and the East where a single Council functions on a temporary basis.

PCs have wide legislative and executive powers covering public lands, police powers, environment, inter-provincial transport, irrigation, agriculture etc. They have an exclusive right to legislate through "statutes" on matters specified in their list. Likewise Parliament has exclusive powers to legislate for those matters in the "Reserved list". PCs and Parliament can legislate on matters on the concurrent list provided it is done in "consultation" with each other. In the event of a conflict between a statute and an Act of Parliament covered by the concurrent list, the PC's statute takes precedence within the province.

Interviews with the Ministry of Provincial Councils showed that there was much confusion and uncertainty about the implementation of the 13th Amendment. Part of the reason for this uncertainty is due to the ongoing all party and other negotiations on devolution. There is also a great deal of reluctance on the part of the bureaucracy of the central government to let go of powers which it has exercised since colonial times. Finally, there is no "federal" culture to support real devolution.

As a result, what is devolved depends very much on what the government decides should be devolved. The ambit of the devolution (or rather delegation) could change from time to time. A circular issued by the Ministry of Provincial Councils in May 1992¹²⁸ seeks to set out the administrative functions that have been devolved. The circular deals comprehensively with some Ministries but appears to be at a loss in respect of others. PCs are expected to "assist in implementing the National Environmental Action Plan at divisional level and create public awareness on environmental issues".

Whereas the 13th Amendment places environmental protection on the concurrent list as well as on the provincial list, the listing on the provincial list confines the PCs to the sphere of environmental protection "to the extent permitted by law" (meaning an Act of Parliament). The NEA does not even mention PCs as it was enacted before the 13th Amendment.

However, the North Western Provincial Council (NWPC) has asserted its right to enact legislation on environmental protection. By the Environmental Statute No. 12 of 1990 it has adapted the NEA to the provincial situation and is about to enact regulations on EPLs and EIAs. There is resistance to this move by the Ministry of Environment and Parliamentary Affairs (MEPA) and the CEA. The main reason for this resistance is due to the North Western PC's refusal to conform to MEPA's and CEA's plan of devolution and delegation. There is an immediate need for the MEPA and the CEA to have a dialogue with PCs to determine a sound basis for devolution. Thereafter, a model statute can be drafted for adoption by PCs enabling them to carry out the agreed devolution package.

¹²⁸Public Administration Circular 21/92 on Taking the Administration to the People.

The package could involve funding for air and water pollution programs and enforcement as well as institutional support for developing awareness and investment advisory programs for the provinces. Some of the EPL functions for low and medium polluting industries might also be devolved but this would have to await a detailed appraisal of capabilities. Carving out a meaningful environmental role for PCs is an immediate need.

At present none of the PCs apart from the NWPC has any capacity to undertake environmental protection work. The NWPC has one officer seconded by the Wildlife Department who heads the Provincial Environmental Authority (PEA). This officer does not even have a proper office and is mainly responsible for maintaining the wildlife sanctuaries within the province.

The same issues present themselves when it comes to public lands within the provinces. An entire schedule has been dedicated to spelling out the rather complex devolution package in respect of public lands, land allocation and alienation. The 13th Amendment postulates the establishment of a National Land Commission (NLC) which would be charged with land allocation to PCs and the establishment of scientific and similar criteria for allocation decisions. The NLC has not yet been established and its draft law is still under negotiation. Once more the uncertainty about the future of the 13th Amendment has created a poor climate for the devolution of land allocation and disposition powers. At present this sphere is very much under the control of the government.

GENERAL OBSERVATIONS ON STATE LAND ISSUES

The upshot of the foregoing discussion is:

1. The state has been acquiring, by different means, large extents of land which it is unable to manage and in this process has replaced traditional managers with alien managers and/or institutions incapable of good management;
2. The transparency of state land mapping and alienation was greater during colonial times and was removed during the post-independence era and has not quite been revived;
3. The Land Reform Law vested further amounts of land in the LRC with devastating effects on management;
4. State land management has been characterised by haphazard (often politically driven) land use decisions and alienations driven by expediency rather than informed decision making; and
5. Land acquisitions and alienations by the state have never represented the true costs of land resulting in the treatment of state land more or less as a free commodity.

8. LOCAL GOVERNMENT AND UDA APPROVAL PROCESSES

Several institutions are involved in the function of local government. To detail all the approval processes applicable to all the local government institutions is beyond the scope of this study. However, a comparison of the procedures applicable demonstrates that they are all based on the model of the Municipal Councils (MCs) (rather less than more)¹²⁹. The rather complex network of local governance is depicted in Fig. 1, but in practice the demarcation of functions and authority is very unclear. Confusion, territorial conflict and the lack of institutional learning and integrity plague the entire system.

For these reasons, it is proposed to discuss briefly the approval processes applicable to Municipal Councils, the Urban Development Authority (UDA), and the Department of Town and Country Planning. From this discussion it is possible to envisage the approval processes applicable to other local government institutions.

MUNICIPAL COUNCIL APPROVAL PROCESSES

There are twelve MCs in Sri Lanka and these cover some 525.9 sq.km of urban area. The MCs are established and derive their powers and functions from the Municipal Councils Ordinance (MCO) (1947) as amended from time to time¹³⁰. MCs are locally elected by proportional representation¹³¹. The Chief Executive Officer (CEO) of an MC is its Mayor. Major policy and other decisions of the MCs are taken by the Council by majority vote and the Council can establish special committees to assist it in its business. All MCs have three standing committees one of which deals with finance¹³². Minutes of MC meetings are available to the public¹³³.

¹²⁹Municipal Councils are established under the Municipal Councils Ordinance for large, populated and fairly developed urban centers. Urban Councils, Town Councils and Village Councils were established in order of descending urbanization. These institutions had constitutions, powers, functions and approval processes modelled on those of Municipal Councils, rather less than more. Town Councils and Village Councils have now been replaced by Pradeshiya Sabhas and Gramodaya Mandalayas. Under the 13th Amendment there are also Provincial Councils (which are not local government institutions in the strict sense as they derive life and existence from the Constitution and share power with the central government) and Divisional Secretariats. Superimposed on these institutions is the government executive network headed by Governors of Provinces, Government Agents, Assistant Government Agents and Grama Seva Niladharis.

¹³⁰The Municipal Councils Ordinance (Cap, 576) 1980 ed.

¹³¹Elections to MCs are held under the Local Authorities Elections Ordinance.

¹³²MCO, Section 26(1).

¹³³MCO, Section 25.

Waste lands, quarries, water bodies and state lands within an MC area can be vested in an MC by the President¹³⁴. Many green areas such as parks and other common utilities comprise such lands. Public parks, streets, markets, buildings and structures are also vested in MCs¹³⁵. In this section, it is proposed to discuss the approval processes applicable to:

1. buildings, and
2. industrial and trade licensing

BUILDING APPROVALS

MCs have been granted power to enact by-laws that govern buildings and building operations¹³⁶. Such by-laws can govern building specifications and standards, open spaces and related matters as well as fees for the examination of building plans and approvals thereof. Once a building is constructed, it may not be occupied until a certificate of conformity (COC) is issued by the MC after due inspection¹³⁷. Such a COC is issued only where the building conforms to building by-laws and to approved plans.

All MCs have by-laws covering buildings though they are not standardised¹³⁸. However, specific powers in respect of building approvals are vested in MCs under the Housing and Town Improvement Ordinance (HTIO)¹³⁹. For the most part, these by-laws and the HTIO include the following requirements:

1. A building plan (whether residential, commercial or industrial) to be submitted by the owner of the property for approval by the MC¹⁴⁰;
2. The plan must be certified by the owner and an architect or draftsman as conforming to the by-laws covering buildings;

¹³⁴MCO, Section 35.

¹³⁵MCO, Section 37.

¹³⁶MCO, Section 272(2).

¹³⁷MCO, Section 127.

¹³⁸The Local Authorities (Standard By-Laws) Act allows the Minister of Local Government with the consent of Parliament to prescribe standard by-laws for adoption by MCs and other local authorities. They are optional and not mandatory. These by-laws do not include by-laws covering buildings.

¹³⁹Housing and Town Improvement Ordinance (Cap. 600), 1980 ed.

¹⁴⁰HTIO, Section 5.

3. Most such by-laws specify building standards, minimum specifications and safety measures;
4. The plan is then considered by a building approvals committee which examines the plan in relation to the by-laws as well as other considerations such as land use and planning¹⁴¹;
5. The committee may require amendments to be made and the owner can persist with his plan, in which case the committee would hear the owner or the architect before deciding;
6. Once the committee has recommended the plan, it would be approved and a renewable building permit usually valid for one year would be granted subject to standard and special conditions;
7. When completed, the owner must notify the MC and an inspector would examine the building against the permit and the plan and a COC would be granted authorising occupation¹⁴².

Sub-division of land and the creation of rights of way also require MC approval. This is a planning requirement without which a building plan for a sub-divided land would not be approved. Access and the availability of amenities and services are two factors that are considered for land planning decisions.

Although for the most part these by-laws and regulations are applied, corruption and abuse lead to irregular variations being granted. In turn this detracts from the objective of the by-laws. The average approval time for a building plan is anything from 4-6 months. This can be speeded up to even 48 hours if "suitable disbursements" are made. Some MCs have a greater degree of corruption and bureaucracy than others. The Colombo MC ranks high on both counts.

Violations are seldom prosecuted or taken to court. In the final analysis, the by-laws relating to building approval have become a cumbersome, corrupt, inefficient, burdensome and ineffective, yet an essential regulatory mechanism. Vast improvements by way of simplification, standardisation and transparency will help to reduce these ills.

¹⁴¹Some of the matters for consideration are set out extensively in the schedule to the HTIO. These matters include building standards, specifications and setbacks from streets etc.

¹⁴²HTIO, Section 15.

INDUSTRIAL AND TRADE LICENSING

Under its power to regulate offensive and dangerous trades, MCs have power to license slaughter houses, places where offal or blood is boiled, soap manufactories, oil manufactories, dye works, tanneries, brick making, lime kilns and pottery, sago manufactories, fireworks and gunpowder manufactories, or other dangerous and offensive trades which the MC may determine¹⁴³. MCs also have power to license and regulate eating houses, restaurants, hotels and hostleries.

By-laws usually require that the license is granted only after an inspection and recommendation by the MC's Medical Officer of Health (MOH) and where the building conforms to specifications¹⁴⁴. Basic treatment of air and water pollutants is required though these by-laws are very much out of date. Thus although the law authorises environmental, public health and safety issues to be addressed in regulating industries and trades through by-laws, those in force are antiquated and require major reforms.

These by-laws are also not enforced and corruption and bureaucratic inertia have kept the by-laws from becoming effective. As a result, dangerous and offensive trades and industries have been established in places totally unsuited for them and have become a major problem to neighbourhoods.

MCs have further power to regulate these trades through their nuisance abatement powers, but these are seldom invoked. Recent amendments in 1979 have granted MCs the authority to prosecute factories which pollute rivers and other waterways, but no such action has been launched yet.

URBAN DEVELOPMENT AUTHORITY (UDA)

The UDA was established under Law No. 41 of 1978. Under the Law it was open to the Minister in charge of urban development to declare any area suitable for urban development as an "urban development area"¹⁴⁵. The UDA acquires jurisdiction over such an area once it is so declared. Colombo and other urban centers have been brought under the UDA in this manner.

When first established, the UDA was a semi-commercial venture in that it had power to carry out planning and the implementation of programs of development, but did not have regulatory authority. The UDA was granted power to compulsorily acquire lands within its jurisdiction in terms of the Land Acquisition Act. It can also be vested with immovable property of the state either by way of a special grant or a lease under the SLO.

¹⁴³MCO, Sections 145 and 146.

¹⁴⁴Part VIII, Standard by-laws for MCs.

¹⁴⁵UDA Law, Section 3.

The UDA was thus obliged to pay market prices only for compulsory acquisitions of private lands while state land was acquired more or less a free¹⁴⁶. Once a property is acquired, the UDA can sell, lease, rent or rent-purchase such land notwithstanding anything to the contrary in the SLO¹⁴⁷. In effect, the UDA became the beneficiary of state lands without having to pay for them. In the final analysis, the state was absorbing the costs of UDA land development programs.

Within the UDA areas the Town and Country Planning Ordinance (TCPO) does not apply and the physical planning of such areas is vested exclusively in the UDA¹⁴⁸. The TCPO and its functions are discussed later in this section. As a result, overlapping jurisdictions with MCs and other regulatory authorities became inevitable and for the most part, continue to date.

In 1982 the UDA was given additional regulatory powers¹⁴⁹. For the first time planning procedures were laid down including the power to prepare a development plan for the area and to regulate compliance through a development permit system¹⁵⁰. The plan is meant for the purpose of "promoting and regulating the integrated planning and physical development of lands and buildings" in the area¹⁵¹. Matters that the plan should provide for are set out extensively in the schedule to the amending law. Zoning of the area for different purposes is one factor that should be dealt with in the plan. The uses to which buildings can be put, zoning for residential, commercial and industrial purposes, building requirements, landscaping, control of pollution and environmental quality, transportation and traffic control etc. are all matters that the plan can deal with¹⁵².

The UDA is required to appoint a Planning Committee to advise it on the preparation and implementation of development plans¹⁵³. The UDA prepares a draft plan and then sends it to the local authorities within the development area for comment. These comments and the draft plan are then examined by the Planning Committee which submits them with recommendations to the UDA. The Minister to whom the draft plan, comments and recommendations are submitted can approve the plan with or without alterations or modifications. Once so approved, the plan is published in the Gazette and becomes effective. The plan may be amended by a similar procedure.

¹⁴⁶UDA Law, Part V.

¹⁴⁷UDA Law, Section 18.

¹⁴⁸UDA Law, Section 23.

¹⁴⁹By Act No 4 of 1982 and Act No. 44 of 1984.

¹⁵⁰Part IIA of the UDA Law.

¹⁵¹UDA Law, Section 8A.

¹⁵²UDA Law, schedule.

¹⁵³UDA Law, Section 8B et seq.

Development activity within the area requires a permit from the UDA¹⁵⁴. The permits can be issued only where the activity conforms to the development plan or if there is no plan as yet, to the future development of the area.

Development activities must conform to the permit and a certificate of conformity must be obtained from the UDA on completion. The permit procedure enables the UDA to delegate this function to the local authorities. A development plan has been finalised for Colombo and the issue of permit for buildings has been delegated to the local authorities within the Colombo area. The Colombo MC therefore performs a dual function in approving buildings, firstly under its own by-laws and the HTIO and secondly as the delegate of the UDA. The local authorities are obliged to refer other development activities to the UDA for approval. Large schemes whether residential, commercial or industrial require permits from the UDA¹⁵⁵.

The commonest form of exercising control within the UDA areas is this permit system. The Colombo Development Plan, however, also allows for variances and exemptions to be granted by the UDA. Although some criteria for granting such variances are set down, the UDA has a wide discretion which is often misused, abused or simply falls prey to corruption. There are occasions when variances have been granted in the teeth of zoning requirements, presumably on the extraction of high fees. Additionally, property owners who have fallen into zones where their activities became inconsistent (retro-actively), have been granted time to relocate with an option to delay relocation on the payment of fairly stiff violation penalties. While this is a workable and economically justifiable system, its lack of transparency and accountability has resulted in a high degree of abuse, corruption and misuse.

The Colombo Development Plan contains a zoning map and use designations¹⁵⁶. In addition, the plan deals with building requirements, green areas, landscaping and general zoning controls. Similar plans exist in sketchy form for a few other urban centers, but have not been finalised. It must be noted that the approval procedure for development plans is not as transparent as under the TCPO as there is no requirement to place it before the public. Development plans are only required to be placed before local authorities and the Planning Committee. Arguably, placing the draft before local authorities is sufficiently transparent.

¹⁵⁴"Development activity" is defined in Section 29 of the UDA Law as "the parcelling or sub-division of any land, the erection or re-erection of structures and the construction of works thereon, the carrying out of building, engineering and other operations on, over and under such land and any change in the use for which the land or any structure thereof is used, other than the use of any land for the purposes of agriculture, horticulture and the use of any land within the curtilage of a dwelling house for any purpose incidental to the enjoyment of a dwelling house, not involving any building operation that would require the submission of a new building plan".

¹⁵⁵UDA Law, Section 26 and interviews.

¹⁵⁶The main designations are: residential, mixed residential, commercial, industrial, public etc.

However, in reality this is not the case. Most property owners in Colombo were unaware of the plan until enforcement began. The UDA commenced an active program of zoning enforcement within the Colombo area though enforcement in other areas has been sporadic.

Use conversions without permits, building construction without permits and zoning violations have been prosecuted in the Magistrates Courts and orders for compliance, including demolition orders, became common. The thrust of prosecutions has abated in recent times.

TOWN AND COUNTRY PLANNING

Prior to the UDA Law of 1978/1982 the major land use and zoning statute was the Town and Country Planning Ordinance (TCPO)¹⁵⁷. First enacted in 1946, this statute is administered by the Department of Town and Country Planning, headed by a Director of Town and Country Planning. The UDA Law has displaced the TCPO within urban development areas in which the UDA has jurisdiction, but remains operative in all other areas to which it is made applicable.

The TCPO has to be made applicable in an area by the Minister in charge of the subject by a declaration notified in the gazette. Such an area is referred to as a "regional development area" and can have comprised within it "urban development areas" and "trunk road development areas"¹⁵⁸. The planning authorities for urban development areas are the MCs while the Director of TCP is the authority for other areas¹⁵⁹. The executive authority for urban development areas is the MCs and in the case of other areas the relevant local authority¹⁶⁰.

A Regional Planning Committee (RPC) has to be set up for every regional development area. The RPC consists of the GA, the Superintending Engineer, a representative each from the local authorities within the area, a Medical Officer of Health from the government or a local authority, an Assistant Superintendent of Surveys from the Survey Department, and five persons not holding any government office, all of whom are appointed by the Minister¹⁶¹.

The planning procedure is transparent and participatory which is a significant feature to be found in this statute enacted just two years before independence. The planning procedure envisages three types of plans:

1. regional planning scheme (RPS),

¹⁵⁷Town and Country Planning Ordinance (Cap 605), 1980 ed.

¹⁵⁸Not to be confused with similar areas under the UDA Law and usually constituting municipalities and towns selected by the Minister. (See Sections 6 and 8 of the TCPO)

¹⁵⁹TCPO, Section 9.

¹⁶⁰TCPO, Section 10.

¹⁶¹TCPO, Section 12.

2. outline planning scheme (OPS), and
3. detailed planning scheme (DPS).

A DPS usually follows an OPS unless special circumstances warrant otherwise¹⁶² and may be prepared only for urban development areas. In all cases, the preparation of the scheme must be authorised by the Minister. Once the Minister's approval is given, a draft scheme must be prepared by the planning authority. If there is undue delay in the preparation of the draft scheme, the Minister can direct that it be prepared by the Director TCP¹⁶³. Every draft scheme must be placed before the Central Planning Commission (CPC)¹⁶⁴ for consideration and for recommendations. The Minister can on receiving the draft scheme, subject to modifications, provisionally approve the draft scheme or direct the preparation of a new scheme by the Director TCP.

The planning authority for each area is then required to prepare the requisite maps, sketches, plans etc., and to notify the public¹⁶⁵ of the availability of the scheme for inspection. Land owners or persons having interests in land affected by the scheme may lodge objections on the basis that the provisions of the scheme are not in the public interests or of the majority of land owners or that the provisions are unduly burdensome on the land owners¹⁶⁶. The planning authority is then required to consider the objections and to forward the draft scheme and objections with recommendations to the CPC. The CPC must consider the same and forward it to the Minister who can sanction the draft scheme whereupon it becomes operative¹⁶⁷. Several such schemes are in force for urban centers and other development areas.

The matters that could be included in a scheme are set out extensively in the schedule to the TCPO. These include zoning, land use, siting of roads, slum clearance, provision of public amenities, parcelling of land and environmental conservation matters. Once a scheme becomes operative, erection and re-erection of structures and the construction of roads are controlled by a permit system operated by the executing authority¹⁶⁸. The executing authority can take steps to prohibit the use of land other than in keeping with the scheme, but this is a necessary second step to enforce the land use scheme. Provision is also made for compensating affected parties.

¹⁶²TCPO, Sections 19 and 20.

¹⁶³TCPO, Section 24.

¹⁶⁴CPC is discussed later in this section.

¹⁶⁵TCPO, Section 26.

¹⁶⁶TCPO, Section 27.

¹⁶⁷TCPO, Section 29.

¹⁶⁸TCPO, Section 55.

The TCPO is supervised by the CPC headed by the Secretary to the Ministry. The Commissioner of Local Government, the Commissioner of Labour, the Land Commissioner, the Director of Commerce and the Director TCP and three citizens are among the members of the CPC. Its basic function is to advise the Minister and planning authorities about the implementation of the TCPO.

Though the TCPO is a land use planning statute and the Department of Town and Country Planning was set up with this intention, it is clear that it has not worked in the way envisaged. The TCPO has become a policy formulating structure rather than one designed to evolve enforceable land use plans. The policy formulated has been implemented in a sporadic manner wherever there were funds, commitment and expediency. In other instances it has remained a dead letter. It is clear that although the procedure is transparent and participatory, the enforcement mechanisms provided are inadequate. For these reasons, the statute has not been effective. The need for enforcement mechanisms to be prescribed, both for citizens and for governmental and local governmental agencies is manifest.

THE GREATER COLOMBO ECONOMIC COMMISSION (GCEC)

A discussion of the GCEC and its functions is beyond the scope of this study. Yet it is worth noting that the GCEC has the power to establish zoning plans for areas under its authority. So far two areas have been declared to be under its authority¹⁶⁹. Within these areas the GCEC can establish export promotion zones (EPZs). Certain industries can also be granted GCEC status in which case they receive investment benefits but may be located outside GCEC areas. The GCEC has established a zoning plan for the Greater Colombo area. For the most part, the GCEC functions as a local authority (with power to delegate functions to local authorities) in areas under its control.

The GCEC has an environment unit which oversees the operation and establishment of industries. No regulatory framework exists for this unit, and as such, there is great variance in the process followed in granting environmental approvals. Its area of jurisdiction extends to (a) the GCEC area as defined in the Act, extending north of Kelani Ganga and south of Maha Oya, (b) licensed zones such as Koggala, Biyagama and Katunayake free trade zones (FTZs) and also to license enterprises wherever they are situated. These changes were effected by an amendment introduced in 1992 which also changed the name of the GCEC to the "Board of Investment" (BOI). Despite these amendments, the area of authority of the BOI is in a confused state and will take some time to be clarified. The delegated EPL process under the NEA extends to all GCEC areas, but there appears to be a recent decision to amend this delegation to include only the Free Trade Zones.

¹⁶⁹12 ¹⁶⁹The Greater Colombo area bounded on the South by the Kelani river and in the North by the Maha Oya, and the Koggala area of some 58 sq. kilometers.

GENERAL OBSERVATIONS ON LOCAL GOVERNMENT AND UDA APPROVAL PROCESSES

1. It is obvious that apart from the UDA and the GCEC areas, there is no cohesive land use planning in other areas. Even within the UDA and perhaps the GCEC areas, variances and wide discretion have combined to negate the effectiveness of land use plans.
2. Land use planning within the UDA and the GCEC areas is not transparent and participatory. On the other hand, the presence of these two factors in the TCPO process has not ensured effectiveness or enforcement. The right to enforce must also be entrenched in favour of citizens and other agencies if land use planning is to become effective.
3. Apart from loose licensing processes for offensive and dangerous trades, there is no control over the siting and safety of industrial establishments (save the provisions of the Factories Act, not discussed here) generally by local authorities including MCs. The development of siting criteria is not mandated though they are well within the interpreted meaning of existing objectives of land use and planning schemes.
4. Abuses, corruption and misuse have all combined to render negatory or ineffective many of the well-intentioned statutes and approval processes. There are times when these have worked to the benefit of violators (industrial and otherwise) and to the detriment of the public, while on the other hand, there are also occasions when they have worked to hinder genuine developers. In both cases the public have suffered.
5. Failure on the part of regulatory agencies to enforce the law and planning schemes has also helped to bring about a chaotic situation within urban centers.
6. Overlapping jurisdictions and the creation of regulatory and policy making agencies without prior organisational analysis and evaluation rank high as a cause for failure. The need for an organisation such as the UDA is questionable since the statutory apparatus and the institutional structure to achieve its purposes were available in the form of the TCPO and the Department of Town and Country Planning. The creation of the UDA and the GCEC has resulted in overlapping jurisdiction over each other and over other local authorities. Uncertainty of organisational territory coupled with reluctance to assume responsibility has contributed to a stalemate situation or to dominance by one. The causes for this systemic failure is partly due to political lobbies and territoriality, partly due to donor emphasis and misconceptions and partly due to short term responses to crises. The existing system is inefficient, burdensome to the public in the extreme, wasteful of public and natural resources and organizationally faulty.

SECTION C : THE NEW EIA AND EPL REQUIREMENTS

This section discusses the legal requirements of the National Environmental Act that introduces new environmental and public review requirements into the project approval process. The section includes:

- a. a detailed description, discussion and an analysis of the Environmental Impact Assessment (EIA) process with particular reference to the regulations, legal issues, procedural requirements and interpretation, and
- b. a detailed description, discussion and an analysis of the Environmental Protection Licensing (EPL) process with particular reference to the regulations, legal issues, procedural requirements, enforcement problems, monitoring, information and interpretation.

9. THE ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

Sri Lanka's first experiments with the Environmental Impact Assessment (EIA) process came with the enactment of the Coast Conservation Act No. 57 of 1981. Several EIAs have been prepared under this law including the one on the Trincomalee Coal Power Plant. In 1988, Parliament enacted amendments to the National Environmental Act (NEA)¹⁶⁶ which are perhaps the most far reaching statutory interventions in the decision making process relating to development projects. In principle the amendments made two major changes; first it introduced EIAs as a decision making tool¹⁶⁷ and second it established a pollution licensing system known as the Environmental Protection License (EPL)¹⁶⁸.

Each of these interventions will be discussed in some detail in this and the following section of this study. How detailed the discussion should be has to be considered in the light of the purposes to which this study will be put. As this study is intended to become the basis for training material for decision makers, NGOs, consultants etc., it would not be useful to adopt an academic style and depth. On the other hand, some in-depth analysis may be required to assist decision makers in the day to day practical problem solving they would encounter. For this reason, descriptions have been kept simple and wherever possible illustrated. In-depth analysis of legal interpretations and problems has been confined to cases where the impact has practical implications for decision makers.

¹⁶⁶The National Environmental (Amendment) Act No. 56 of 1988.

¹⁶⁷By a new Part IVC.

¹⁶⁸By two new parts IVA and IVB.

THE NEA AND THE EIA PROCESS

The provisions relating to the EIA¹⁶⁹ in the NEA merely create a decision making framework which has to be supplemented by supporting regulations. These regulations are now in draft form and were prepared after much consultation and compromise with NGOs, industry and regulatory agencies. For the purposes of this study they are referred to as the EIA Regulations although they have not yet been formerly gazetted and brought into operation.

The EIA process applies only to "prescribed projects"¹⁷⁰. Such projects need to have approval from the "appropriate Project Approving Agency" (PAA)¹⁷¹ before they can be "implemented"¹⁷². The Minister of Environment must decide what the prescribed projects (PPs) are and must also decide who the PAA are.

WHO IS A PROJECT APPROVING AGENCY (PAA)?

The EIA regulations designate 11 such state agencies¹⁷³. There can be situations in which there will be more than one PAA which would be appropriate to undertake the EIA process. The NEA states that the PAA which is "concerned or connected" with the PP would be the appropriate one. Such a decision would have to be made in keeping with guidelines issued by the CEA¹⁷⁴. However, a PAA which is also the project proponent (the entity promoting the project) is disqualified from acting as the PAA for that project¹⁷⁵. Even in terms of the guidelines, where there is more than one appropriate PAA, the Secretary and the CEA will decide who should be the PAA. In the event of a doubt, the project proponent should make a formal request to the Secretary to make a decision as to who the appropriate PAA is.

¹⁶⁹Rather awkwardly numbered 23Y, 23Z, 23AA - 23FF.

¹⁷⁰NEA, Section 23Z.

¹⁷¹NEA, Section 23AA(2).

¹⁷²Ibid.

¹⁷³EIA Regulation 2(i) read with Schedule I.

¹⁷⁴Ibid, Regulation 3(i).

¹⁷⁵Ibid, Regulation 3(ii). In such a case the Secretary to the Ministry of Environment, in consultation with the CEA will decide which PAA should undertake the process. The idea behind this regulation is that there should be no conflict of interest between the PAA as regulator and the person regulated. Patent bias has always been a ground for the Courts to annul administrative decisions.

The question still remains as to who within each PAA would make the formal and informal decisions in the course of the EIA process. Given the administrative structure, where Ministries are designated as PAAs, the formal decision would be taken by the Secretary (or other specially authorized officer) of that Ministry acting for and on behalf of the Minister. The informal decisions which include calling for additional information, evaluating EIAs, scoping etc., would be carried out by an environmental unit within the PAA (where there is one) or some other division having technical competence to handle the procedure. The Ministry of Housing and Construction and the Ministry of Transport and Highways are two of the least equipped PAAs.

Where the PAA designated is a government department, the formal decisions would be made by the Head of the Department. This would be the case with the Department of Coast Conservation and the Department of Geological Surveys. In the case of the GCEC and the UDA, formal decisions would have to be made (or ratified) by the Commission or the Authority in the manner other formal decisions are made¹⁷⁶. Informal decisions could be made by officers of the Department or the GCEC/UDA. Except for the Department of Geological Surveys, the other three agencies have special environmental units to handle the process.

It would always be a rather vexing question as to whether a Ministry is disqualified as a PAA where the project proponent is a department under it. Take the case of the Menik Ganga diversion project which seeks to build a wier on the Menik Ganga and a diver overflow through a built canal to the Lunugamvehera Reservoir. The Ministry of Lands, Irrigation and Mahaweli Development is the appropriate PAA. However, it is intrinsically involved in project formulation, proposal writing and in seeking donor assistance for the project. In the wider sense the Ministry is a "project proponent" but the EIA regulations exclude Ministries as project proponents¹⁷⁷. A consonant interpretation would therefore suggest that only the GCEC, UDA, CCD and the Department Geological Surveys are within the disqualifying provision. Thus in the case under consideration, the Ministry can still function as the PAA and the Department of Irrigation would be the project proponent. On the other hand, if the GCEC was proposing to establish an Export Promotion Zone, the latter being an industrial estate, it would be disqualified from being the PAA.

¹⁷⁶i.e. by the members of the Commission or the Authority deciding the issue at a formal meeting.

¹⁷⁷See EIA Regulation 23(3): definition of project proponent.

WHAT IS A PRESCRIBED PROJECT (PP) ?

The EIA regulations describe what PPs are. The approach has been to establish three lists¹⁷⁸ describing the projects that would require an EIA/IEE¹⁷⁹ before they can be implemented. One of the lists relates to 17 different types of projects (excluding industries) that are considered generally as having significant impacts¹⁸⁰. The other two lists relate to industries and have been the subject of much negotiation. One of these lists sets out very high polluting industries which need an EIA/IEE wherever they are located¹⁸¹. This is a free standing list of industries which will be subject to the EIA process irrespective of location. The third list sets out medium and high polluting industries which need to have an EIA/IEE if located in "environmentally sensitive areas"¹⁸². A list of environmentally sensitive areas is provided in the regulations separately¹⁸³. Thus these industries would be caught up in the EIA/IEE process only if they are located in the areas set out in the environmentally sensitive area list¹⁸⁴.

The description of projects, undertakings and industries in the regulations is loose. The schedules are more descriptive than definitive. In Schedule III, the manufacture of industrial alcohols is described as an industry that needs to have an IEE/EIA if located in an environmentally sensitive area. Many industries do produce alcohol either as a primary or a secondary product of an industrial process which may or may not have alcohol as its primary product. How would a PAA determine the question as to whether the industry is within the scheduled item or not. The interpretation the courts would be inclined to give would be one that advances the remedy and suppresses the mischief¹⁸⁵.

¹⁷⁸Contained in three schedules, namely Schedules II, III and IV read with Regulations 2(i) and 2(ii).

¹⁷⁹Initial Environmental Examination (IEE)

¹⁸⁰EIA Regulations, Schedule II.

¹⁸¹EIA Regulations, Schedule IV.

¹⁸²EIA Regulations, Schedule III.

¹⁸³EIA Regulations, Schedule V.

¹⁸⁴Schedule III: industries located in Schedule V areas.

¹⁸⁵Heydon's case (1584) Co. Rep. 7a, 7b.

In this context, the industries and projects listed in the schedules to the EIA regulations should be given a liberal interpretation rather than a literal one.

Where the goal is wholly or mainly the operation of a project or industry described in the schedules, it must be treated as coming within the EIA process requirement.

There would always be the borderline case and in such cases, the PAA should adopt the precautionary rule and err in favour of treating the project as coming within the EIA regulations rather than outside them.

It must be borne in mind that unlike in the U.S.A. where the EIA process is applicable only where the threshold requirement of "significant impact" is traversed, under the NEA and the EIA regulations, this is not the case. Ultimately, the decision turns on an objective characterisation of the project or process/product and an interpretation of the schedules to the EIA regulations. Uniformity of decisions and interpretations given to the schedules must be ensured. One way of doing so is for the CEA or some NGO to regularly compile threshold decisions giving brief descriptions of the project and the reason why it is held to be within or without the schedule. A record of agency decisions placed in the public realm will ensure uniformity and clarity for those regulated and regulators.

The NEA mandates that the PAA should call for an EIA/IEE "as required by the PAA" from the project proponent who seeks approval for a PP¹⁸⁶. The EIA regulations state that the project proponent must submit "preliminary information" (PI) on the project to the PAA as early as possible¹⁸⁷. The PAA must acknowledge receipt of the preliminary information within seven days¹⁸⁸. The decision as to whether an EIA or an IEE should be called for is entirely at the discretion of the PAA¹⁸⁹. Before it takes such a decision, the PAA must have a scoping and must decide on the terms of reference (TOR) for the EIA/IEE. In drafting the TOR the PAA may take into consideration views of other state agencies and the public¹⁹⁰.

¹⁸⁶NEA, Section 23BB(1).

¹⁸⁷EIA Regulation 6.

¹⁸⁸EIA Regulation 7(i).

¹⁸⁹NEA, Section 23BB.

¹⁹⁰EIA Regulation 7(ii).

WHAT IS "PRELIMINARY INFORMATION"?

A project proponent of a PP is required to give the PAA, preliminary information as early as possible¹⁹¹. It is the PI that triggers the scoping process.

The PI should include a description of the nature, scope and location of the proposed project accompanied by location maps and any other details as may be requested by the PAA¹⁹².

The PAA may request additional information from the project proponent. It is for the PAA to decide whether adequate information has been given by the project proponent to be treated as the PI. This is a strategic decision because if the PI does not contain enough information, the management of the scoping could become difficult and the "significance" of the decision could also be flawed. For this reason the PAA must satisfy itself that the required information is given before the scoping commences. The PI submitted could be fairly comprehensive and might even be sufficient for the PAA to treat it as an IEE¹⁹³.

WHEN MUST THE EIA PROCESS BE STARTED (TIMING)/ WHEN IS THERE A "PROJECT" ?

The issue here is not so much the time at which the PI and scoping must commence, but rather the point at which the project proponent must come into contact with the PAA. The timing of the EIA/IEE is crucial if it is to become a useful tool in decision making. If the timing is late, then many important decisions would have been made and the IEE/EIA would only serve the purpose of justifying decisions already taken. "Decide, announce and justify" is a common process through which projects emerge only to be struck down by the judiciary as being contrary to the intention of the NEA.

Thus, the project proponent must be encouraged to come within the orbit of the PAA at the stage "where the project proponent has a goal and is actively preparing to make a decision about that goal"¹⁹⁴. This is the stage at which the EIA regulations envisage the existence of a project likely to be subject to the EIA process. A project is "any undertaking, scheme or plan where commitment of resources, time and funds are envisaged"¹⁹⁵. These provisions are consistent with the US regulations¹⁹⁶.

¹⁹¹EIA Regulation 6.

¹⁹²EIA Regulation 23, definition of PI.

¹⁹³EIA Regulation 7(v).

¹⁹⁴EIA Regulation 23: definition of "project".

¹⁹⁵Ibid.

It must be understood that a project comes into existence for the purposes of the EIA regulations at a time when the project proponent usually declares the intention of the project. The latter case happens only where the major project decisions of siting, design and funding are completed.

For the purposes of making the EIA regulations work in the way envisaged, "projects" must be caught in the net well before this latter stage is reached. In the case of an agency having a goal to generate hydro-electric power the project comes into existence at the time it actively prepares to make a decision about how to generate the anticipated power.

Often this situation corresponds with the pre-feasibility stage of large projects. In some cases it may even be anterior to this. The purpose of this requirement is to help project proponents to integrate environmental planning into the decision making cycle relating to the project.

The reason for early involvement of the PAA and the project proponent in the EIA process is obvious. It is because IEEs and EIAs must be "written late enough in the development process to contain meaningful information, but they must be written early enough so that whatever information is contained can practically serve as an input into the decision making process"¹⁹⁷.

WHAT IS AN "ENVIRONMENTAL SCOPING" ?

Environmental scoping is a term which originated in the U.S. to describe the function of identifying issues and information needs that form the contents of an EIA. Scoping is a vital point in the EIA/IEE process and is the stage at which much can be done to smooth out the rest of the process to follow. Scoping applies to EIAs and IEEs and varies only in depth, duration and comprehensiveness¹⁹⁸.

The PI would constitute the basic information required to commence scoping. The process seeks to create a forum at which parties with interests at stake should be brought together to help the PAA decide on the issues that should be addressed in an EIA. The TOR is an outcome of the scoping. The PAA should bear in mind that the scoping should at all times be controlled by it and that it is only a forum for the PAA (not the participants) to make informed decisions about the TOR, the significance of impacts, and the option between EIA/IEE.

¹⁹⁶CEQ Regulation 1508.23.

¹⁹⁷Scientists' Institute for Public Information Inc. (SIPI) Vs. Atomic Energy Commission, 481 F.2d 1079 (D.C. Cir. 1973) at 1093.

¹⁹⁸EIA Regulation 7(ii).

For this reason, it is important to be inclusive rather than exclusive in the parties invited to a scoping. Ordinarily, a scoping should include the project proponent, other relevant agencies, affected people or their leaders and NGOs. The EIA regulations state that the PAA may take into consideration the views of state agencies and the public in drawing up the TOR for an IEE or an EIA¹⁹⁹.

Although the PAA has a discretion, experience has shown that to ignore such views is to invite confrontation where none is necessary or healthy.

One of the functions of the scoping is for the PAA to decide whether an IEE will suffice or whether an EIA should be called for. Legally, the NEA allows a PAA to call for an IEE first and thereafter, on the basis of the IEE, to decide whether an EIA should be carried out.

However, this is cumbersome for the PAA and is burdensome and expensive for the proponent. In fairness to all, every attempt should be made at the scoping to decide whether an IEE or an EIA should be carried out. Often the PI, if well compiled, can be treated as an IEE and after scoping and notice, approval can be granted. If the PI is not comprehensive, it is an evaluation of the impacts that will reveal whether an IEE would suffice.

WHAT IS AN IEE?

An Initial Environmental Examination (IEE) is a report where possible impacts of a PP are assessed with a view to deciding whether the impacts are significant or not. If at the end of an IEE the impacts disclosed are significant, then the NEA requires an EIA to be prepared²⁰⁰. An IEE must contain such further details, descriptions, data, maps, designs and information as the Minister may prescribe. However, no regulations have been made yet specifying these additional requirements. For the time being, an IEE must have a statement about the "possible" impacts of the PP and an assessment as to whether these impacts are significant or not. A TOR for an IEE only needs to address these two basic issues:-

1. What are the possible impacts?
2. What is the context and intensity of these impacts?

WHEN IS AN IMPACT "SIGNIFICANT"?

As stated earlier, the PAA must decide whether to call for an IEE or an EIA²⁰¹.

¹⁹⁹EIA Regulation 7(ii)(b).

²⁰⁰NEA, Section 33, definition of IEE.

²⁰¹NEA, Section 23BB.

This decision depends on whether the **possible impacts** of the PP on the environment are **significant** or not²⁰². The time at which this decision must be made by the PAA is after the receipt of the preliminary information and after the environmental scoping²⁰³. Neither the NEA nor the EIA regulations give any guidance on how to determine the "significance" of possible environmental impacts.

The concept of "significance" has been borrowed from the National Environmental Policy Act (NEPA) of the U.S.A. and for this reason it is useful to look for guidance to the way in which the concept has been developed in the U.S.A. both by the administrative agencies and by the courts.

Generally, major actions have significant impacts²⁰⁴. Thus the bigger the scope and command area of the project, the more significant would be the impact. On the other hand, there could be major projects which do not necessarily have significant impacts. This is a guiding rule of thumb which may be applied by the PAA to help make the "significance" decision.

Regulations in the U.S.A. ask the deciding agency to consider both the "context and intensity" of the project²⁰⁵. These regulations list ten factors affecting intensity. They also say that an impact of a "highly controversial" nature should be treated as significant. The context of a project includes the society, the region, interests and locality in which the project is to be carried out²⁰⁶. Thus a rock quarry which carries out blasting operations would have a "significant" impact if it is in the context of a residential locality whereas the impacts may not be significant if it is isolated. Likewise a project would have significant impacts if it requires the closing down of a public playground rather than a private one. In the latter case it is the nature of the public's interest that makes the impact significant.

"Intensity" is perhaps less subjective and is often measurable and quantitative. A project which consumes 100 cubic meters of water per day will have a less "intense" impact than one which uses the same quantity of water per hour. Thus intensity is a factor that depends on the rate and quantity of the impact.

²⁰²NEA, Section 33, definition of IEE.

²⁰³EIA Regulation 7(i).

²⁰⁴Council on Environmental Quality (CEQ) Regulations (40 Code of Federal Regulations S. 1508.18).

²⁰⁵CEQ Regulations (40 CFR S. 1508.27).

²⁰⁶Ibid.

For the most part, these two guidelines are adequate for a PAA to decide whether a project has significant impacts.

This is an issue often contested both by the project proponent and by the affected parties and NGOs. On the one hand, a finding that the PP has no "significant" impacts is favourable to the project proponent and will reduce the burden of investment on an EIA while on the other hand, affected parties would feel that the impacts would not be adequately assessed.

As a result, it is very important for a PAA to keep good records of the submission in the preliminary information, the minutes of the scoping and the reasons and evaluations it performed to make the decision on "significance".

Another factor that can influence the "significance" of an impact is the mitigatory measures proposed in the PP. The discharge of an untreated pollutant into inland surface waters can have significant impacts while the same discharge if treated may not. Thus, the mitigatory measures proposed by the project proponent should also be weighed in the equation.

An examination of the existing environmental impacts to determine the extent to which the PP would increase those impacts and the absolute quantity thereof²⁰⁷ also helps a PAA reach its decision. Despite all these helpful guidelines, there is always the "grey" area where a particular impact is on the borderline of "significance". It has been suggested by the US courts that in such cases the PAA should err on the side of the environment and treat the impact as significant rather than not. This rule of thumb is helpful in making decisions where the pros and cons are evenly balanced; give the benefit of the doubt to the environment and not to the developer.

Where a PP is determined to have possible significant impacts, the NEA requires the PAA to call for an EIA. Where they are not significant, the PAA should only call for an IEE. However, even after calling for an IEE, if the impacts disclosed in the IEE are significant, the PAA must call for an EIA. This is a rather cumbersome situation for the agency and a burdensome one for both the developer and the affected public. For this reason, the PAA must make every effort to decide at the outset of the process whether what is required is an EIA or an IEE. Scoping therefore assumes great significance. It is the scoping that will determine the significance of the impacts and the TOR for either an EIA or an IEE. Scoping sessions must therefore be transparent and comprehensive. They must be used to reach consensus on issues wherever possible and to draw out the contentious ground, where it exists.

²⁰⁷Hanly Vs. Kleindienst (Hanly II) 471 F.2d 823 (2d Cir. 1972), cert. denied, 412 U.S. 908 (1973).

WHAT IS AN EIA?

An EIA is defined in the NEA²⁰⁸ and must have the following contents:-

1. a description of the proposed PP;
2. prediction of environmental consequences of the proposed PP;
3. avoidable and unavoidable adverse impacts of the PP;
4. description of irreversible and irretrievable commitment of resources for the PP;
5. alternatives to the proposed PP²⁰⁹;
6. reasons why these alternatives were rejected; and
7. an environmental cost/benefit analysis, if one has been prepared.

WHAT ARE "ALTERNATIVES"?

At the heart of the EIA process is the requirement that "alternatives to the activity which might be less harmful to the environment" should be considered²¹⁰. An EIA must contain a description of all such alternatives together with the reasons why such alternatives were rejected²¹¹. Neither the NEA nor the EIA regulations give any guidance as to what an alternative is and how far the exercise should be carried. Once again, the concept of alternatives has been borrowed from the NEPA and it is useful for us to look for guidance to administrative and judicial interpretations in the U.S.A.

The pith and substance of informed rational decision making is that the decision maker considers alternatives to achieving an objective and selects the best. The range of alternatives that a proponent might consider is considerable. The most dramatic of all the alternatives is the "no action" alternative. What is the situation if the proponent did not carry out the project? Looking at this alternative often forces the proponent to consider the economic and environmental impacts of doing nothing.

²⁰⁸NEA, Section 33.

²⁰⁹Discussed below.

²¹⁰NEA, Section 33, definition of EIA.

²¹¹Ibid.

It is not surprising that the "no action" alternative can sometimes actually turn out to be the best.

Another requirement is the analysis of the "worst case" where information on the adverse impacts are unknown, too costly to obtain or the means of obtaining it are unknown and information is needed to make a reasoned decision about the alternatives²¹². A worst case analysis assumes that the impact will be the worst possible and caters to meet such an eventuality.

Other alternatives include different siting, design and other modifications to the project including reducing raw materials consumed, using alternative materials and reducing production. Alternatives can be classified as primary and secondary²¹³. A primary alternative is one where the project goal can be achieved in a different manner. If the goal is to produce 50 MW of electric energy by coal, a primary alternative would be to produce this energy by hydro or diesel. It is another way to get to the same goal. A secondary alternative assumes that the mode of achieving the goal is necessary but looks at other ways of carrying out this mode. Thus if a coal power plant is assumed as needed, then considering different sites or clean coal technology would amount to looking at secondary alternatives.

The question of what alternatives need to be addressed in the EIA is always a difficult one. However, it is suggested that an expansive view of alternatives should be adopted in preference to a narrow and limiting one²¹⁴. Both primary and secondary alternatives must be taken into consideration²¹⁵. When the EIA on the Trincomalee coal power plant was opened for public comment, one of the comments made was that the plant was too big and need not be built if mini-hydro potential was exploited and electricity efficiency increased. The Director of Coast Conservation took the view that this was an alternative that was too remote to be considered. This view is clearly erroneous as mini-hydro and energy efficiency are two primary alternatives that should be addressed.

²¹²Now repealed CEQ Regulation 1502.22. But the courts have held that this is a requirement even though the CEQ repealed its regulation. See *Sierra Club Vs. Sigler* 148 F.2d 957 at 969 (1983) and *Robertson Vs. Methow Valley Citizens' Council* 109 S.Ct. 1835 (1989).

²¹³"Environment and Equity", by D. Mandelker, (1981), 120p.

²¹⁴U.S. courts have adopted such an approach.

²¹⁵Natural Resources Defense Council, Inc. Vs. Morton
458 F.2d 827 (D.C Cir. 1972).

In the case of the EIA carried out on the Kandalama Tourist Hotel, alternatives to the project have been left out altogether. In terms of the NEA this would be a defective EIA.

PAA's must ensure that a consideration of alternatives is built into the TOR and that the EIA when prepared would actually address them²¹⁶. The alternatives that must be considered are simply those that are reasonably available. The term alternatives is not "self-defining" and "must be bounded by some notion of feasibility"²¹⁷. Alternatives that are remote and only speculative need not be considered. However, with the advancement of technology and its availability, what is a remote alternative today may well be feasible tomorrow.

The concept of alternatives is therefore an evolving one requiring a developer to look at fewer or more alternatives as they become better known and understood²¹⁸.

After an EIA is prepared, the project proponent must submit it to the PAA who must check its adequacy against the TOR²¹⁹. In the case of an IEE there is no such requirement to check the adequacy. If the PAA is not satisfied with the EIA, then it should ask the project proponent to make the necessary amendments and resubmit it²²⁰. The PAA must thereafter publish notices in the gazette and in daily newspapers in all three languages inviting the public to inspect and make comments on the EIA/IEE within 30 days²²¹. These costs are to be pre-estimated and collected before scoping as administrative charges from the project proponent²²². The notice should say where and when the EIA/IEE can be inspected²²³. The public have a right to obtain copies of the EIA/IEE from the PAA on payment of copying charges²²⁴.

²¹⁶EIA Regulation 11(ii).

²¹⁷Vermont Yankee Nuclear Power Corp. Vs. NRDC 435 U.S. 519 (1978).

²¹⁸Ibid.

²¹⁹EIA Regulation 11(i).

²²⁰EIA Regulation 11(ii).

²²¹NEA, Section 23BB(2) read with EIA Regulations 8(ii) and 12(i).

²²²EIA Regulation 7(iii).

²²³NEA, Section 23BB(2) read with EIA Regulations *(iii) and 12(ii).

²²⁴EIA Regulations 8(iv) and 12(iii).

NOTIFICATION

The publication of the notification is a vital part of the process. Failure to publish the notification or failure to give the time prescribed (30 days from the appearance of the first notice either in the gazette or in a newspaper²²⁵) would render the proceedings illegal from that point onwards and liable to be quashed. It is therefore in the interests of the PAA and the parties concerned that these provisions be complied with strictly. All that the notice need state is:

1. that the EIA or the IEE is available at a named place;
2. that it may be inspected by the public at given times; and
3. that the public are invited to make comments.

The notice need not state the duration within which the PAA will entertain comments (i.e. 30 days). If the notices are to appear together on a single date it may be useful to state this as well, but if the notices are to appear at different times it can cause confusion.

Once the public comment period is over the PAA must decide whether the case warrants a public hearing²²⁶. Although the EIA regulations confine such situations to EIAs only, legally it is open to a PAA to hold a hearing on an IEE as well²²⁷. However, an IEE should very rarely, if at all, be the subject of public hearings.

²²⁵EIA Regulations 8(ii) and 12(i). In the author's view this limitation is contrary to the intent of the NEA and the time limit would be 30 days from the date on which the last notice appears. Section 23BB(3) states that the public have a right to make comments within 30 days "of the date on which a notice...is published". As the provision is intended to benefit the public, courts would tend to extend the time rather than limit it. Furthermore, circumstances might justify such extension. In the case of a villager who is literate in Sinhala only, a publication in the English or Tamil newspapers cannot pre-empt the duration for comment and time will run only on the gazette or Sinhala newspaper notice.

²²⁶NEA, Section 23BB(3).

²²⁷Section 23BB(3) of the NEA does not limit the hearing to EIAs only, but covers both IEEs and EIAs. The EIA regulations refer to hearings only for EIAs (vide Regulation 13), but omit the reference in the case of IEEs (Cf. Regulation 9(i)).

PUBLIC HEARINGS

A badly conducted hearing could become controversial and confrontational and totally counter-productive. The NEA states that the PAA "may, where it considers appropriate in the public interest" hold a hearing²²⁸. **Only those who have sent in written comments are entitled to attend and be heard at the hearing²²⁹.**

What is meant by the amorphous term "public interest" is impossible of precise definition and only illustrations of situations can be given. The term is an expansive one and each generation is likely to define it in the light of their context and experience. The public interest would be present where the PP can have serious impacts on the health and safety of a community or can have serious consequences on their property. An explosives factory or a hazardous waste facility in a residential neighbourhood is such a case.

Highly controversial projects might also come within the "public interest" definition. In such a project the controversy demonstrates the interest of the public if its actors are many and from different contexts.

Likewise, where comments have been made on behalf of a community by an NGO or other representative, it may be in the public interest for the PAA to know how representative the comments are.

The hearing must be confined to allowing those who have made written comments to "support" those comments. The PAA should allow commentators to place additional evidence or arguments before it to support the comments. The proponent must also be invited to the hearing and allowed to cross examine any witnesses called by the commentators²³⁰.

A single officer supported by secretarial services must be appointed to hold the hearing. Hearings must proceed in the manner that disciplinary inquiries are held in the public service under the Establishments Code.

²²⁸NEA, Section 23BB(3).

²²⁹NEA, Section 23BB(3) states that the PAA may "afford an opportunity to any such person of being heard **in support of his comments**". It is arguable whether the PAA can select persons from among those who have made comments and only hear them or whether it is bound to invite all who have made comments. The author holds the view that all must be called except where the PAA adopts a selective process and criteria which have a rational differentia and this relates to the objective of the hearing and the approval decision to be made.

²³⁰This is the requirement of natural justice and fairplay which the courts insist on in administrative hearings.

The rules in the Code are a good guide to how a hearings should be held and most senior public officers have experience in doing so. The PAA's staff who are actually dealing with the EIA/IEE process should be present and even seek clarifications from commentators and witnesses, but the proceedings are best regulated by a non-partisan officer with experience in conducting inquiries.

The government also has a panel of retired officers (including retired judges) who are regularly employed for disciplinary inquiries. These persons can also be utilized as presiding officers for hearings. Any issues of interpreting what can and cannot be done at the hearing must be left to the officer, and the Environmental Unit can certainly advise him/her of the technical aspects. The hearing is a forum to collect more data or arguments for, against or simply clarifying the PP, EIA or IEE. It is a tool to help the PAA make its ultimate approval decision.

At the conclusion of the hearings and/or comment period, the PAA must send the comments and other material obtained at the hearing to the project proponent for review and comment²³¹. When the response is received, the PAA has seven days in the case of an IEE and 30 days in the case of an EIA to make its approval decision²³².

In the case of an IEE, the PAA can grant approval with conditions or refuse approval (giving reasons) or call for an EIA where significant impacts are disclosed²³³.

In the case of an EIA, the PAA can grant approval with conditions or refuse approval (with reasons)²³⁴.

²³¹EIA Regulations 13 and 9(i). The requirement applies both to IEEs and EIAs. This requirement is introduced in the EIA regulations and is not found in the NEA. However, the regulation is justified as it is in keeping with the rules of natural justice and fairness.

²³²EIA Regulations 10 and 14.

²³³EIA Regulation 10. This regulation does not expressly mention the PAA's right to call for an EIA. However, this becomes clear from the definition of an IEE in the NEA which overrides inconsistent EIA regulations. It must be borne in mind that this power should be invoked by the PAA only in very rare situations where the significance of the impact could not have been foreseen at the scoping stage.

²³⁴EIA Regulation 14.

When the PAA approves a PP with or without conditions (his), a notice of this fact must be published in the gazette and in the daily newspapers in the three languages²³⁵. The approval remains valid for 24 months²³⁶.

Where approval is refused, the project proponent has a right of appeal to the Secretary of the Ministry of Environment²³⁷. There is no time limit fixed for the appeal and, therefore, it may be lodged within a reasonable period of time. The appeal must be in writing and the Secretary may hear the appellant in support of his appeal²³⁸. The Secretary can confirm, reject or modify the PAA's decision.

TIME LIMITS

The time limits set out in the EIA regulations are directory and not mandatory. The 30-day time limit set apart for public comments in the NEA is mandatory. A PAA must make every effort to comply with the directory time limits, but failure to do so will not result in adverse legal consequences to the PAA, public or the project proponent. On the other hand, non-compliance with the mandatory time limit would render the process void from that point onwards.

RECORD KEEPING

As the EIA/IEE procedure is a statutory one, it is always possible that each step would be open to judicial or parliamentary supervision. It is therefore in the interest of the PAA to maintain a fair and accurate record of the process. Chronological sheets are a useful way of indicating the steps of the process, particularly as time limits are involved.

²³⁵NEA, Section 23BB(4) read with EIA Regulation 17.

²³⁶EIA Regulation 18.

²³⁷NEA Section 23DD read with EIA Regulation 15.

²³⁸The rules of natural justice demand that the respondents to the appeal should also be heard. Those who have made comments and participated in the hearings must also be heard by the Secretary. Failure to do so would open the decision in appeal to be quashed for breach of the rules of natural justice. The finality given to the Secretary's decision will not protect it from being reviewed by the courts on the ground of illegality or failure to comply with natural justice or patent lack of jurisdiction.

In addition, all process documents such as the PI, scoping minutes, additional information, TOR, IEE/EIA (together with all referenced material and annexures), evaluation of IEE/EIA for compliance with TOR, public notices, public comments, notes and transcripts of public hearings, proponent's responses, evaluation of responses and comments, approval decision and conditions, reasons for approval/refusal, public notice of approval, notice of refusal, appeal, submissions in appeal, notice to appear and appeal decision with reasons should form the basic records. Additionally, correspondence relating to the process should also be part of the record.

It is arguable whether this record is in the public realm or not. The better view is that as the whole process is designed to be transparent and participatory, the record should be in the public realm. The PAA should keep this in mind at all times. Any indication on the record that there has been an abdication of discretion or statutory power or that there has been dictation from unauthorised agencies could vitiate proceedings. For this reason the PAA must take precautions to keep the record clean.

10. POLLUTION LICENSING PROCESS

With the 1988 amendments to the NEA, an environmental pollution licensing system was introduced with the CEA as the apex licensing authority²³⁹. Two new parts were added to the NEA, one dealing with environmental protection (licensing) and the other with environmental quality (standard setting, pollution offences and judicial proceedings for violations and other remedies)²⁴⁰. A legal analysis of the new provisions manifest serious failures in conceptualising the pollution licensing and standard setting functions of the regulations. The language is loose, in many instances redundant, repetitive and confusing. The resultant position is not an enviable one either for the regulatory authorities or for the regulated, and far less for an environmental lawyer.

To begin with, there is some confusion as to whether standards set operate independently of licensing or whether they become operative through licensing. The problem of prescribing standards behind closed doors has not been addressed either.

The standards currently prevailing have been established without any consultation either with NGOs, or industry or other regulatory agencies.

²³⁹National Environmental (Amendment) Act 56 of 1988.

²⁴⁰NEA, Parts IVA and IVB.

A general prohibition has been introduced against the discharge, deposit or emission of **waste** into the **environment** which will cause **pollution** except--

1. under a licence issued by the CEA; and
2. in keeping with standards/criteria established under the NEA²⁴¹.

Three keywords need to be understood in the licensing scheme.

ENVIRONMENT

The term "environment" was first introduced into the NEA when it was originally enacted in 1980. No review was undertaken during the 1988 amendments. The term has been defined as "the physical factors of the surroundings of human beings, including the land, soil, water, atmosphere, climate, sound, odours, tastes and the biological factors of animals and plants of every description"²⁴². The question of whether the psychological impacts of a project such as stress etc. are within this definition or not has been settled in the U.S. in the affirmative²⁴³.

WASTE

The term "waste" has received an inclusive definition as "any matter prescribed to be waste and any matter, whether liquid, solid, gaseous or radioactive, which is discharged, emitted or deposited in the environment in such volume, constituency or manner as to cause an alteration of the environment"²⁴⁴ (emphasis added). The NEA contemplates two types of waste:-

1. any matter which is by regulations prescribed as waste;
2. other matter which by virtue of its volume, constituency or manner of discharge causes an alteration of the environment.

No regulations have been made yet prescribing waste matter that should be treated as such under the NEA. It is only the second limb of the definition that would operate at this point of time.

²⁴¹NEA, Section 23A.

²⁴²NEA, Section 33, definition of "environment".

²⁴³ These judgements may not be applicable in Sri Lanka.

²⁴⁴NEA Section 33, definition of "waste".

Inherent in the second limb of the definition is the notion of "carrying capacity" of the environment. If a too literal view is taken of this part of the definition, one ends up with the equation that any discharge, however small the volume be, will "alter" the environment. It is therefore suggested that a liberal construction harmonious with the intent of the statute be adopted. There are some inputs into the environment that can be absorbed and assimilated by the environment through its natural processes.

However, as the volume, or the constituents or the manner of discharging an effluent increases or changes, a point is reached when the environment can no longer carry out its natural function of absorption and assimilation. This saturation point is often equated by ecologists to the minimum sustainable level of the existing environment.

The carrying capacity of water bodies are often represented by an ambient standard as against a discharge standard. The former stipulates a measurable standard which if complied with for that particular segment of the environment, will sustain. If an ambient standard is exceeded, the environment would begin to show adverse changes. It is suggested that the second limb of the definition imparts the concept of "ambient standards" related to the concept of "carrying capacity". Thus a discharge would be treated as waste under this limb only if it alters the carrying capacity of the environment or affects ambient standards. While this is easily argued, the concept is more difficult to translate into practical scientific standards and measurements and apportionments among several polluters of the same environment.

Waste might also be treated as such when its "manner" of discharge (as opposed to the volume or the constituents) alters the environment. The manner of discharge could alter the succession of an ecosystem, or introduce new limiting factors into it, or interrupt its energy flow or cause a chain reaction. Cooling water discharged above ambient temperature could cause such impacts as could the creation of a cumulative obstruction to drainage by collecting solid waste. These elements are more amorphous and require detailed scientific study before a conclusion can be drawn.

Given the very limited capacity of the CEA to undertake such studies, and given the high cost and time involved, it is highly desirable that the CEA should undertake an immediate study to identify as many of the potential substances (industrial effluent, municipal sewage etc) that should be named as "waste" for the purposes of the NEA.

POLLUTION

The third term in the NEA that requires a close look is the term "pollution" which is defined as "any direct or indirect alteration of the physical, thermal, chemical, biological or radioactive properties of any part of the environment by the discharge, emission or the deposit of wastes so as to affect any **beneficial use** adversely or to cause a condition which is hazardous or potentially hazardous to public health, safety or welfare or to animals, birds, wildlife, aquatic life, or to plants of every description"²⁴⁵.

The definition of pollution has been tied up with those of "waste" and "beneficial use". The term "beneficial use" means "a use of the environment or any portion of the environment that is conducive to public benefit, welfare, safety or health and which requires protection from the effects of waste discharges, emissions and deposits"²⁴⁶. The term is used to signify those uses of the environment which benefit the public, its health, safety and welfare and which uses need to be maintained unaffected by the effects of waste. The definition appears to imply the existence of ambient standards that must be fixed by reference to the public uses of the environment. Several types of uses are mentioned and made referable to health, safety and welfare. To illustrate, take the case of air in Colombo 2. The use of air in Colombo 2 by the public is conducive (nay even essential) to public safety, health and welfare. If the use is to be protected from the effects of waste, then the quality of the air must be decided upon by reference to the "use" to which the public are putting it, namely to breathe.

It is suggested that the term "beneficial use" merely imparts the concept of ambient quality standards, but goes a step further and requires that the standard be fixed by reference to the "use" to which the public are putting that segment of the environment. Thus in the case of a water body, it would be necessary to first determine the "uses" to which the "public" are putting the water body. This may be for drinking, bathing, irrigation, swimming or industry. The use would determine the standard that needs to be adopted to protect the water. If the water is used for drinking, the standard will have to fix high ambient standards compatible with potability standards. If the uses are for industry (say cooling water) then the standard could be lower. The term allows regulators to identify the criteria that should govern standard setting. These criteria should be fixed from the reference point of "public uses" and not from any other reference point such as uses for aquatic life etc. Such non-human factors may be relevant under the classification of "public benefit", but each case must be argued and justified on its own facts and merits.

²⁴⁵NEA, Section 33, definition of "pollution".

²⁴⁶NEA, Section 33, definition of "beneficial use".

To return to the concept of pollution under the NEA, it would be useful to segment the definition into different limbs:-

1. direct/indirect alteration of any part of the environment by waste; and
2. such alteration must adversely affect beneficial use of the environment; or
3. the alteration must cause a hazard or potential hazard to the public, fauna or flora.

The first limb of the definition controls both the second and the third limbs. The second and the third limbs are either/or propositions. If the first part of the limb is taken in conjunction with the definition of waste, two ideas emerge:-

1. waste named as such under the NEA will be treated as giving rise to pollution only if it alters (exceeds the carrying capacity) of the environment;
2. other waste would be treated as giving rise to pollution where it exceeds the ambient standard or by its manner of discharge alters the environment.

Manifestly the second idea is concomitant with the first limb of the definition of pollution. The first idea, however, re-imposes upon the named waste if it "alters" the environment. Even in respect of named "waste", ambient standards would therefore be required. Thus, to begin with, pollution legally occurs only where waste directly or indirectly causes an exceedence of the carrying capacity of the receiving environment (causes a change that leads to an exceedence in ambient standards). Proof of these matters is very difficult and scientific measurement and apportionment constitute an expensive, time-consuming and laborious task. Given the current capacities of the CEA and other research instituti.c.s, the NEA pollution definition becomes unworkable.

If the second limb of the definition is examined, it would be seen that inherently the ambient standard for those parts of the environment which are "used" by the public, must be set by reference to human uses to become applicable at all. The third limb imparts the idea of an end of the pipe dischrge standard, a standard which is fixed by reference to hazards to public health and safety and by reference to hazards to fauna and flora (which- ever is higher).

The total impact of this definition is to require either an ambient standard (fixed by reference to human uses) to be violated or both, such ambient standard and a discharge standard fixed by reference to hazards to humans, fauna and flora to be violated in order that "pollution" might be proved. The definition thus makes enforcement a nightmare and excuses for non-enforcement readily avaiable.

Ambient quality standards have not been promulgated and in their absence prosecutions for pollution under Sections 23H, 23J, 23M, and 23P remain in the realm of imagination.

For the same reasons, the CEA's and the Magistrates Courts' power to rein in delinquent polluters and licence violators and call them to account remains inoperative. Apart from citizen suits to enforce standard setting or licence violations, no enforcement mechanism outside the CEA exists. The EPL provisions of the NEA will, apart from the paper work of issuing, renewing and suspending the EPL, remain a dead letter.

EPL PROCESS

All is not lost however. Discharge standards have been fixed for some industries and natural bodies by regulations (EPL regulations)²⁴⁷. From 1st July 1990, an EPL is required for the discharge, emission or deposit of waste into the environment²⁴⁸. The CEA issues these licences, but has delegated the power to the GCEC in respect of facilities situated within the GCEC areas of authority.

Further delegations are planned to local authorities in respect of low and medium polluting industries. Delegation and supervision of delegation are pressing needs as the CEA does not have the capability of administering the EPL scheme islandwide and approaching the CEA in Colombo is inconvenient. However, delegation has its own problems. The delegation must go to agencies equipped to handle the EPL scheme and it must be limited to the capability (scientific and administrative) of the agency. For these purposes, it is of vital importance that an immediate study be carried out to assess the basic needs of the EPL scheme, viz-a-viz the scientific requirements, administrative requirements and decentralization. The study must specifically address both the needs of pollution control, the severity of the problem, the needs of industry (of all classes), the areas of specialization and problems (scientific know-how at different levels, and problems of siting, waste treatment etc) as well as the capabilities of ground level institutions to administer the different segments of the EPL scheme.

The rationale for the study is to devise an EPL scheme that meets the needs of industry, public and institutional capability without compromising environmental protection. This may result in the identification of some local authorities with capacity to receive the power of delegation while others may not be qualified.

²⁴⁷ National Environmental (Protection & Quality) Regulations, No. 1 of 1990, published in Gazette 595/16 of 02.02.1990.

²⁴⁸ NEA, Section 23A read with the EPL regulations.

There may be situations where one local authority may be able to administer only a part of the EPL scheme (such as receiving and delivering EPL applications--a post box operation) while another may be capable of basic evaluation of EPL applicants against set lists of pollutants. Some local authorities²⁴⁹ may be able to undertake the full range of regulatory activities of the EPL scheme. **What is dangerous at this stage is to enter into generalised delegations of any kind (perhaps excepting a post box operation) to other agencies without a thorough evaluation of the needs of the EPL scheme and the capabilities of the receiving agency. What is recommended is a selective delegation tailor-made to fit each receiving agency and adjusted to meet public and industrial needs.**

The EPL process begins with the polluter making an application on a prescribed form to the CEA²⁵⁰. The application form asks vital questions from the applicant about the operation and its constituent elements as well as about discharges, energy use, land use etc. An examination of a sample of applications received at the CEA demonstrates that the tendency is for applicants not to bother to fill in the data and answer the questions. The CEA is also in the habit of accepting these incomplete applications without rejecting them outright for failure to complete. The CEA then embarks on an inspection of the site or facility. Inspections are sometimes delayed due to the lack of personnel at the CEA. Notwithstanding such delays, there are selective cases in which the CEA conducts site inspections within 24-72 hours of receiving the application.

This is clearly due to political and other pressures brought upon the CEA and its staff by the applicants. As a result, the process gets skewed and loses objectivity. It is suggested that inspections should be carried out strictly in accordance with the chronology of applications. In exceptionally urgent cases (which are difficult to imagine), the applicant must be made to pay a high fee for special inspection teams and as a penalty "for breaking the line".

Before inspection, the CEA also calls for additional information, particularly where the applications are incomplete. The EPL scheme is administered by a Director (Environmental Protection) who has a small staff. There is no inspectorate within the CEA adequate to meet the needs of the scheme. A large amount of administrative time is spent on calling for additional data. Much of this work can be reduced if the burden is shifted to the applicant to complete the EPL application properly.

²⁴⁹Such as the Colombo Municipal Council which has well equipped laboratories with trained personnel.

²⁵⁰The form is included in the EPL regulations.

There is no reason why public funds should subsidise industrialists who cannot supply the basic information required for the EPL. If in doubt, an industrialist should be able to resort to a consultant, pay his/her/their fees and fill up the application properly. There is no reason why the CEA should be doing this for them. The EPL regulations provide for rejection in the case of false or incomplete applications. The rule should be applied.

Usually, after inspection, the CEA issues an EPL with conditions where the facility does not have pollution problems or the problems can be solved quickly. In other cases, the CEA calls the applicants for discussions which relate to installation of pollution control machinery etc⁰ and setting time limits for compliance. At the end of these negotiations, an EPL is issued and a time-bound program is included as a condition.

These proceedings can be protracted partly due to the lack of staff at the CEA, partly due to obstinacy on the part of industry, partly due to political and other pressure, and partly due to investigations and process changes which the industrialist has to get from another agency like the CISIR²⁵¹. Once again, there are selected cases in which all these are bypassed for political and other reasons. The CEA appears, however, to be relatively free of corruption compared to other agencies such as the Forest Department.

An examination of some EPLs issued manifest serious problems with the scheme. The lack of expertise at the CEA shows up. The conditions included are superficial and vague. These become problematic in enforcement and monitoring. Even where standards are included in the EPL, monitoring for compliance remains in the realm of the "never done". Even when the occasional sample is obtained and analysed, no enforcement action is taken against the delinquent.

The compliance rate is very poor. As much as 4606 industries were identified as requiring an EPL²⁵² while only 1489 have applied and, of these, only 433 applications have been processed in about one year. Compliance with the EPL requirement is 32%. The rate of processing is one per day. No enforcement action has been taken against failure to apply for the EPL.

²⁵¹Ceylon Institute of Scientific and Industrial Research.

²⁵² Survey of Stationary Pollution Sources, Vol.II. CEA, September 1989, by Resources Development Consultants, Colombo.

SUGGESTED ENFORCEMENT STRATEGY

Enforcement is basic to the EPL scheme. To begin with, polluters must be compelled to make the EPL application to the CEA or the GCEC. It is this procedure that triggers the process. Prosecutions on this count should have been made simple. However, the foregoing analysis demonstrates the legal complications that can arise in proving "pollution".

Fortunately, a certificate issued by the Director General of the CEA²⁵³ serves as prima facie proof of the pollution stated therein. This mechanism shifts the burden of displacing the presumption of pollution to the polluter. It relieves the CEA of an otherwise onerous burden of proof. The problem, however, is that the effect of the certificate is limited to prosecutions under Part IVB (Environmental Quality) and does not extend to prosecutions under Part IVA (Environmental Protection) where the EPL scheme is provided for. What is therefore suggested is a prosecution under Part IVB for "pollution" without a licence.

Legally, it would be necessary to amend the NEA and to extend the applicability of the certificate to Part IVA as well. Once this is done, it would be possible to prosecute for "failure to apply for a licence"²⁵⁴. Additionally, the burden of keeping pollution records must be incorporated into the EPL. These records must be available to the CEA and must be subjected to regular audits by independent consultants.

If records are maintained and audited, then enforcement and monitoring become easier. CEA monitoring would be confined to those cases where suspicion of fudging records exists or where ambient quality is at stake. Enforcement can also be extended to citizens through citizen suits. The enforcement is simply proof taken from the self-monitoring records. The only way that these records can be kept clean and accurate is by regular independent audit and by surprise monitoring. Fudging of records should carry heavy penalties including cancellation of the EPL and closure. Incentives for good, honest records duly certified as such can also be provided.

Standard setting is another urgent need. Standard setting must be carried out through a transparent and participatory procedure. It is suggested that the CEA through public notices announce that it will set a particular standard and that representations will be entertained. On conclusion of this step, the CEA should prepare a draft standard and hold hearings or open it for comment.

²⁵³under Section 23X of the NEA.

²⁵⁴NEA, Section 23A read with Section 31.

Where the standard is hotly disputed, negotiations must be conducted to reconcile the dispute. Standards thus fixed are probably more likely to be followed and would probably be more realistic from the point of economic feasibility as well as enforcement and monitoring. Alternatively, the CEA could request the Bureau of Sri Lanka Standards to set the standard under its own statute²⁵⁵.

The Bureau has followed a fairly participatory and transparent procedure. A committee of experts is established (often with NGOs, industry, and academic participation). Representations are considered and a draft standard issued for public comment. The final standard is not compulsory unless the Minister decides so. The CEA can then take the standard and enact it through its own regulations. This is how a few of the existing standards were fixed.

Once issued, an EPL is renewable annually. This causes an unnecessary administrative burden on the CEA²⁵⁶. The NEA should be amended to provide for flexible time schedules for renewal. Renewal should be fixed by reference to the time-bound program agreed or be industry/waste/receiving environment-specific. An appeal is available to the Secretary, Ministry of Environment against EPL denials, cancellations and suspensions.

There is a clear lack of transparency in the EPL process. Hitherto the EPL has been a matter for industry and the CEA/GCEC behind closed doors. The public finds it almost impossible to examine and take copies of EPLs issued to industry which might be affecting them nor are they allowed to see inspection or monitoring reports. Very often the neighbourhood community is left out of negotiations about the EPL time-bound program. As a result, several actions are pending before the Magistrates Courts where the community is seeking closure of or regulatory orders against industries which have EPLs or CEA site clearance. In other cases litigation has ensued against industries who do not have an EPL or who are acting in violation of EPLs because the CEA does not undertake enforcement although it does not have problems in threatening it.

CITIZEN LITIGATION OVER POLLUTING INDUSTRIES

As there are no citizen suit provisions in the NEA for EPLs, litigation is almost always under the public nuisance provisions of the Criminal Procedure Code²⁵⁷. In a case filed against Keang Nam which operates a quarry in Kurunegala for road building purposes, the CEA issued a site clearance, but did not give an EPL.

²⁵⁵Bureau of Sri Lanka Standards Act 38 of 1964.

²⁵⁶NEA, Section 23B(1)(c).

²⁵⁷Criminal Procedure Code, Section 98 et seq.

The application for the EPL is almost unfilled. Affected community members have obtained an interim injunction and a conditional order for closure. The industry argued that the court had no jurisdiction as its power was ousted by the NEA. The court ruled against the industry and the matter is now in appeal. In another case, filed in Colombo, the industry was emitting Methyl Methacrylate, a toxic gas which is a by-product of plastic manufacture. The CEA had not granted an EPL and had issued ultimatums to close and relocate.

However, the CEA took no action to enforce its own order for over two years.

In a third case yet pending before the Gangodawila court, the CEA refused to issue an EPL to a textile industry which was polluting ground water with dyes and causing noise pollution with over 10 powerlooms. It instructed the local authority to deny planning permission. However, no enforcement action was taken and pending the citizen litigation, political pressure on the local authority allowed the industrialist to get planning permission.

In a fourth case also involving a quarry in Matara, the CEA has neither issued an EPL nor site clearance. The industrialist has not applied for any EPL at all. The CEA when notified of the problem merely referred it to the Pradeshiya Sabha for action. The Director General has filed an affidavit in the Supreme Court stating that the CEA cannot enforce the EPL regulations against quarries as no relevant standards have been specified. Yet the CEA has granted site clearance to Keang Nam and even entertained an EPL application for this quarry. The GCEC has issued an EPL for a quarry in Malwana with conditions including noise levels and standards. This demonstrates a total misunderstanding of the EPL scheme and a high degree of discriminatory application of the rules as well as a lack of consistency between the CEA and the GCEC. Several similar cases are also before the newly established Mediation Boards.

IDENTIFIED EPL NEEDS

The upshot of the foregoing discussion on EPL is that there is--

1. an urgent need for enforcement of pollution laws;
2. a need to train staff in the institutions regarding the conceptualisation and details of the EPL scheme;
3. a need to issue guidelines on EPL to agencies;
4. a need for transparency and participation in the EPL process;
5. an urgent need for revision of the NEA regarding EPLs;
6. a need to provide for incentives for pollution control;

7. a need to provide for self-regulation and record keeping;
8. a need to provide for auditing records;
9. a need for citizen suits for enforcing EPLs;
- 10 a need to study institutional capacity and public needs and to devise an EPL delegation scheme consistent with them; and
11. an urgent need for transparent and participatory standard setting and revision, including setting of ambient standards.

11. MAJOR ISSUES AND CONCLUSIONS DRAWN FROM THE CASE STUDIES

The following major issues and conclusions can be drawn from the three case studies in Section A of this report:

1. Failure to integrate environmental evaluations and costs into development planning from the inception resulted in the project being rendered economically costly and/or environmentally unsustainable;
2. Absence of informed decision making resulted in failure to consider environmental impacts, alternatives to siting, project design, the "no action" alternative and the worst case scenario;
3. The authorities have failed to utilize existing statutory and permit approval processes to receive environmental information, test its adequacy and accuracy, and obtain participation of affected and concerned people;
4. Lack of transparency in the decision making process resulted in opportunities for careless use of information, corruption, or political interference;
5. Costs of environmental impacts, or externalities, were borne by the community and the state.

12. HOW PROJECT RESULTS COULD HAVE BEEN CHANGED: EIA/EPL APPLIED TO THE THREE CASES

At the end of Section A the three case studies were discussed and two scenarios of what happened and what should, legally, have happened were developed. Reasons for the failure of the existing processes were also outlined. The following is a brief discussion of what ought to happen under the new EPL and the EIA procedures if the three projects were proposed today.

All three cases would require an IEE/EIA, because they fall within listed Prescribed Projects (PPs)²⁵⁸. It can be presumed that, since the probable impacts of these three projects are "significant," a scoping meeting would quickly determine that an EIA (not simply an IEE) was necessary. The scoping process would also determine the major issues to be addressed. Most probably, affected communities and NGOs would be involved in the scoping process as well as other relevant government agencies.

The EIAs would be checked for adequacy against the TORs and opened for public comment. Public comment is likely to highlight defects in reasoning, justification, data and information on the projects. In the case of Embilipitiya, a change of site and treatment process would be likely, or, at the very least, proposed for further consideration. The Samanalawewa project might not receive approval if engineering and community issues received the attention EIAs normally provide, and the Kirinda harbour project would be likely to be subjected to analysis of alternative sites and wave climate studies prior to design.

Additionally, the Embilipitiya mill would be regulated through an EPL with standards for discharges into inland waters being enforced as conditions. Many of the pollution issues would be addressed through the EIA process and conditions in the EPL would have to be consistent with the project approval conditions.

In the case of the Kirinda harbour, the CCD would be the agency acting as the PAA, and it would have to integrate its own permit procedure into the decision making process. Thus a permit under the CCA would be issued only after an EIA process. The rehabilitation would also be within the EIA regulations and would require the normal process described in Section B of this report.

If the EIA and EPL requirements were to apply to these projects if proposed today, it is likely that most of the issues identified in the case study discussion would be addressed. Yet some of the problems identified in Section A would not have surfaced because the EIA process still has problems of its own. Agencies and proponents still need capabilities to gather, analyze and integrate data, and to screen important from unimportant information. Community groups and NGOs need skills to respond effectively to EIAs. Notwithstanding the lack of capacity to respond adequately, all three projects would be highly likely to elicit relevant comments from NGOs.

²⁵⁸The Embilipitiya Paper Mill had a production capacity of 15,000 tons annually (or 57 tons approx. per day), given 260 working days annually. This brings the mill within item 9.1 of Schedule IV of the EIA regulations. Though the study does not make this clear, the mill site has the Kachchigala Area as a boundary and is therefore within item 3 of Schedule V read with items 14.1 and 14.2 of Schedule III of the EIA regulations. The mill is also caught up within the EIA regulations under items 17 of Schedule II. The Kirinda Harbour project is within items 6 and 14 of Schedule II of the EIA regulations. The Samanalawewa hydro electric project is within items 1, 3, 7, 8, 10, 12, and 15 of Schedule II of the EIA regulations.

In the Embilipitiya case, the forum created under the SLO or the Irrigation Ordinance would have to be integrated with the EIA process. Thus two permitting and approval processes could be combined with useful inputs through the EIA process. Both would benefit from the data and information as well as from the participatory and transparent approach. Both would also have the benefit of informed decision making.

13. INTEGRATING EIA/EPL INTO DECISION MAKING RELATING TO DEVELOPMENT PROJECTS

Integrating the EPL process with other statutory and administrative procedures already in place requires delegation by the CEA. Only the BOI (formerly GCEC) has been delegated this authority so far and, as such, the BOI is the only agency in a position to integrate both the EPL and the EIA²⁵⁹ into its own planning and approval processes. The other agencies named as PAAs in the EIA regulations would be in a position to integrate the EIA processes into their own development decision making.

The Ministry of Policy Planning and Implementation (MPPI), which is a PAA, should be able to enlarge its existing procedure to integrate the EIA process. As described in Section B of this report, the NPD, which functions under the MPPI together with the Ministry itself, already has a sketchy IEE/EIA procedure. On the ground and in practice, the procedure does not work in the way it is meant to. Nor does it have the degree of transparency and participation envisaged in the EIA process under the NEA. To this extent the MPPI will have to amend its existing process.

The Ministry of Lands, Irrigation and Mahaweli Development (MLMD) is an agency with a large mandate covering major natural resources. The Department of Wildlife Conservation, the Forest Department and the Land Commissioner's Department come under the the MLMD. The MLMD is also responsible for the administration of several far reaching resource regulation laws including the State Lands Ordinance, the Land Development Ordinance, the Land Reform Law, the Land Settlement Ordinance, the Forest Ordinance, the Fauna and Flora Protection Ordinance, the Mahaweli Authority Law and the Irrigation Ordinance. As seen in Section B the several land statutes described here do create forums for decision making and provide for mechanisms for planning, regulation and approvals in one degree or another. What is required is the integration of the EIA process into these existing processes.

The undermentioned hypotheses will help to illustrate the point:

1. When transmission lines are to be drawn over a national park, the Director of Wildlife must grant a permit to the CEB under the Fauna and Flora Ordinance.

²⁵⁹The GCEC is one of the PAAs named in the EIA regulations.

In all likelihood, an EIA would have to be called for either because the transmission lines themselves or because the power generation project with which it is related come within the EIA regulations. The Director of Wildlife Conservation should be involved in the scoping and the issue ought to be addressed in the TOR. The decision relating to the permit can then be based on the data and the information contained in the EIA (which would ordinarily not be available) and follow the EIA approval and conditions.

2. A decision to lease state land for a major tourist hotel project can be integrated with the process that requires public comments to be called for prior to leasing. If the tourist hotel requires an IEE/EIA then the decision to lease and the public comment period can be made to coincide with each other and the decision on the lease can follow the IEE/EIA decision as well as benefit from the data and the information given in the IEE/EIA.
3. Decisions to grant permits for logging in natural or plantation forests can be integrated with the IEE/EIA process where the area involved is more than 1 ha²⁶⁰. Approval conditions can then be included in the logging permit as well as in the project approval strengthening the regulation and the enforcement capability.

Such integration will have several benefits:

1. It relieves the regulatory agency of duplicating administrative processes and maximises the available manpower capacity and optimises process costs;
2. It is less burdensome to the regulated entity since, as far as they are concerned, there is only ONE integrated IEE/EIA process which results in project approval under the NEA as well as other permits and approvals under other statutes administered by the same PAA. Still better would be the integration of all permit decisions under the administering authority. This is possible if scoping is developed into such an integrating process (i.e. all permit agencies should be made part of the scoping) and should await the IEE/EIA and hearings to make their own decisions on permits.
3. It makes other permit/approval decisions more transparent and participatory and dependent on the outcome of the IEE/EIA process. In turn this gives the public an opportunity to hold the agencies accountable as well as to contribute with appropriate inputs.

The Ministry of Power and Energy, the Ministry of Transport and Highways, the Ministry of Industries, Science and Technology and the Ministry of Housing and Construction have no statutory approval/permit procedures within their purview.

²⁶⁰EIA regulations item 3 of Schedule II.

The Ministry of Power and Energy does have the power to license the generation, distribution and supply of electrical energy, but this provision will remain a dead letter till this sector is diversified to the private and cooperative sectors. If and when the function is so diversified, the Ministry can and should integrate the IEE/EIA process into the licensing process. In the case of the other Ministries, the IEE/EIA will have to become a new process in the day to day decision making on highway, industrial and major housing projects. In all these cases, the proponent is likely to be a government agency such as the Road Development Authority, or the National Housing Development Authority or a private industrialist. There is a special need to train the staff within these Ministries (including staff at the level of decision makers) about the IEE/EIA process.

In the case of industries, it may also be desirable, after conducting the study recommended above, to delegate authority to the Ministry or some agency under the Ministry of Industries to issue EPLs.

The Ministry of Fisheries and Aquatic Resources is also named as a PAA. The CCD was under this Ministry, but is no longer so. The Department of Fisheries, the Marine Pollution Prevention Board (MPPB)²⁶¹ and the NARA are within its purview. The MPPB and the Department of Fisheries are both involved in approval/permit procedures and it is in their interests to integrate the IEE/EIA process into decision making. A detailed analysis of how and at what points such integration should take place is beyond the scope of the present study though the principle is applicable.

The UDA, the GCEC and the CCD are all involved in planning, permitting and regulation. So the integration of the EIA process is much easier. Superimposing the CCA with the NEA is straight forward. In the case of the UDA and the GCEC, permits for new industrial siting and approval for zoning and new industrial investment should trigger the IEE/EIA process.

The days of the Department of Geological Survey (DGS) are numbered, because its major regulatory functions would be taken over by a Mining Bureau²⁶². The new Bureau would have the power to survey, plan, permit and regulate mining and quarrying in Sri Lanka. When the Bureau is established, the DGS would have to be removed as a PAA and the new Bureau instituted in its place. The new bill does state that the NEA will apply to mining decisions, but leaves out the application of the IEE/EIA procedure. Environmentalists and the CCD are campaigning for inclusion of provisions that would bring the activities of the Bureau within the NEA and the IEE/EIA process. Even otherwise, a new gazetting of EIA regulations would include the Bureau's activities. Given the draft regulatory authority of the Bureau, integration of the IEE/EIA process is possible subject to training and capacity building.

²⁶¹Established by the Marine Pollution Prevention Act.

²⁶²A controversial bill is before Parliament at this moment.

Prior to the EPL/EIA regulations being drafted, the CEA commissioned a study in 1987/88 to survey the existing permit/approval procedures with a view to integrating the IEE/EIA and the EPL processes into the decision making process. The study was never made public, nor does it appear to have had an impact on the draft regulations. Perhaps it would be useful for drafting guidelines for the IEE/EIA process. The success of the EIA/IEE process would depend very much on the degree of integration with each PAA's own existing planning, regulatory and permit functions. Each PAA must identify the steps in its existing decision making process and evolve a program whereby the IEE/EIA decision and process schedule fits in comfortably with its own. Adjustments may be required in the existing process schedules or in the IEE/EIA schedules without compromising statutory requirements of either. For this reason, the setting of time limits in the EIA regulations is inconvenient, but as stated earlier, must be looked upon as flexible, directory time lines only.

It is recommended that a legal and institutional expert be contracted to study the existing decision processes of PAAs named in the EIA regulations and to draw up guidelines and procedural manuals for each PAA which would facilitate the integration process.

The leasing of state land is controlled by the existing procedure under the SLO. This includes a survey of the land, negotiation with the Land Commissioner, a public notice stating the preferential terms of the lease, calling for objections, and the preparation of a draft lease agreement for signature. The final decision to lease is taken after the public objection period, which is usually six weeks (more than the 30 days set out under IEE/EIA procedure)²⁶³. However, in practice, the decision has often been made before this point is reached and public notice is only a formality. Manifestly, this is not the intent of the law.

In the present problem, the IEE/EIA can be integrated by coordinating its steps with those of the leasing process, as shown below:

<u>IEE/EIA STEP</u>	<u>LEASING STEP</u>
1. PI	Request for land
2. Scoping	-
3. TOR for IEE/EIA	-
4. IEE/EIA	Alternative land identification
5. -	Survey of the site recommended in the IEE/EIA

²⁶³There is nothing in law to prevent the extension of the 30- day period to six weeks though reducing it to less than 30 days would be illegal.

- | | | |
|----|-------------------------|-----------------------------------|
| 6. | Public notice (6 weeks) | - same - |
| 7. | Decision on approval | Decision on the lease |
| 8. | Conditions | Conditions in the lease agreement |

Similar time schedules should be worked out for all PAAs and their decision processes. This is a basic need to ensure that integration takes place. Failure to do so will result in the IEE/EIA process being treated as just another process with the consequence that crucial decisions are likely to be made before the IEE/EIA is carried out. In turn this would negate the intent of the process and will not improve the quality of the decision making for the environment.

Appendix A

THE HUMAN AND TECHNOLOGICAL DIMENSION OF DEVELOPMENT PROJECTS: THE EMBILIPITIYA CASE

"We don't know why the authorities are not allowing us to use this water in our paddy fields. It is a crime. This water although said to be polluted is good. We can certainly use it in our paddy fields which always face water shortages" exclaimed Mr. Punchi Banda, a 50-year old farmer in the area.

Although the black liquor to which Mr. Punchi Banda referred is an eternal problem for the officials in the Embilipitiya Paper Mill, he and other farmers have uses for it.

"True, sometimes we can identify useful applications for waste but black liquor has detrimental effects on soil, particularly if used continuously," observed a top soil scientist. "Farmers don't know that." The use of black liquor in agriculture without any scientific basis will have long-term effects on the soil condition, an important resource on which the farmers depend for their livelihood.

The pollution from the plant can, in short, have beneficial effects, but there are limits. A good example is sodium build-up as shown in Table 1.

TABLE 1

Characteristics of Soil Irrigated with Mill Effluent

Soil parameters	Plot 1	Plot 2	Plot 3	Permissible level
pH	7.5	6.0	7.5	6.5- 7.5
SAR	< 8	< 8	< 2	< 8
Ca 2+ (mg/100g)	24	15	12	-
Mg 2+ (mg/100g)	3.6	2.6	2.5	-
Cl - (mg/100g)	-	-	-	< 200
Cond. (us/cm)	0.75	1.5	0.5	< 1000

Plot 1: 10 years irrigated.

Plot 2: 5 years irrigated.

Plot 3: Control plot.

This case was prepared by Vasantha Siriwardhena, Deputy Chief of Party NAREPP/IRG, based on the technical report submitted to NAREPP/IRG by Dr. J.A.P. Mathes titled "Environmental Impact Study of Industrial Pollution at Embilipitiya Paper Mills". All names used in the case are hypothetical.

All case materials of NAREPP/IRG are prepared solely for teaching and training purposes and are neither designed nor intended as illustrations of correct or incorrect decision making.

The Area

Embilipitiya Paper Mill is located in the Southern Province of Sri Lanka and 160 km away from the capital city of Colombo. Geographically it is situated in the southeast dry zone of the island. Low average annual rainfall of 30 inches, dry weather and high day time temperatures averaging up to 30° C typify the climate to some extent. Flat terrain together with a vast extent of paddy land with man-made irrigation channels characterize the area. Beautiful seasonal changes from green blossoming young paddy fields in Maha (October-February) and Yala (April-July) to dry, brown, flat beds of the same in April and September are part of the inheritance. It is a fascinating land. Although the irrigation systems together with some large man-made reservoirs have altered the topography in the recent past, it still has jungles, forest and wildlife. Chena cultivation is still being practised. A few decades ago Leonard Woolf talked about almost the same area in his book *Village in the Jungle*. Now it is not like what it was those days.

"We are facing a lot of problems in the name of environmental pollution" said the Manager of this 250 ha. factory complex. He agreed that pollution caused by the factory is a big problem and that they have to do something. "It is our responsibility, but we are not the only ones responsible for the environmental degradation of the area." He is correct. Data provided in the report under reference gives us a fairly complex picture of socio-economic consequences caused by the environment and natural resource base degraded due to development activities.

Project History

In this tranquil, beautiful area a paper mill was built in 1977. At that time almost everybody welcomed it. It had well thought out objectives such as increased farmers' incomes, foreign exchange saving, self-sufficiency in paper etc. The National Paper Corporation of Sri Lanka commissioned M/s Sandwell, a renowned consultancy firm, to carry out a feasibility study prior to setting up the factory in 1969. Sri Lanka, then known as Ceylon, was only producing one third of its annual paper requirement through the only paper mill at Valaichchenai. In this background it was decided to set up an integrated pulp and paper mill, using rice straw as the main raw material for pulp manufacturing. This decision was well in line with the then government policy on development and industrialization, best utilization of local resources and import substitution. Table 2 shows the rice straw collection pattern envisaged at that time. At the present farm-gate price (as of December 1991) of straw farmers are likely to earn an additional annual income of Rs. 2,240,000/- by selling straw to the paper mill.

The Sandwell study went into all the key areas covering technical, financial, social and to some extent pollution control as well. The selection of a suitable site for the plant was a key issue. The two main selection criteria were the availability of nearly 2.9 million gallons of water per day and the procurement and transport of rice straw. An earlier selection of a plant site at Ambalantota involving drawing of water directly from the Walawe river was ruled out when investigations revealed siltation and salinity problems caused by the impoundment of the Walawe Ganga.

After careful consideration of the availability of raw material and water for the plant, the present site was proposed by the study. It was based purely on economic grounds. Water for the factory is now taken from Candrika Wewa through a 6400-foot pipe line.

The financial forecast also indicated an attractive picture for the investment. Gross and net return on investment were found to be 17.2% and 10.4% respectively. Annual foreign exchange savings were computed to be nearly 20.4 million rupees. Table 3 provides some information on financial performance of the factory, and also shows that at present (December, 1991) the factory procures only 10,000 metric tonnes of rice straw per annum. The rest of the pulp is a mixture of imported and local wood pulp derived from waste paper. At the present level of collection, farmers earn about Rs. 2,240,000/- in an year as stated earlier.

TABLE 2

Rice Straw Collection Pattern

Area	Acreage	Straw Output (Tons/a)	Expected collection	Value Rs. million
Uda Walawe region	63,000	35,000	19,000	4,290
Tissa region	24,000	14,000	8,500	1,880
Matara region	12,000	7,000	2,500	550
Total	99,000	56,000	30,000	6,720

TABLE 3
Financial Details

Item	Unit	Amount (Expected)	Amount (At present)
Annual paper production	tons	15,000	13,500
Annual sales revenue	Rs.	37,100,000	675,000,000
Annual production cost	Rs.	22,100,000	605,000,000
Gross profit	Rs.	15,000,000	70,000,000
Capital investment (excluding working capital)		87,200,000	503,072,000
Gross return on investment	Rs.	17.2%	13.9%
Annual depreciation	Rs.	5,900,000	30,000,000
Earnings before int. & tax	Rs.	9,100,000	40,000,000
Net return on investment		10.4%	8.0%

Socio-Economic Effects

There is clear evidence that the mill has greatly accelerated the economic development of the Southern Province. In addition to nearly 1200 direct employment opportunities the mill has provided, an equal number of indirect employment opportunities was also created, mainly for the people in the region. It also initiated a series of progressive improvements to the roads and other infrastructural facilities in the area. This economic development trend is clearly demonstrated by a sharp increase in land prices in the area. A socio-economic survey of the area has indicated that the land price in the vicinity of the factory is three times higher than that of the outskirts. As shown in Table 2, further social benefits were brought to the area as a result of increasing the farmers' incomes. However, contrary to the project objective of self-sufficiency in paper, now it has become a distant dream due to the heavy increase in the demand for paper products. At present Sri Lanka produces only 23% of its paper requirements.

Environmental Implications

After some time, problems started to crop up. The benefits were marred by losses and environmental damage. Environmentalists began to protest. They say the factory does not treat its effluent and, as such, it pollutes the whole area. Residents in Ambalantota complain that their water supply is contaminated by effluent from the paper mill. When contacted, the National Water Supply and Drainage Board which is in charge of the operations of Ambalantota town water supply, agreed that there are occasions on which they have to shut down the water supply due to effluent discharge from the factory.

"We have to bear untold hardships" said Mr. Serasinghe, a teacher in a nearby school and a long-standing resident of the area. "Our effluent treatment plant is not working now" admitted Mr. Abesinghe, the Factory Manager.

Authorities shift a part of the blame to the consultants. They maintain the view that the treatment system and the technology were proposed by the consultants. Effluent is not the only problem; there are air pollution and solid waste problems too. Table 4 constitutes a chart presented by a consultant at a recent seminar on industrial pollution, which gives details on pollution effects of the paper mill on the surrounding area. Addressing the seminar he said, "Still no one has studied the health implications of this pollution."

Development Issue

Authorities do not like too much publicity for pollution issues.

"Most of these things are raised by NGO people who are living in Colombo, not by the people who are here. What they want is development and we know their needs" said a local politician.

"Can we allow economic development to stop just because of pollution problems?" one industrialist argued. "After all, we have other more critical issues to resolve : poverty, unemployment etc. We've got to accept the fact that we are a developing country and we have to make a trade-off. Industrialization is very important for the economic development of the country."

Everybody agrees.

Technical Aspects

With a sigh of relief, Mr. Abesinghe sat down on an easy chair and tried to explain the factory process and what had gone wrong. He submitted a diagram explaining the process. "Ours is a wet caustic soda process mainly depending on rice straw as raw material. It was a logical decision. Otherwise we have to depend totally on wood pulp; unless we import wood pulp, we need nearly 6000 acres of forest area to meet our annual demand for pulp. I don't think it is possible to sustain this in real terms" he explained.

Unfortunately the black liquor problem is connected with the raw material usage. The black liquor produced by the process contains high amounts of silica which prevents the smooth and continuous operation of the chemical recovery plant. Further, the effluent, due to its high silica content, is not responding to the treatment process as expected. Table 5 gives the composition of the main raw materials used in pulp manufacturing. The consultants were aware of this fact but they assured success in the effluent treatment process. Based on this assurance, the management of the National Paper Corporation has constructed a massive effluent treatment plant at the factory, at a cost of Rs. 20 million, which is now idling. As a solution to this, but mainly to reduce the production costs, the factory has installed a chemical recovery plant (CRP) at a cost of Rs.120 million. but unfortunately, it did not respond because of the high silica content.

"Theoretically we have to first reduce the silica content in our waste water before doing anything else" the Factory Manager further said. "May be our foreign consultants were too optimistic or did not know exactly what to do." Anyway, this is a good lesson for the future. Table 6 gives some details about the effluent generated.

TABLE 4
Pollution Effects

Time Area	Short term reversible effects	Intermediate effects	Long term irreversible effects
Local	<p>Death of fish and plankton</p> <p>Low photo- synthesis due to decreased light transmission</p> <p>Avoiding reactions affecting fish</p> <p>pH changes</p>	<p>Accumulation of toxic substances in fish</p> <p>Bad taste</p> <p>pH change (benthic animals)</p>	<p>Sedimentation of solids e.g. fibres</p> <p>Formation of hydrogen sulphide</p> <p>Destruction of fish spawning grounds</p>
Distant	<p>Oxygen deficiency in water bodies</p> <p>Growth stimulation</p>	<p>Oxygen deficiency in sediment/ water interface</p> <p>Decreased light transmission</p> <p>Reduced photosynthesis</p> <p>Avoiding reactions</p>	<p>Accumulation of toxic mater in fish</p> <p>Bad taste (fish)</p> <p>Growth stimulation</p> <p>Persistent genotoxic substances in water</p>

TABLE 5

Composition of Raw Materials Used in Pulp Manufacturing

Component	Hardwood	Softwood	Straw
Cellulose	41%	42%	36%
Hemicellulose	39%	30%	37%
Lignin	20%	28%	12%
Ash	< 1%	< 1%	-
Silica	-	< 1	< 13%

TABLE 6

Pollution Characteristics of the Effluent

Effluent source	TSS(mg/l)	COD(mg/l)	BOD(mg/l)
Pulping	1870	800	450
Thicker and bleaching	960	650	360
Paper making	850	600	90
Composite effluent	1340	685	270

Present Effluent Disposal Method

There are known environmental impacts caused by the present disposal system of the factory effluent, mainly in the areas of rice and crop productivity, fish production, water supply and air pollution. The Factory Manager revealed that they are not treating the effluent at present. Instead they store the waste water in three large ponds and release it to the Walawe River when the water flow in the river is high during the rainy season.

"Earlier we were releasing this effluent without storing it but the Central Environmental Authority stepped in and asked us to comply with the regulations. We had no other immediate solution" he said.

No study has yet been made on the health impacts caused by this.

Future Options

Industrial pollution caused by the Embilipitiya Paper Mill was subjected to a great deal of research and study by researchers and scientists, mainly from the Ceylon Institute of Scientific and Industrial Research (CISIR). Dr. J.A.P. Mathes, Head of the Environmental Division of CISIR has recently carried out a study on Embilipitiya Paper Mills and its environmental pollution effects, funded by NAREPP/IRG. In his report he has suggested some remedial measures to reduce the pollution caused by the factory. All these suggested actions need additional investment plus an increase in operating costs. It is still not very clear what the best available economic options are. Some of the suggestions made by Dr. Mathes are :

1. Change in raw material composition,
2. Commissioning of the chemical recovery plant,
3. Waste water management,
4. Pulp recovery,
5. Rehabilitation of the effluent treatment plant, and
6. Use of treated effluent for irrigation.

The Embilipitiya Paper Mill stands out as the front-runner of Southern Province development. Once extensively damaged due to civil unrest in the country, the authorities were quick to repair the damage and commission it once again. Policy makers are in no doubt that industrialization is an essential component of the economic development process of the country.

APPENDIX B

TABLE 1*

(Vide Regulation 4 of the State Lands Ordinance)

<u>Designation of Officer</u>	<u>Description of the Instrument of Disposition</u>
1. President	Special lease under Section 6 of the Ordinance
2. Land Commissioner	Lease for a period not exceeding fifty years of the right to mine or gem in any crown land or in any land which has been disposed of by the Crown with a reservation of mining rights in favour of the Crown
3. Government Agent	Licence or permit to mine or gem in any crown land, or in any land which has been disposed of by the Crown with a reservation of mining rights in favour of the Crown, for a period not exceeding one year
4. Government Agent	Disposition for a period not exceeding five years of crown land in the charge of the Government Agent, other than a disposition referred to in item 1 or item 2 of the Schedule
5. General Manager of Railways...	Disposition for a period not exceeding five years of crown land in the charge of the General Manager of Railways, other than a disposition referred to in item 1 or item 2 of the Schedule
6. Chairman of the Ports Authority	Disposition for a period not exceeding five years of crown land in the charge of the Chairman of the Ports Authority, other than a disposition referred to in item 1 or item 2 of the Schedule
7. President or Land Commissioner	Disposition of crown land for any period not exceeding fifty years, than a disposition referred to in item 1 of the schedule

 * Adopted from Subsidiary Legislation under the Crown Lands Ordinance

Fig. 1.

LOCAL GOVERNMENT
Provincial Council (Provinces)

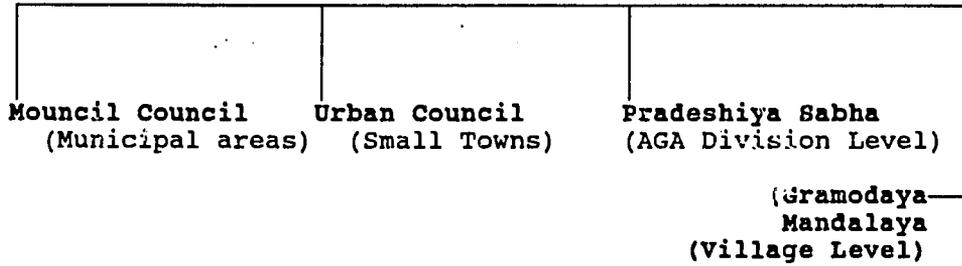


Illustration I

