Training Report no. 5 / 5

South Pacific Regional Environment Programme

Environmental Impact Assessment Training in the South Pacific Region

Meeting Report

Majuro, Marshall Islands
31 August - 4 September 1992

With technical and
financial assistance from the
Asian Development Bank (ADB),
United Nations Development Fund (UNDP),
United Nations Environment Fund (UNEP),
and the World Conservation Union (IUCN).

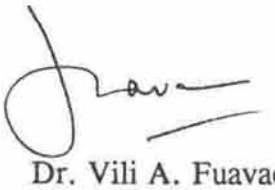
FOREWORD

It gives me great pleasure to provide an introduction to the Meeting Record for the Environmental Impact Assessment Training Course held in the Republic of the Marshall Islands. This course was the fifth in a series of EIA Training courses conducted by the South Pacific Regional Environment Programme (SPREP) in the Pacific Islands.

These courses address a fundamental issues for Pacific Island countries; that of how to successfully integrate environmental considerations into economic planning. Too often such considerations have been seen in a negative light, as a break on economic development.

Thankfully, this perception is changing and decision makers in the Pacific countries are increasingly aware of the need for careful and long term environmental planning. Environmental Impact Assessment is an important tool in bringing this about. It is important that EIA be applied in an appropriate manner in the Pacific. EIA must be relevant to the social and political systems in Pacific countries and it must be simple and easy to apply. It is not an academic exercise.

These EIA training courses build on the important work carried out by SPREP in the Pacific with the development of National Environmental Management Strategies. These Strategies are being developed through the RETA (Regional Environment Technical Assistance) project and the NEMS (National Environmental Management Strategies) project. These important projects are funded by the Asian Development Bank, the World Conservation Union (IUCN) and the United Nations Development Programme UNDP). I would like to thank those agencies for their generous support. I would also like to thank the United Nations Environment Programme (UNEP) for their generous support of this EIA Training Programme.



Dr. Vili A. Fuavao
Director
South Pacific Regional Environment Programme

Contents

1. Senior Officials Seminar

Opening

1. The Invocation was given by Reverent Balukne Johnny.

2. The Vice Chairman of the Republic of the Marshall Islands Environmental Protection Authority (RMI EPA) Board , Dr Masao Korean, welcomed participants to the Senior Officials Training Seminar on Environmental Impact Assessment. The list of participants is attached in Annex 1. The Vice Chairman noted that RMI faces numerous environmental problems associated with the sea, lagoons, land and atmosphere. He looked forward to the outcome of the Seminar being of assistance to both the RMI Government and the RMIEPA in addressing these problems and securing a sustainable future for all of its people.

3. The Acting President of RMI, the Hon. Kunio D.Lemari formally opened the Seminar and pointed out that it provided an opportunity to equip the Marshallese people with the planning tools to manage both environmental and development interests to ensure that development activities are sustainable. He described sustainable development as that development which results in "the ability to survive on the atolls from day to day and from there after". His speech is attached in Annex 2.

Introduction

4. Mr Komeri Onorio, the SPREP EIA officer, provided background to the SPREP EIA Training Programme which is being implemented in most Pacific countries. He noted that the project is the largest EIA training exercise ever held in the Pacific.

5. Mr David Sheppard, Team Leader, Regional Environment Technical Assistance Project (RETA) introduced the resource personnel participating in this and the Technical Officers seminar. They were:

Mr Warwick Giblin	SPREP Environmental Adviser
Mr Peter Rappa	University of Hawaii, Sea Grant Extension Service
Ms Jacqueline Miller	University of Hawaii Environmental Center

Mr Sheppard then outlined the agenda for the Senior Officials (See Annex 3). Healso noted that this EIA training programme was one practical outcome from the RETA project. He also pointed out that:-

- the President of RMI tabled the NEMS at UNCED ("Earth Summit") in Rio de Janerio in June, 1992.
- the NEMS highlighted the limited and fragile environment of RMI and the need for developments to incorporate appropriate environmental safeguards to avoid long term environmental costs and to maximise long term economic benefits.
- Environmental Impact Assessment (EIA) is a valuable tool to bring about these linkages
- donor agencies now require recipient countries to be able to demonstrate that they are environmentally responsible
- for environmental impact assessment to be successful in RMI it requires:
  a) simple, clear procedures tailored to suit the local circumstances
  b) acceptance and endorsement by the Government and senior management

Background Briefing

6. Ms Elizabeth Harding, legal counsel for the RMIEPA provided delegates with an overview of the existing situation regarding environmental laws and regulations. The main points are listed below:

a) the National Environmental Protection Act, 1984 is the main implementing law in RMI regarding environmental protection. It establishes an independent statutory authority, namely the RMIEPA.

(i) there is a limited system of environmental regulations (based on health and natural resources protection)
(ii) the law requires government instrumentalities to furnish an Environmental Impact Statement for all major Government actions that could significantly affect the human environment. Such a document should be issued to the public for comment before a decision is made.
(iii) there are uncertainties regarding the definitions of "major government action" and "significant effect on the human environment".
(iv) the legislation is only being implemented on an occasional basis.
(v) often the EPA is unaware of projects until construction commences.
(vi) environmental regulations exist for earth moving, toilet facilities and solid waste dumps.

b). the Coast Conservation Act (1988) provides for a survey of the coastal zone to be undertaken and followed by a Coastal Zone Management Plan.

(i) the coastal zone is defined as an area 25 feet landwards of high water mark (HWM) and 200 feet seawards of HWM (both ocean and lagoon sides).
(ii) The Act has provisions for a permit to be issued by the Director of Coast Conservation to allow development activity in this zone. The Director may require EIA. The Act does, however, cover both Government and private development proposals.
(iii) If an Environmental Impact Statement (EIS) is done, the Environmental Advisory Council is meant to determine the matter.
(iv) The Environmental Advisory Council is intended to be the oversight body for this legislation. It is yet to meet although Cabinet has approved its establishment.
(v) This Act has yet to be implemented.

c) US Federal law (NEPA) requires EIA to be prepared for major US funded projects.

d) Issues requiring attention include:

(i) definition of a 'development activity' and terms in a) (iii) above.
(ii) completion of outstanding regulations.
(iii) completion of a coastal zone survey.
(iv) establishment of the Environmental Advisory Council.
(v) encouragement of Government to apply its environmental laws.
(vi) the need for a simple two tiered approach to EIA (for major and minor projects) with clarification of accountability and specified time frames.

Presentations

7. Mr Warwick Giblin, SPREP Environmental Adviser discussed the topic "Sustainable Development and EIA". Mr Giblin explained how sustainable development is now a key issue for all nations and how such development hinges on responsible environmental management. He noted the following principles of sustainable development:

- human life is reliant on clean air, clean water, and good soil.
- natural resources need to be harvested at a level that is sustainable for the long term.
- the need to minimise waste and recycle resources wherever possible.
- excessive waste leads to pollution.
- the need to use technology which maximises the value that can be extracted from the resources used.
- resource consumption is dependent on two factors: population and consumption per person. The developed world is extravagant in its use of resources.

Mr Giblin then defined Environmental Impact Assessment as a process to plan better use of natural, cultural and human resources. The aim is to maximise the long term benefits and minimise the long term costs. He also noted that EIA:

- identifies environmental issues.
- predicts the future state of the environment as a consequence of the development.
- is a valuable tool which should be used very early in the planning of proposed projects.
- integrates engineering, financial, human and environmental aspects.
- will result in projects that are good for business and good for the environment.

Mr Giblin emphasised that EIA policies and procedures should be kept as simple as possible and should be developed to reflect the unique circumstances in each country. He also pointed out that EIA needs to be underpinned by appropriate land use and resource planning.

8. Mr Peter Rappa, University of Hawaii, delivered a slide presentation which pointed out the direct and indirect adverse environmental impacts that can arise from poorly planned projects in the Pacific Islands. The slides showed:-

- airports, harbours and roads (dredging and filling).
- tourist development (demands on local services and infrastructure).
- water, sewage, solid waste and electricity infrastructure projects.
- residential development (coastal filled land).

9. Mr Komeri Onorio, SPREP, gave a presentation which provided more detail on the concept of EIA. He noted that EIA:

- requires political endorsement and commitment if it is to work effectively.
- is now an integral part of good business management.
- is now required by donor agencies.
- can be undertaken by local or outside expertise.
- should be an integral component of developing policies and plans
- involves predictions and therefore uncertainty.
- must involve local communities and interested parties.
- continues throughout the life of the project, from project design through to project implementation.
- is a tool which generates information that greatly assists decision making.
- is not anti-development but in fact can help avoid mistakes which could prove costly in terms of economic, social and biophysical parameters.

Issues raised in discussion

10. Discussion followed the morning presentations. The key points which arose were that:

- EIA has not been widely used in RMI.
- now is an opportune time to develop EIA in RMI given the preparation of the*NEMS, the President's speech at UNCED ("Earth Summit"), the intention to establish an Environmental Advisory Council and the need to develop. environmental regulations to supplement the local laws.
- donor agencies now require evidence of good environmental planning for project proposals and EIA facilitates this.
- challenges requiring attention include:-
- the conflict between private land ownership and the need for integrated land and marine use planning.
- the lack of environmental awareness.
- the need to build on the existing permitting system to make it more environmentally focussed.
- the need to apply a more environmentally focussed permitting system very early in the project planning.

Examination of Existing EIA procedures and how they might be improved

11. The Seminar discussed in open forum the existing arrangements regarding EIA. The Earthmoving Permit was identified as the major mechanism used to date, along with the permit for toilet facilities. It was acknowledged however that the current permitting system required revision and extension.

Future directions

12. The Seminar participants identified some key principles and actions necessary to see effective implementation of EIA. They were the need:

a) to raise the level of knowledge and understanding of key groups in the RMI of the importance of economic activity being sustainable. Via this process EIA will be recognised as necessary to facilitate achievement of this goal. Key groups to participate in the education programme include:

   - elected politicians, including President and Cabinet.
   - senior government officials (National and Local).
   - traditional leaders (Paramount Chiefs, Council of Local Chiefs).
   - religious groups.
   - womens groups.
   - youth groups.
   - Chamber of Commerce.
   - landowners.

b) for RMI EPA to explain the impact assessment process and its merits via articles in the local newspaper and on weekly radio

c) to clarify the roles of local Government and the EPA regarding toilet acilities and earth moving permits

d) for more effective incorporation of the EI process into project decision aking

e) build on the NEMS and the intention to establish and Environmental dvisory Council

f) for customised EIA procedures which reflect the special needs of RMI.

g) to modify the current permitting arrangements to more adequately address environmental factors.

h) to subject not only public but also private projects to EIA.

i) to develop regulations that are two tiered (for major and minor projects), simple and easy to understand.

j) establish the Environmental Advisory Council by the end of 1992 and for it to act as a catalyst to promote improved environmental management in RMI.

Many of the above points are encapsulated in the brief statement from the Senior Officials shown in Annex 4.

Technical Officals Meeting

Opening

1. Mr David Sheppard, Team Leader/RETA (Regional Environment Technical Assistance Project, SPREP, opened the Seminar and welcomed delegates (see Annex 5), noting that RMI was the first country associated with SPREP to have developed a NEMS. Furthermore, this strategy had been actively promoted by the President of RMI at UNCED (the "Earth Summit") recently. Mr Sheppard stated that EIA was a very useful process to bring about economic activity that is sustainable for the long term. Such development is both good for business and good for the environment.

He noted that the Taskforce established to prepare the NEMS was seen by the Government as having performed well and that it should now become the Environmental Advisory Council to oversee environmental management activities in RMI. Mr Sheppard drew the attention of delegates to the Future Directions statement prepared by the Senior Officials and the need for this Seminar to focus on these issues.

He outlined the agenda for the Seminar (see Annex 6).

Introduction

2. Mr Komeri Onorio, the SPREP EIA officer, provided background to the SPREP EIA Training Programme, which is the largest EIA training programme ever implemented in the Pacific.

3. Mr David Sheppard indicated that this EIA training programme was one practical outcome from the RETA project and that it flowed directly from the National Environment Management Strategy that has been prepared for RMI.

Presentations

Introduction to EIA

4. Mr Warwick Giblin, SPREP Environment Advisor , presented the topic, Sustainable Development and the Environmental Impact Assessment. Mr Giblin discussed the principles of sustainable development and outlined EIA as a tool for assisting the practical application of sustainable development policies (refer point 7 of the Senior Officials Meeting Record). He emphasised that EIA policies and procedures should be kept as simple as possible and should be developed to reflect the unique circumstances in each country.

Outline of an EIA report

5. Mr Giblin outlined the main steps in the EIA process, highlighting that EIA is a valuable tool to assist in planning, designing, operating and maintaining important economic activities that are environmentally sustainable in the long term. The main steps are:

a. Screening - determining the extent of EIA required based on the relative environ mental significance of the proposed project.

b. Scoping - identifying the issues to be addressed, including alternatives.

c. Report Preparation - identification of safeguards to be incorporated and residual impacts. The length of the report will vary from 1-20 pages for a minor project to a comprehensive Environmental Impact Statement for a major proposal likely to generate a significant environmental impact.

d. Public and Agency Review - the adequacy of the EIA report is assessed, including justification for the project and its short and longterm benefits and costs.

e. Agency/Government Decision - decision made on the project proposal. If approved, conditions are specified.

f. Performance Monitoring - During the construction and operational phases, the project is monitored by its management and the Government to ensure all safeguards have been adopted and assessed for their adequacy.

EIA in RMI

6. The contents of an EIA Report were outlined by Mr Giblin. It was noted that the specific contents would often vary in accordance with the specific issues in each country. However, it is noted that most EIA Reports should include the following:

- Objectives of the proposal (purpose)
- Description of the environment (physical, biological, cultural socio-economic)
- Description of the proposal (components of the proposal, areas affected, construction methods, access arrangements, duration and hours of operation)
- Assessment of impacts of the proposal (is the potential impact: small/large?, beneficial and/or adverse? short term and/or long term?, reversible or irreversible?, direct and/or indirect?, local and/or regional?)
- Environmental safeguards that could minimise the environmental impacts of the proposal (such as staging of operations, siltscreens, allowing for tidal flushing, protection of marine species, rehabilitation of disturbed areas, etc)
- Alternatives to the proposal
- Conclusion

Mr Giblin pointed out that the information included in the EIA Report should be restricted to that which is directly relevant. Furthermore the scope and extent of the EIA should reflect the magnitude of the likely impact of the proposal on the social, economic and biophysical environment. In essence, the EIA should be kept as simple and relevant as possible.

Group discussion of EIA in RMI

7. The participants then discussed a number of questions and made the following points:

   a. What steps are needed to make EIA work in RMI?
      - need political support
      - need institutional support; more funds and staff
      - require regulations to support the laws

- need economic incentives and disincentives to reinforce good environmental practices and behaviour
- need a training Workshop for members of the EPA Board

b. How do we build on the current permit system?
   - modify the existing permit application forms to include more adequate environmental information
   - encourage applications to be submitted very early in project planning

c. Which agencies should be involved in screening and scoping EIA?
   - depends on the issue, but there should be wide canvassing of agencies

d. Who should prepare the EIA Report?
   - proponent/developer

e. What should be the review process?
   - in principle, EPA is the lead agency
   - other agencies directly involved should also have equal say in project determination. The public should also be invited to participate
   - adequate time required to enable proper review

Minimising environmental impact

8. Mr Rappa discussed approaches to mitigate or "soften" the impacts of developments on the environment. He outlined the following typology of mitigative approaches:

a. *Prevention:* eliminate or avoid impacts altogether:
   - *Substitution/Avoidance:* Elimate impact by choosing a different site or design.
   - *Remedial:* Elimate impact by restoring environment back to its original condition.

b. *Control:* Minimise impacts by direct physical controls.
   - *Amelioration:* Control of impacts by applied direct measures such as slit curtain, berming, sewage treatment facility and seasonal grading.
   - *Data Recovery:* Control of impacts to historical and/or cultural sites of significance by incorporation of site into design, rebuilding the site or recording the data before removal or burial.
   - *On-Site Enhancement:* Control impact by enhancing some feature at the proposed site which will benefit local users

c. *Compensation:* Reimburse those most heavily impacted.
   - *Transfer Payment:* Requiring indirect payment by developers through exactions, dedications or impact ties or direct payment through relocation fees or land condemnation.
   - *Off-site Enhancements:* Make-up for the destruction of a particular feature by renovation or redesigning another similar area.

Prevention and Control have proved to be much more acceptable by the impacted parties while Compensation is much less popular.

Techniques for mitigation of short-term impacts

9. Mr Rappa stated that environmental impacts may be beneficial or detrimental depending on the changes brought about by the development to the physical or social setting. Impacts may be short term (perhaps limited to the construction phase) while others may be long term (consequences of ongoing operation). The impacts may also be direct or indirect with spillover effects.

Adverse short term or construction phase impacts of, for example, coral dredging, may be mitigated by a number of measures such as:

- using silt curtains.
- avoiding uniform dredge holes in reef.
- controlling the size of blast charges.
- avoiding construction and operation during migratory, breeding or spawning seasons.

Mitigating long term impacts using physical measures

10. Ms Jackie Miller gave a presentation on how to mitigate long term adverse impacts that may result either directly or indirectly, as a consequence of development. From a management perspective indirect long term impacts are more difficult to mitigate than those caused directly by a project. As in short term impacts, the setting in which the project is located very much influences the magnitude and significance of the impact.

A fish processing plant, for example, may have direct impacts on coastal and marine resources, water quality, traffic and solid waste. Indirect impacts may include extra demands on the local water and sewerage systems.

Compensation techniques for mitigating long term impacts

11. Mr Rappa discussed the different forms of compensation and the rationale for their use.

a. Nature of Compensation
   - Includes transfer payment and off-site enhancement
   - Applies primarily to long term impacts especially long term indirect impacts.

b. Rationale for Use of Compensation
   - By granting permit, government imparts a value that did not exist or government has the right to capture some of that value.
   - Should be part of a planning process and have basis in statute.
   - Legal Basis: Compensation is reasonable if development creates a need and that the compensation is applied to the area to address that need.

c. Example of Use:
   Use of dedication, exaction, impact free, direct payment, and off-site enhancement of long term impact of resort development.

Slide presentation - Project case studies in the Pacific

12. Mr Rappa delivered a slide presentation on ten projects that have been developed in the region. Each case was discussed along with details of how improvements were made or could have been made to mitigate or soften the major adverse environmental impacts. The types of projects discussed were:

- dredging and filling a lagoon
- construction of a sewage outfall
- causeway construction in a lagoon and harbour
- airport and harbour construction
- port development
- atoll quarrying
- landfill construction
- fish processing plant
- resort development
- residential development

Environmental issues in RMI

13. The following environmental issues were identified by the delegates as important in RMI:

- coastal erosion
- traffic
- limited natural resources
- marine water pollution
- water supply and contamination
- social problems in populous urban areas
- solid waste management
- graves beside homes

Case Study

14. An integral part of the seminar was to examine an actual proposed project and prepare an outline of an appropriate EIA report. The selected case study was a proposed extension to a coral quarry operation at the bridge on Majuro atoll. An application for an Earthmoving Permit had been filed.

Two working groups were suitably briefed both before and at the site. They spent the afternoon of Day 2 at the site and then in preparing their presentations to all delegates. Each group outlined the proposal, critically examined the likely environmental impacts and suggested appropriate ways to minimise the adverse impacts.

The case study was considered very useful as it provided practical experience in preparing an EIA report.

Development of EIA procedures for RMI

15. The delegates discussed the current EIA procedures in the RMI and summarised them as follows:

- permits are required for projects associated with earthmoving, toilet facilities and solid waste management. The EPA is the agency responsible for determining such permits although other agencies such as the Historic Preservation Office, MALGOV and the Majuro Water and Sewer Company are involved as necessary. The permits are required 30 days before project work commences.
- MIMRA requires a permit for point source discharges to marine waters.
- it is understood that the EPA will require a Coastal Zone Development Permit for coastal activities when the coastal management plan and necessary regulations have been drafted.
- the EPA requires certification of any operations/storage/transport involving pesticides.
- environmental quality standards have been specified for drinking water, air and marine waters.

The delegates were of the view that the current procedures required upgrading to reflect RMI's environmental management needs of the 21st Century. The recommendation prepared by the Seminar participants are contained in part 20 of this report.

Implementing mitigating measures

16. Mr Rappa discussed how measures to mitigate adverse environmental impacts might be implemented.

a. *Factor affecting feasibility:* Mitigation must be judged feasible by proposers, agency and impacted party. Factors include:
   - Cost: Benefit has to be greater than the costs.
   - Appropriate: Must address the problem area.
   - Workability: Must have reasonable chance of working.

b. *Making Mitigative Measures Mandatory:* Forcing the implementation of mitigative measures.
   - Within the EIA system.
   - Through statute, regulation, or ordinance.
   - Through the permit process.

Monitoring and post-EIA review

17. Ms Miller outlined the benefits of monitoring a project during its construction and operation phases. Monitoring provides the:

- Basis for changes in the environmental impact assessment technique.
- Decision to continue, modify, or suspend mitigation measures.
- The application of new knowledge to be used in land use decisions.

Post EIA Review is an important exercise that is rarely undertaken. Post EIA review allows:

- Evaluation of accuracy of the predictions made in the EIA.
- Evaluation of effectiveness of EIA methods.
- Improvement of EIA documents and land use decisions.

Ms Miller discussed who should have the responsibility for conducting both monitoring and Post-EIA review. She listed favourable and unfavourable reasons:

- Compelling agencies to carry out these functions.
- Compelling developers or project proponents to carry out these functions.
- Requiring these functions be done by neutral third party.
- Some combination of the above.

Monitoring and Post EIA Review work best when neutral third parties are chosen on the basis of their competency. Although this neutral party is funded by the proposer and is responsible to the agency, the neutral party is given a free hand to set up their monitoring and post EIA review.

Preparing EIA reports

18. Mr Giblin discussed how EIA reports might be prepared in RMI. The salient points were:

- always seek out local knowledge, it is very valuable and is often not found in technical reports.
- ascertain the existence of previous technical reports and studies in libraries, museums, agencies etc (don't reinvent the wheel).
- if you need to engage off-island experts check that a prospective consultant has relevant experience, has performed well in previous assignments and provides value for money.
- before seeking to engage a consultant ensure that the "Terms of Reference" (or contract brief) is clear, concise and focussed on the objectives of the EIA project. It is important that you know exactly what you want a consultant to deliver before he/she is engaged.
- once engaged, a consultant should be managed closely and regular progress reports provided.

Evaluation of an EIA report

19. Factors to be considered in the Evaluation of an EIA Report were outlined by Mr Giblin. These were factors that decision makes would be likely to ask in reviewing an EIA and included:

- is there a clear justification for the project?
- do the project objectives contribute to sustainable development?
- have environmental safeguards that could minimise the adverse environmental impacts of the proposal been incorporated into the project design (such as staging of operations, siltscreens, seasonal controls, etc)?
- are there any viable alternatives to the proposal?

Recommendations to Senior Officials

20. Mindful of the Statement from the Senior Officials Seminar (see Annex 4), the Technical Officers put forward a number of recommendations for consideration by their senior colleagues. A number of practical recommendations for the future application of EIA in RMI are outlined below:

1. That this Seminar welcomes the Cabinet directive to establish an Environmental Advisory Council (EAC) and hopes that it will be functional by the end of 1992.

2. That the EAC be responsible for overseeing the completion of the following priority tasks by the EPA (with assistance from other relevant agencies):

   a) Set clear and simple guidelines and procedures for when EIA is required for both public and private projects. This should be a two tiered process which addresses both major and minor projects. It should include modification of the existing permit application forms to provide environmental information. The timeframes for applying for permits and their review should also be revised.
   b) Complete a coastal resources inventory of all inhabited atolls to provide baseline information for a comprehensive coastal resources management plan.
   c) Develop recommendations on land and marine use planning.
   d) Monitor all agencies to ensure they are meeting their environmental requirements in accordance with existing laws and regulations.

3. That the EPA give priority to:

   a) Undertaking the tasks assigned to it by EAC.
   b) Modifying the earthmoving permit application form (as per 2(a) above).
   c) Determining if the environmental impact of proposals is likely to be significant, thus requiring an Environmental Impact Statement.
   d) Making recommendations to the EPA Board on project proposals, be they publicly and privately funded, subject to completion of appropriately detailed EIA Reports (in accordance with the attached "Procedures" flow Chart - see Table 1 below).
   e) Setting clear environmental assessment guidelines for earthmoving, toilet facilities, solid waste coastal and marine waters and public water.
   f) Developing regulations relevant to the existing environmental laws.
   g) Monitoring the environmental performance of RMI with respect to implementation of upgraded EIA guidelines and the adoption of environmental quality standards.
   h) Developing and implementing educational programmes to inform the citizens of the RMI of the needs, benefits and procedures of EIA for both public and private projects. Such programmes should involve traditional leaders, church and youth groups. School and college curriculums should include environmental studies.
   i) Undertaking workshops on EIA procedures for political and traditional leaders.

Table 1: Possible Future Procedures

1. EIA at project proposal stage (early planning phase)
   - minor project - improved earthmoving permit application form (or other relevant permit) plus explanatory notes on the environmental information required.
   - major project - Environmental Impact Statement

2. Submitted to EPA

3. EIA material distributed to relevant agencies and public for thirty-day review
   - radio/newspaper announcements of public hearings for major projects
   - letter to local landowners near proposed site

4. Comments back to EPA

5. EPA reviews project EIS (or Permit Application if minor project), considers agency and public comments.

6. EPA staff make recommendations to EPA Board for a decision on major projects (with conditions). EPA staff make decisions on minor projects.

7. EPA - monitors performance/compliance of projects under construction or in operation.

Seminar Evaluation

21. Participants were invited to provide feedback on the seminar and a summary of the evaluation results is shown in Annex 7.

Annexes

Annex 1: Participants List - Senior Officials Seminar

Name	*Position*	*Agency*
Abel Aniep	Education Officer	EPA
James Alloway	City Manger	Majuro Atoll Local Government (MALGOV)
Hemley Benjamin	Assistant Archaeologist	Historic Preservation Office
Joe Mook	Officer, Outer Islands, Project Manager	Resources and Development
Cathy Relang	Deputy Secretary	Education
Anwest Eleasant	Assistant Director, Majuro Hospital	Health
Kato Rubon	Planning Officer	Planning and Statistics
Barbara Barber	Director, EPA Laboratory	EPA
Joe Riklon	Acting General Manager	EPA
Mabel Andrew	Social Studies and Population Curriculum Writer	Education
Juanita Rilometo	Science Curriculum Writer	Education
Abraham Hicking	Deputy Director, EPA Laboratory	EPA
Harrington Dribo	Laboratory Specialist (Ebeye)	EPA
Elizabeth Harding	Legal Counsel	EPA
Nena Kilna	Fisheries Officer	RMI Marine Resources Authority

Annex 2: Opening Address by Hon. Kunio D. Lemari, Acting President, RMI at Senior Official Seminar

Ladies and Gentlemen, it is with great pleasure and honour that I address you at this opening of the "Environmental Impact Assessment" Training Course here in Majuro.

The subject to be discussed in this workshop is equally new to all although a few of us might have heard of and used EIA on several occasions. I welcome this opportunity to get a better understanding of the subject, and, more importantly, of its relevance to the Marshall Islands as a whole.

The workshop is organised by SPREP, the South Pacific Regional Environment Programme, in collaboration with the Environmental Centre of the University of Hawaii and the Environmental Protection Authority of the Republic of the Marshall Islands.

A wide range of experienced resource personnel are available to you for this workshop. You should utilise this opportunity and, wherever possible, recommend development of new policies, ways of implementing them and even modification and improvement of existing policies and practices.

In our country, with its limited resource base and fragile environment, we are faced with a dilemma. The options are either we preserve our environment, while little development is to be achieved, or to go for short term development goals where environmental costs will be felt far in excess of the benefits that would be enjoyed in the short run. We certainly need to make a careful choice to ensure the development path we follow is a sustainable one.

We of the present generation have a duty to ensure that those of future generations will be able to enjoy the same quality, if not better, of the environment resources we enjoy now. This duty is engraved in the concept of sustainable development which this government has translated to mean "the ability to survive on the atolls from day to day and from there after".

This workshop is one way of equipping us with skills to discharge that duty and responsibility towards our future generations. It will provide the planning and management tools with which we can, at least, identify the areas of the environment that will be affected by any major activities. If we can understand this planning process, we will be in a position to better manage both the environment and development concerns; and this, in my view, is a prerequisite for sustainable development.

I thank you for the encouragement you give this workshop by your presence here. I wish all participants a successful workshop, which I now declare open.

Thank you and may God be with you.

Annex 3: Agenda for SPREP/University of Hawaii Meeting on Establishing Effective Environmental Impact Assessment (EIA) Procedures

Republic of the Marshall Islands (RMI)
Senior Officials Training Seminar
31 August, 1992

Objectives

1. To increase the level of knowledge and understanding of Senior Officials in the Republic of the Marshall Islands to the principals and benefits of EIA.

2. To obtain direction from the Senior Officials in relation to what EIA procedures are most appropriate for the RMI and how they could be developed.

Agenda

8.00 - 9.00 am	Opening and Introduction Introduction by the Minister Official Opening Introduction to the SPREP EIA Training Programme (K Onorio) EIA as a component of the National Environmental Management Strategy (D.Sheppard).
9.00 am - 9.30 am	Coffee Break
9.30 am - 12.00 noon	Why do EIA ? (W Giblin, P. Rappa and K Onorio) The link between sustainable development and EIA Why do EIA's Slide presentation The procedures and principles of EIA
12.00 noon - 1.00 pm	Lunch
1.00 pm - 2.30 pm	Establishing Effective EIA Procedures in the RMI. (W Giblin - Discussion Leader) What are the current EIA permitting policies and procedures in the RMI? How could these EIA procedures be improved?
2.30 pm - 3.00 pm	Coffee Break (Video)
3.00 - 4.00 pm	Ways and means of making EIA happen in the RMI (Small Working Group Sessions Introduction by D Sheppard) What are the challenges to be met in establishing EIA in the RMI? How can these challenges be addressed? What are the key groups/agencies which will influence the establishment of EIA procedures in the RMI?
4.00 pm - 4.30 pm	Working Groups report back
4.30 pm - 4.35 pm	Closing and Invitation to attend the Technical Officers Training Seminar and return on Thursday for the closing function.

Annex 4: Environmental Impact Assessment in the Republic of the Marshall Islands

Statement from the Meeting of Officials
Majuro, RIMI 31 August, 1992

The Goal is:

"To achieve improved management of the environment of the Republic of the Marshall Islands (RMI), through the use of Environmental Impact Assessment (EIA)"

The Goal can be achieved by:

1. Increasing awareness of the need for improved management of the RMI environment and how EIA can assist.

2. Increasing the involvement in environmental management activities at all levels in the RMI. This includes local leaders, Local Government and National Government.

3. Mobilising the RMI Environmental Advisory Council.

4. Developing specific EIA regulations and that are tailored to the unique RMI needs and conditions.

5. Developing a system of EIA in the RMI which incorporates different levels of EIA, appropriate to the scale and type of activity.

Annex 5: Participants List - Technical Officers Seminar

Name	Position	Agency
Kato Rubon	Planning Officer	Planning and Statistics
Joe Mook	Outer Island Project Manager	Resources and Development
Stephen Lepton	Director, Family Food Products	Social Services
Mabel Andrew	Social Studies & Population Curriculum Writer	
Harrington Dribo	Laboratory Specialist (Ebeye)	EPA
Hemley Benjamin	Assistant Archaeologist	Historic Preservation
Fraser Rdialul	Project Inspector (Ebeye)	Public Works
Joe Riklon	Acting General Manager	EPA
Nena Kilma	Fisheries Officer	R.M.I. Marine Resources Authority
Abraham Hicking	Deputy Manager, Laboratory	EPA
Wallace Peter	Tourism Officer	Resources Development
Abel Aniep	Education Officer	EPA
Masha Note	Assistant Education Officer	EPA
Juanita Rilometo	Science Curriculum Writer	Education
Johnson Riklon	Legal Counsel	Kwajalein Atoll Development Authority
Titus Langrine	Supervisor, Parks & Recreation	Majuro Atoll Local Government
Anwest Eleas	Assistant Director, Majuro Hospital	Health

Annex 6: SPREP/University of Hawaii Environmental Impact Assessment Training Seminar, Republic of the Marshall Islands

Three day Course for Technical Officers
1-3 September 1992

Day 1 : Tuesday 1 September

9.00 9.30am	Opening and Introduction ○ Introduction to the SPREP EIA Training Programme (K.Onorio) ○ EIA training in relation to the National Environmental Strategy (D.Sheppard)
9.30 - 10.15am	Introduction to EIA (W.Giblin) ○ The link between sustainable development and EIA ○ What is EIA? ○ Reasons for Doing EIAs
10.15 - 10.30am	Coffee Break
10.30 - 11.15am	EIA Process/EIA Contents (W Giblin) ○ Main steps in the EIA Process ○ Contents of EIA: Minor report, Major report
11.15 - 12.00 noon	Workshop Session (W Giblin) ○ EIA process for RMI
12.00 - 1.00pm	Lunch
1.00 - 2.30 pm	○ Approaches to Minimising Environmental Impact (P Rappa)
2.30 - 3.00 pm	Coffee Break
3.00 - 4.00 pm	○ Techniques for mitigating short term impacts (P Rappa)

Day 2 : Wednesday 2 September

8.00 - 9.00 am	○ Mitigating long term impacts using physical measures (J Miller)
9.00 - 9.30 am	Coffee Break
9.30 - 10.30 am	○ Compensation techniques for mitigation of long term environmental impacts (P Rappa)
10.30 - 11.20 am	Common environmental and social problems in the Pacific - Slide Show and Discussion (P Rappa)
11.30 - 12.00 noon	Briefing for Case Study (W Giblin)
12.00 - 1.00 pm	Lunch

1.00 - 4.00 pm	Undertake EIA Case Studies ❍ Travel to site ❍ Conduct Investigation ❍ Draft notes for report

Day 3 : Thursday 3 September

8.00 am - 9.30 pm	Presentation of Case Study Reports (W Gilbin) ❍ Break into case study groups and prepare report ❍ 15 minute presentation plus fifteen minute discussion for each group
9.30 - 10.00 am	Coffee Break
10.00 - 11.30 am	Development of EIA Procedures for the RMI (W Giblin) ❍ What are the current EIA permitting policies and procedures in the RMI?
11.30 - 12.00	❍ Implementing Mitigating Measures (P.Rappa)
12.00 - 1.00 pm	Lunch
1.00 - 1.30 pm	❍ Monitoring and Post EIA Review (J Miller)
1.30 - 2.15 pm	❍ Discussion of how EIA Reports could get done (W.Giblin) ❍ Land use planning ❍ Local people who can do EIA's ❍ Other training required to upgrade local skills ❍ Use of external consultants ❍ Drafting brief for external consultants
2.15 - 2.30 pm	Coffee
2.30 - 3.00 pm	❍ Evaluation of an EIA Report (W Giblin)
3.00 - 4.00 pm	Conclusion (W Giblin) Preparation of feedback to senior government officials Evaluation of training course
4.00 pm	CLOSE

Annex 7: Evaluation Form and Results

EIA, Technical Officers Training Seminar
Majuro, Republic of the Marshall Islands
1st - 3rd September, 1992

SPREP is striving to undertake EIA training that is of maximum benefit to the participants. To help us structure the best possible training seminars in the future, could you please answer the following questions.

1. How useful was the workshop in increasing your understanding of EIA principles and the way EIA is done?
   very useful 92%
   useful 0%
   little use 8%

2. Do you think the workshop was:
   [ ] too long? 0%
   too short? 62%
   about right 38%

3. Which particular sections of the workshop were the most useful? [circle numbers]

   1. Principles and process of EIA
   2. Ways and means of improving EIA in RMI
   3. Contents of EIA report
   4. Approaches to minimising environmental impacts
   5. Mitigating short term impacts
   6. Mitigating long term impacts
   7. Compensation options
   8. Case study
   9. Refining EIA procedures in RMI
   10. Evaluation of EIA reports
   11. All useful **100%**

4. State any particular sections of the workshops that were of least value.
   all useful 54%
   compensation options

5. How do you rate the field exercise?
   useful 85%
   some value 15%
   waste of time 0%

6. Are there any specific topics you think should be included that were not covered in this technical workshop?
   no 23%
   atoll ecology

7. Are there sections of the workshop that should be expanded upon?
   - ecology of the islands
   - presentation from developer prior to case study
   - effects of sedimentation on reefs
   - improving EIA in RMI
   - compensation options

8. As an aid to learning more about EIA, the preparation of the outline of an EIA report based on the case study was:
   very valuable..... 85%
   useful 15%
   of little value 0%

9. The organisation of the workshop was:
   excellent 31%
   good 69%
   fair 0%
   poor..... 0%

10.(a) Please comment on the presentations of the EIA workshop leaders:

Quality		*Length*	
good	92%	long	7%
fair	8%	about right	62%
poor	0%	short	31%

10.(b) How might the quality of the presentations of the workshop leaders be improved?

- ❍ more class discussion
- ❍ include engineer instructors
- ❍ fine tune your accent!
- ❍ talk more slowly
- ❍ more videos and slides

11. Please feel free to may any further comments

- ❍ more case studies
- ❍ top level officials should be involved in workshop
- ❍ another workshop should be held to educate our leaders.