

Training Report no. 4 / I

South Pacific Regional Environment Programme

Environmental Impact Assessment in the South Pacific Region

Meeting Report

Pohnpei, Federated States of Micronesia May 1992









SOUTH PACIFIC REGIONAL ENVIRONMENT PROGRAMME

FEDERATED STATES OF MICRONESIA
ENVIRONMENTAL IMPACT ASSESSMENT
TRAINING SEMINARS

PART A- SENIOR OFFICIALS SEMINAR (Friday May 1, 1992)

PART B- TECHNICAL OFFICIALS TRAINING (Monday, May4- Thursday, May7,1992)

MEETING RECORD

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INTRODUCTION FROM THE DIRECTOR OF SPREP

It gives me great pleasure to provide an introduction to the Meeting Record for the Environmental Impact Assessment Training Course held in the Federated States of Micronesia. This course was the first in what will be 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 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 brake on economic development.

Thankfully this perception is changing and decision makers in 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 that is being carried out by SPREP in the Pacific at the moment 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.



GOVERNMENT OF THE FEDERATED STATES OF MICRONESIA

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Dear Participant

RE: Environmental Impact Assessment (EIA) Training: Senior Officials (May 1, 1992) and Technical Officers (May 4 - 7)

Please find attached a copy of the meeting record from the Environment Impact Assessment (EIA) Training Program, held in Pohnpei from May 1 through 7, 1992.

This EIA Training Program was implemented through SPREP and was largely funded through the Asian Development Bank. On behalf of all participants I would like to express appreciation to these organisations for their generous support.

The EIA Training Program was held at two levels. The first was an EIA Seminar for Senior Officials, held on May 1. This involved key decision makers from State and National Governments and resulted in a "Statement of Direction" concerning the application of EIA. This document stated broad principles for the effective management of the environment of the FSM and concluded that an EIA process shaped for our specific needs would be a practical tool for integrating economic development and environmental management.

This "Statement of Direction" was transmitted to the May 4 - 7 meeting, which involved technical practioners from relevant government agencies of the State and National Governments. The Technical Officials considered the "Statement of Direction" from the Senior Officials and prepared a response.

Both the "Statement of Direction" from the Senior Officials and the response from the Technical Officers are incorporated with this meeting record and I commend them for your attention. The Technical level training also included practical training in EIA and a number of local case studies were examined by the group.

The EIA Training Program was, in my opinion, a great success. This was due in no small measure to the enthusiastic participation of all concerned and I would like to thank you for your contribution. I look forward to your continued close cooperation in implementing our recommendations for developing an effective EIA process for our nation.

Yours sincerely [1] [1] [1] 1 [1]

Dr Effeut k. Pretrick, "

Chairman, Presidential Taskforce on Environmental Management and Sustainable Development.

MAY 7 1992

FEDERATED STATES OF MICRONESIA

ENVIRONMENTAL IMPACT ASSESSMENT -SENIOR OFFICIALS SEMINAR

(PART A)

MEETING RECORD

OPENING

- 1. The Invocation was given by Mr I. K. Joseph.
- 2. The Chairman of the Seminar, Dr Elieul K. Pretrick, Secretary, FSM Department of Human Resources, welcomed participants to the Senior Officials Seminar on Environmental Impact Assessment. The list of participants is attached as Annex B. The Chairman noted that this Seminar followed directly on from the Meeting which reviewed the draft Nationwide Environment Management Strategy (NEMS) and that Environmental Impact Assessment (EIA) is an important and practical tool which will be required for the implementation of the NEMS.
- 3. The FSM Vice President formally opened the Seminar, and noted that it provided the opportunity for the FSM to develop Environmental Impact Assessment procedures to reflect the unique circumstances existing in the FSM.

INTRODUCTION

- 4. Mr Komeri Onorio, the SPREP EIA Officer, provided background to the SPREP EIA Training Programme which will result in the implementation of EIA training in most Pacific countries over the next 12 months. He noted that this project was the largest EIA training course ever held in the Pacific.
- 5. Mr. David Sheppard, Team Leader/RETA, indicated that this EIA training programme was one practical outcome from the RETA (Regional Environment Technical Assistance) project. Mr. Sheppard also outlined the agenda for the Senior Officials Seminar.

PRESENTATIONS

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6. Mr Warwick Giblin, SPREP Environmental Advisor, presented the topic <u>Sustainable</u> <u>Development and EIA- how EIA can help the decision maker</u>. 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, good topsoil, and other natural resources;
- * the need to minimise waste and recycle resources wherever possible;
- * the need to use technology which increases the value extracted from the resources used;
- * resource consumption is dependent on two factors: population and per person consumption.

Mr Giblin introduced Environmental Impact Assessment as a tool to assist in the practical implementation of sustainable development policies. 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. He also pointed out that EIA needs to be underpinned by appropriate landuse and resource planning.

- 7. Mr Komeri Onorio gave the following presentation: The principles, process and procedures of EIA. Mr Onorio defined EIA and introduced the general principles underlining the application of EIA. These principles included that EIA:
 - * applies to policies as well as projects;
 - * 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;
 - * must reflect the values of affected persons, not the values of the assessor.

Mr Onorio also outlined that, for EIA to work effectively, there must be political commitment, that the community must be involved and that EIA must involve a training component.

8. Presentations were then made in relation to the situation with EIA in the United States, Australia and the Pacific. Similiarities between the United States and the Australian situation were noted as: how EIA is integrated with decision making processes in these countries; how different types and levels of EIA are required, based on a range of factors, such as the level of impact of the development proposal and the integration of public comment into the EIA process. The situation in the Pacific represented a contrast, as EIA has not been widely accepted or implemented. The main reason for the limited application of EIA in the Pacific was identified as the general perception of decision makers that EIA is 'anti- development' and represents a constraint on economic development in Pacific countries.

DISCUSSION ARISING FROM DISCUSSIONS

- 9. There were a number of issues raised in subsequent discussion. These included:
 - * there is a fundamental need to convince decision makers in the FSM of the need for EIA. Environmental Assessment procedures exist in the FSM. However, these have had limited acceptance or application;
 - * the need for the application of the EIA process to all projects from the public and private sectors;
 - * the need for the application of EIA to all policies as well as projects;
 - * the need for local communities and specifically traditional owners to be closely consulted in the planning and implementation of EIA programmes;
 - * the need for States and the National Government to work together in the application of EIA. It was emphasised that the FSM should be taking a 'nationwide' approach rather than a 'national' or 'state' approach;
 - * the need for the unique circumstances of the FSM to be considered when developing EIA programmes;
 - * the importance of natural resources, particularly marine resources, for the economy and livelihood of the FSM and the need for any EIA system to be integrated with the sustained development of natural resources in the FSM;
 - * the need for EIA to be integrated with existing systems for land use planning (where they exist) in the FSM;
 - * the type of development activity which requires an EIA in the FSM requires clarification.

DEVELOPMENT OF EIA POLICIES AND PROCEDURES IN THE FSM

10. Presentations from each of the States and the National Government outlined existing policies and procedures in relation to EIA in the FSM. From the presentations it is clear that environmental assessment currently practiced in the FSM is limited in terms of the environmental issues addressed, the completness of studies, and the types of development proposals examined.

DISCUSSION GROUPS

- 11. Seminar participants divided into two groups to analyse the most appropriate directions for EIA in the FSM. Arising from these discussions the Senior Officials prepared a 'Statement of Direction' which set out the key issues in relation to the future implementation of EIA in the FSM. This statement is attached as Annex C.
- 12. The Senior Officials resolved to refer this statement to the Technical Level EIA training that was following the Senior Officials meeting, with the request that they act on this Statement and develop appropriate EIA mechanisms for application.

FEDERATED STATES OF MICRONESIA ENVIRONMENTAL IMPACT ASSESSMENT -TECHNICAL OFFICIALS TRAINING WORKSHOP (PART B)

MEETING RECORD

OPENING

- 1. The Chairman of the workshop, Dr. Elieul K. Pretrick, Secretary, FSM Department of Human Resources, welcomed participants to the Technical Officials Training Workshop. The Chairman noted that this Workshop followed directly on from the Senior Officials EIA Seminar. He noted that the Senior Officials had agreed upon the importance of EIA for environmental management in the FSM and that they had prepared a 'Statement of Direction' as to how EIA should be applied in the FSM.
- The FSM Vice President formally opened the Workshop and noted that he
 hoped that participants could develop practical procedures for the application of EIA in
 the FSM, following on from the Senior Officials Seminar.

INTRODUCTION

- 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.
- 4. Mr David Sheppard, Team Leader/RETA (Regional Environment Technical Assistance Project) 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 is currently being prepared in the FSM. Mr Sheppard also outlined the agenda for the Technical Officials Workshop.

INTRODUCTION TO EIA

5. Mr Warwick Giblin, SPREP Environmental Advisor, presented the topic <u>Sustainable Development and the Environment-Introduction to EIA</u>. Mr Giblin outlined the principles of sustainable development (refer point 6 of the Senior Officials Meeting Record) and outlined EIA as a tool for assisting in the practical application of sustainable development policies. 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.

6. Mr Komeri Onorio gave a presentation on What is EIA? principles, and the EIA process. (Refer Senior Officials meeting Record point 7). Mr Onorio stressed that, for EIA to work effectively, that there must be adequate community participation and that there must be a committment from decision makers. He also warned of the danger that technically skilled people and government officials set themselves up as representatives of the local populations, perhaps believing that the issues involved are too technical for less educated people to cope. This leads to a technocratic approach to EIA which is not desirable.

EXPERIENCE FROM ELSEWHERE

7. Presentations were made in relation to the situation with EIA in the United States, Australia and the Pacific. It was noted that both Australia and the United States have well developed procedures for Environmental Impact Assessment. These procedures usually allow for differing levels of assessment, based on a range of factors such as the likely level of impact of the development proposal. In the Pacific EIA has not been widely applied, due largely to the perception amongst decision makers that EIA is anti-development. It was noted that the application of EIA in the Pacific will require an attitude change on the part of decision makers.

EXPERIENCE IN THE FSM

8. Presentations were made by each of the State Governments and the National Government. From these presentations it is clear that procedures exist for EIA at most levels of government but that they are not rigorously applied. It was considered that EIA has yet to reach its full potential as an effective tool for environmental management in the FSM.

UNDERTAKING ENVIRONMENTAL IMPACT ASSESSMENT

- 9. 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 was noted that most EIA Reports should include the following:
 - * Objectives of the proposal
 - * Description of the environment (physical, biological, cultural socio-economic)
 - * <u>Description of the proposal</u> (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 or adverse? short term and/or long term?, reversible or irreversible?, direct and/or indirect?, local and/or regional?)

- * Environmental safequards that could minimise the environmental impacts of the proposal (such as staging of operations, topsoil stockpiles, rehabilitation of disturbed areas, visual screening 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.

10. The presentation Managing an EIA was given by Mr Onorio and Mr Sheppard. It was noted that managing an EIA study refers to two related tasks:

first, that of the co-ordinator of a team carrying out the EIA; and second, that of personnel within a responsible agency liaising with the EIA team and encouraging compliance with expectations and requirements for such work.

It was also noted that the better approach to managing the EIA team was to identify the co-ordinator(s) who would define the broad scope of the EIA study, define the role of the specialists and ensures proper integration of the various specialist studies Some ''key factors'' for successfully managing the team and the process included: the need to encourage good practice of the EIA process; encourage support and management of the process as a facilitative role rather than a policing one; the need for clear identification of what the team and process is to achieve; selection of the best team for the EIA exercise and the need for management of the team, involving clear and effective communication.

- 11. A presentation on the <u>Use of Resource Material</u> was provided by Mr Kit Dahl. It was emphasised that there are a wide range of potential sources available and that those preparing EIA's should ensure that all information sources are canvassed.
- 12. The presentation <u>Drafting Terms of Reference for the EIA Consultant</u>, was given by Dr Bob Thistlethwaite. It was emphasised that the Terms of Reference should be clear, concise and focussed on the objectives of the EIA project. A range of terms of reference were tabled and reviewed.
- 13. Factors to be considered in the <u>Evaluation of an EIA Report</u> were outlined by Mr Giblin. These were factors that decision makers 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 reasonable alternatives to the project been identified and evaluated?
- * Does the project comply with existing EIA guidelines or procedures?
- * Does the project comply with existing planning provisions and other relevant laws?

CASE STUDIES

- 13. An integral part of the training workshop was the Case Studies. Three Case studies were examined:
 - * Waste Water Treatment Plant: Pohnpei State Fish processing Plant;
 - * Nihkwe Dredge Site;
 - * Nihco Resort development at Pais, Sokehs.

Relevant Background papers are attached as Annex E. Three working groups were identified and they spent the afternoon of Day 2 inspecting their respective sites and then preparing their presentations. These Working Groups reported back to the Workshop on the morning of day 3. Each Working Group outlined the background to the proposal and critically examined the likely environmental impacts and suggested appropriate approaches to minimising the impacts of each project. The Case Study exercise was considered to be very useful as it provided experience at assessing actual and hypothetical project proposals.

- 14. The implications from the Case Study Exercise for the development of EIA policies and Procedures in the FSM was outlined by Mr Sheppard. These included:
 - * The need for support for decision makers;
 - * the need to expand traditional views of environmental assessment;
 - * the need to critically evaluate EIA proposals and to look carefully at all direct and indirect impacts of proposals;
 - * the need to use EIA at an early stage of project developments;
 - * the need to keep EIA clear and simple.

DEVELOPMENT OF APPROPRIATE EIA PROCESSES IN THE FSM

- 15. The <u>Statement of Direction</u> from the Senior Officials Seminar (Annex C) was introduced by Secretary Asterio Takesy, Secretary for Resources and Development. Mr Takesy highlighted the following points:
 - * the need for the FSM to abandon the fixation of legal complexities to arrive at a practical EIA process appropriate to the FSM;
 - * Environmental policy should be the guiding policy for development and not the reverse;
 - * Environmental concerns are pro development, not anti development and EIA is an important and practical tool for ensuring environmental concerns are integrated into decision making;
 - * The EIA system developed for the FSM must be as simple as possible and must clearly identify roles and responsibilities.
- 16. Technical Officials then canvassed many aspects relating to EIA in the FSM. They then produced the document Memorandum from the Participants of the Technical Level Workshop on EIA Training to the Senior Officials of the FSM. This document is an excellent summary of the conclusions reached by the technical officials and outlines a number of practical recommendations for the future application of EIA in the FSM.
- 17. An evaluation of the course was carried out and a summary of the evaluation forms is attached as Annex F.

AGENDA- ENVIRONMENTAL IMPACT ASSESSMENT TRAINING- SENIOR OFFICIALS

Friday, 1 May, 1992

9.00am- 9.15am- Opening

Invocation

Introduction by the Chairman of the Presidential Taskforce on Environmental Management and Sustainable Development, Dr Eliuel Pretrick

fficial Opening

9.15am -9.40am- MorningTea

9.40am-10.00am Introduction

- 9.40am- 9.50am Introduction to the SPREP EIA Training Programme: Mr Komeri Onorio, SPREP EIA Officer.
- 9.50am- 10.00am Role of the RETA/NEMS project in relation to EIA: Mr David Sheppard, Team Leader/Regional Environment Technical Assistance

10.00am- 12.00pm How can EIA help the decision maker and how has it been used elsewhere?

- 10.00am -10.30am EIA and Sustainable Development- how EIA can help the decision maker, Mr Warwick Giblin, SPREP Consultant
- 10.30am -11.00am The principles, process and procedures of EIA. Mr Komeri Onorio, SPREP EIA Officer
- 11.00am-11.10am Experience elsewhere: United States, Mr Kit Dahl
- 11.10am- 11.20am Experience elsewhere: Australia Mr Warwick Giblin
- 11.20am- 11.30am Experience elsewhere: Pacific countries: Mr Komeri Onorio
- 11.30am -12.00am Discussion

12.00noon- 1.00pm Lunch

1.00pm- 5.00pm Development of EIA policies and procedures in the FSM

1.00pm- 1.50pm Presentations by each State and the National Government on its current EIA or permitting policies and procedures (5 presentations @ 10 minutes each)

1.50pm- 2.00pm: Introduction to discussion groups: Mr David Sheppard, SPREP

2.00pm -3.30pm Discussion Groups

To discuss what are the most appropriate approaches to the development of EIA policies and procedures in the FSM. (3 groups to discuss this topic with a view to developing general principles that will be further discussed and expanded the following week by the Technical training group)

3.30pm -4.00pm Afternoon Tea

4.00pm- 5.00pm Presentations by each group

5.00pm Closing

AGENDA - ENVIRONMENTAL IMPACT ASSESSMENT TRAINING WORKSHOP: TECHNICAL TRAINING

FEDERATED STATES OF MICRONESIA -4 - 7 MAY, 1992

DAY 1- Monday, 4 May 1992

9.00am -9.15am -Opening

Invocation

Introduction by Chairman of Presidential Taskforce on Environment and Sustainable Development, Dr Eliuel Pretrick

Official Opening

9.15am- 9.45am- MorningTea

9.45am-10.05am-Introduction

9.45- 9.55am: Introduction to the SPREP EIA Training Programme and the agenda for the FSM Technical training: Mr Komeri Onorio, SPREP EIA Officer

9.55- 10.05am: Role of the RETA/NEMS project in relation to EIA: Mr David Sheppard, Team Leader/Regional Environment Technical Assistance (RETA), SPREP.

10.05am- 12.30pm- Introduction to EIA

10.05am- 10.45am: Sustainable Development and the Environment - Introduction to the role of EIA: Mr Warwick Giblin, SPREP Consultant

10.45am-11.30am: What is EIA?: principles, and the EIA process (EIA activity path and the main steps in the EIA process): Mr Komeri Onorio. SPREP EIA Officer.

11.30am-12.00noon: Discussion

12.00-12.30pm: Procedures for undertaking EIA: Mr Warwick Giblin.

12.30- 1.30pm- Lunch

1.30pm -2.30pm- EIA- Experience from elsewhere

Experience from other countries (20 minutes per speaker):

- (1) United States: Mr Kit Dahl
- (2) Australia: Mr Warwick Giblin
- (3) Pacific countries: Mr Komeri Onorio

2.30pm- 3.00pm- Afternoon Tea

3.00pm- 4.30 m- Presentation from each state on procedures for the permitting and review of development projects

- (3.00pm- 3.20pm) -Yap State
- (3.20pm- 3.40pm)- Kosrae State
- (3.40pm- 4.00pm) -Chuuk State
- (4-00pm- 4.20pm)- Pohnpei State
- (4.20pm- 4.30pm)- Discussion

4.30pm- End of Day 1

DAY 2- Tuesday, May 5, 1992

9.00am- 10.20am Undertaking Environmental Impact Assessment

- 9.00am- 9.20am: Contents of an EIA report: Mr Warwick Giblin
- 9.20am -9.40am; Managing the EIA team and the EIA process: Mr Komeri Onorio and Mr David Sheppard.
- 9.40am-10.00am: Use of Resource Material: Mr Kit Dahl.
- 10.00am- 10.20am: Drafting terms of reference for the EIA Consultant: Dr Bob Thistlethwaite.

10.20am-11.00am-MorningTea

11.00am- 5.00pm- Case Studies

- 11.00am-11.05am: Introduction to the objectives of the Case Studies: Mr Warwick Giblin;
- 11.05am -11.20am; Introduction to local case studies
- (1) Tourist development, (2) Dredging and road construction, (3) Effluent management -fish processing plant: Mr Kit Dahl.
- 11.20am- 11.40am: The inside story -the priority aspects/issues considered by the agency making the final decision. Mr Warwick Giblin
- 11.40am-11.50am Teams prepare for EIA exercise, (which members responsible for what, division of labour, approach to be taken, how the report is to be written etc).
- 11.50am- 12.30pm travel to site of field exercise
- 12.30pm -1.00pm Lunch (to be supplied)
- 1.00pm- 5.00pm: Undertake EIA investigation and draft outline of the report
- 7.30pm- 9.00pm: Teams complete reports ready for presentation on day 3.

DAY 3- Wednesday, 6 May, 1992

9.00am- 10.30am: Case Study presentations (10 minute presentation followed by 20 minute discussion for each group)

9.00am -9.30am: Presentation- Group 1

9.30am- 10.00am: Presentation- Group 2

10.00am- 10.30am: Presentation- Group 3

10.30am-11.00am: MorningTea

11.00am- 12.00: Evaluation of Case Studies and Implications.

11.00am- 11.20am: Evaluation/Discussion of group EIA reports: Mr Warwick Giblin, Discussion Leader

- 11.20am- 11.40am: Discussion on implications of case studies for the development of EIA policies and procedures in the FSM: Mr David Sheppard, Discussion Leader.
- 11.40am- 12.00: Evaluation/feedback from participants on the benefits of the case study exercise: Mr Warwick Giblin, Discussion Leader.

12.00- 1.00pm Lunch

1.00pm- 2.40pm Development of EIA policies and procedures

- 1.00pm- 1.20pm: EIA as a component of good business management: Dr Bob Thistlethwaite.
- 1.20pm- 1.40pm: Guidelines for the development of EIA policies and procedures. Mr Warwick Giblin.

1.40pm- 4.30pm- Working Groups to develop appropriate EIA Processes for the FSM

- 1.40pm- 2.15pm: Roles of the State and National Governments in relation to environmental management- the legal situation: Ms Maureen Phelan, FSM Assistant Attorney- General.
- 2.15pm -2.30pm: Presentation from the Senior Officials Meeting- A Statement of Direction: Dr E. Pretrick.
- 2.30pm- 2.40pm: Introduction to Working Groups: Mr David Sheppard

2.40pm- 3.00pm Afternoon Tea

- 3.00pm- 5.00pm Working Group Session 1- Roles of the National and State Governments in relation to environmental management (paper to be distributed)
 - 3.00pm- 4.30pm- Working Groups
 - 4.30pm- 5.00pm- Presentations from working groups

Day 4 May 7, 1992.

- 9.00am- 9.30am: The policy context for the development of EIA policies and procedures in the FSM.:Secretary Takesy.
- 9.30am- 10.30am: Working Group Session 2. Discussion by State in relation to EIA (refer Attachment)
- 10.30am-11.00am Morning Tea
- 11.00am- 12.00noon Working Group Session 3. Applying EIA in the FSM (refer Attachment).
- 12.00noon- 12.30pm Presentations by Working Groups
- 12.30noon- 1.30pm Lunch
- 1.30pm- 2.30pm Discussion of recommendations from the Technical EIA Training Course.
- 2.30pm- 2.45pm Evaluation of EIA Technical Training Course.
- 2.45pm- 3.00pm Closing remarks
- 3.00pm End of Training Course.

PARTICIPANT LIST- SENIOR OFFICIALS ENVIRONMENTAL IMPACT ASSESSMENT

NAME

POSITION

1. DAVID SHEPPARD	RETA TEAM LEADER/SPREP		
2. BOB THISTLETHWAITE	RETA ENVIRONMENT MANAGEMENT		
ADVISOR			
3. NENA S. NENA	HOSP. ADMISTRATION OFFICER, KOSRAE		
4. RUSSEL MARSH	YAP ATTORNEY GENERAL'S OFFICE		
MARTIN PANKOVE	DEPUTY A.G. CHUUK		
6. JOHN A MANGEFEL	CONSULTANT, 0.P.S NATIONAL GOV'T.		
7. JOSFPH AYIN	SPKR, YAP LEGI SLATURE		
8. IHLEN K. JOSEPH	ASST. SECRETARY OF FINANCE, FSM		
9. JOE XAVIER	YAP STATE, EPA		
10. WARWICK GIBLIN	SPREP ENVIRONMENTAL ADVISOR		
11. KOMERI ONORIO	SPREP EIA OFFICER		
12. JOHN SOHLITH	PLANNING OFFICE YAP		
13. TONY ACTOUKA	DEPT. CONSERV. & RESOURCE SUR., PNI		
14. KRESCIO BILLY	DIR. DPS CHUUK STATE GOVERNMENT		
15 MARION HENRY	DIR. COMMERCE & IND., CHUUK		
16. ASTERIO TAKESY	SEGRETARY, DEPT. OF R&D		
17. MASACHIRO CHRISTLIB	V -SPEAKER, CHUUK STATE LEGISLATURE		
18 MAUREEN PHELAN	ASSISTANT A.G. FSM		
19 JACOB NENA	VICE PRESIDENT, FSM		
20. ELIUEL K. PRETRICK	SECRETARY, DOHR, FSM		
21. KONRAD ANGLY	DSI		
22. JOSEPH PETER	OPS/FSM		
23. KIT DAHL	SEA GRANT/CCM		
24. CYPRIAN MUGUNBAY	EX. DIRECTOR, YAP- CAP		
25. ROBERT A. RUECHO	STATE SENATOR, YAP		
26. JESSE GAJDUSEH	RESOURCES & DEVELOPMENT, YAP		
27. IRA E. AKAPITO	SENATE PRESIDENT, CHUUK		

PARTICIPANT LIST

EIA TECHNICAL LEVEL TRAINING

NAME	ORGANIZATION	TITLE
1. DAVID SHEPPARD	SPREP	RETA TEAM LEADER
2. LUCILLE APIS	FSM DEPT OF R&D	SPECIALIST
3. MARION HENRY	DATE: SOUTH AND SALES OF THE SA	CONSERVATION AND MNGT SPECIALIST
4 TOE KONNO	CHILIK EDA	COORDINATOR
5 JOHN JOH	MPMD VAP	CHI EF
6 VIT DAUI	CEA CDANT	EXTENSION AGENT
7 EAUSTING VANGMOG	DIL & C VAD	DEPUTY DIRECTOR
9 IOE VAVIED	VAD EDA	EXEC. DIRECTOR
4. JOE KONNO 5. JOHN IOU 6. KIT DAHL 7. FAUSTINO YANGMOG 8. JOE XAVIER 9. WARWICK GIBLIN 10. KOMERI ONORIO	CDDED	CONSULTANT
10 POWERI ONORIO	CDDED	EIA OFFICER
10. KOMERI ONORIO	MADINE DECREE CAR	SPOUNDEL CHIEF
II. IASHIKU LUDWIU	MARINE RESRCES, C&RS ENV. HEALTH	of Office Li, Cities
	ENV. HEALTH KOSRAE	
14. TEDDY JOHN	ARCHIVES & HISTORIC	
	PRESERVATION FSM	OFFICER
15. HOSTINO E. LIVAIE		ADMIN. OFFICER
	AGRICULTURE DEPT	
17. JOSEPH PETER	FSM. OPS	PLANNING SPECIALIST
18. DONNA SHEURING	SPREP	ASSISTANT
19. ALDEN SALVADOR	POHNPEI ENV. HEALTH	ENV. SPECIALIST
20. NENA NENA	HEALTH SERV KOSRAE	ADMINISTRATION
21. NACHSA SIREN	FSM DEPT, HUMAN	EPA HEALTH
	RESOURCES	SPECIALIST
22. EDGAR SANTOS	POHNPEI, DEPT. LAND	
23. JOHN WEILBACHER	POHNPEI, DEPT. LAND	LAND MANAGEMENT
24. JOHN MANGEFEL	O.P.S NATIONAL GOVT	CONSULTANT
25. M HELGENBERGER	MARINE RESOURCES	CONSERVATION
		OFFICER

STATEMENT OF DIRECTION OF THE FSM SENIOR OFFICIALS MEETING

TO THE

TECHNICAL LEVEL WORKSHOP ON EIA TRAINING

We, the Senior Officials of the FSM who attended the Senior Officials' Seminar on Environmental Impact Assessment on Friday, May 1, 1992, provide the following Statement of Direction for delegates to the technical level training on Environmental Impact Assessment held from May 4 - 7, 1992:

- Careful management of the environment is essential for the long term economic development of the FSM.
- 2. Public awareness of and appreciation for the environment is essential for implementation of environmental policies.
- 3. There are a number of unique circumstances in the long term management of the environment. These include:
- the small land area of our islands and their susceptibility to environmental disturbance;
- the separation of powers between State and National governments and the decentralized nature of our decision -making system;
- our limited natural resource base and thus our dependence on the careful management of our marine and land resources;
- the lack of basic information on our resources;
- our patterns of land ownership.
- 4. The way we manage our environment is a critically important issue that transcends State and National boundaries. State and National Governments must work together to ensure that we pass on a healthy environment to our children.
- 5. The Nationwide Environment Management Strategy (NEMS), being prepared under the direction of the FSM Presidential Taskforce on Environmental Management and Sustainable Development, will provide an important framework for developing our natural and cultural resources in a sustainable manner.
- 6. Environmental Impact Assessment (EIA) is a valuable yet basic tool in achieving sustainable development. It is also important for the effective implementation of the

NEMS as it allows for social, economic and biophysical factors to be considered when assessing development proposals and policies.

- 7. Any EIA system that is developed in the FSM must be as simple as possible and must clearly identify the roles and responsibilities of all relevant parties.
- 8. There needs to be a consistent approach to EIA across the FSM. This will necessitate the adoption of compatible environmental policies and laws.
- 9. The roles of the State and National Governments must be clearly specified. The National Government should, in consultation with the States, identify appropriate guidelines for the application of EIA, set minimum environmental protection standards, and ensure that adequate coordination occurs between the States and among all levels of government. The State role is in implementation and to ensure that specified standards are met.
- 10. EIA must be applicable to all projects that are likely to have some environmental impact. Projects likely to have significant impact on the environment must undergo comprehensive environmental appraisal. The level of significance needs to be defined in terms of clear criteria which are understood by all relevant parties. It must be applied, without distinction, to both government and private sector projects.
- 11. Equally important, EIA must be applied to the policy making process where it may affect the social, cultural, physical or natural environment.

MEMORANDUM FROM THE PARTICIPANTS OF THE TECHNICAL LEVEL WORKSHOP ON ENVIRONMENTAL IMPACT ASSESSMENT TRAINING TO THE SENIOR OFFICIALS OF FSM

We, the Technical Officials of the FSM involved in the environmental impact assessment, (EIA) training course (Palikir 4 -7 May 1992) have received and strived to act on the attached Statement of Direction received from the FSM Senior Officials dated 1 May 1992 concerning EIA.

As a result of the EIA training course we have a higher level of knowledge and understanding of the concept of EIA and why it is important for FSM. By undertaking practical case studies we are aware of how to prepare an EIA report and the importance of identifying environmental issues that may be associated with a development proposal.

We have also attempted to develop EIA general procedures that might be appropriate for FSM. These procedures aim to build on the current administrative arrangements in FSM. The existing permit system is, in our opinion, one appropriate decision making tool that can be built on to develop satisfactory procedures applicable across all levels of Government in our count,ry.

Out recommendations are as follows:

- That a Nationwide Board on Environment and Sustainable Development be established by December 1992 with representatives from each State, the National Government, NGO's and private industry and that its responsibilites include:
 - a) setting guidelines for when EIA is needed and how EIA should be done.
 - b) setting minimum environmental standards for water and air quality, noise control and waste management.
 - c) setting guidelines for the management of endangered species, cultural and historic sites and activities outside the 12 mile limit.
 - d) approving or not approving proposed projects funded by donor agencies for which EIA is requested.
 - e) monitoring the environmental performance of the States with respect to the implementation of EIA guidelines and environmental quality standards.

The Nationwide Board on Environment and Sustainable Development will require a technical unit/secretariat to fulfill these responsibilities and to provide assistance to the State agencies.

- 2. That the coordinating State Government agency having primary responsibility for environmental management (nominally the Office of Planning and Statistics -Yap; Development Review C,ommission- Kosrae; Environmental Protection Agency-Chuuk, Pohnpei) will be responsible for:
 - a) ensuring National environmental guidelines and standards are adopted. The States, however, may apply more stringent controls.
 - b) preparing environmental regulations compatible with national laws and standards.
 - c) determining if the environmental impact of a proposal is likely to be significant, thus requiring preparation of an Environmental Impact Statement.
 - d) making the final determination on project approval for all publicly and privately funded projects to be implemented in a State and for which EIA has been satisfactorily undertaken. [See point 1 (d) above for decisions on projects funded by donor agencies. For such projects, the environmental agency in the State concerned will make a recommendation to the Nationwide Board on Environment and Sustainable Development as to whether a project proposal should be approved and if so under what conditions.]
 - e) monitoring the performance of projects which have received environmental approval.
- 3. That the State Government, agency primarily responsible for environmental management will set clear environmental guidelines in consultation with other relevant agencies on the following resource uses/activities.
- -earthmoving
- -agriculture
- -forestry
- -watershed management
- -mining, within the 12 mile zone
- -natural habitat and wildlife protection
- -marine resources management

These guidelines will be compatible with, and not diminish those guidelines established by the Nationwide Board on Environment and Sustainable Development.

- 4. That the Nationwide Board on Environment and Sustainable Development give priority to educating and informing the citizens of FSM that good environmental management makes good business sense. Possible actions include:
 - a) communication with the President, Congress, Governors, Legislators,

Traditional leaders, private sector leaders and Departmental Heads.

- b) preparation of case studies to illustrate the benefits of including EIA in early project planning,
- c) involving community leaders in activities which demonstrate environmentally responsible behavior eg dedicate a day to Earth Day with tree planting and rubbish collection, etc.
- 5. That when established, the Nationwide Board on Environment and Sustainable Development rotate its meetings throughout the States and that frequent workshops be held on relevant environmental management issues to help improve the long term management of the environment of the FSM.
- 6. That the State Government agency responsible for EIA ensure that all categories of project proposals benefit from EIA. Three categories of projects are envisaged:
 - a) simple, low key projects for which conditions can be attached to permits
 - b) project proposals requiring preliminary environmental assessment (say 2-20 page report)
 - c) project proposals requiring comprehensive environmental assessement involving the preparation of an environmental impact statement. (See Attachment 1 for the criteria which will trigger such an assessment).
- 7. That for environmental impact assessment to achieve its full potential, the Nationwide Board on Environment and Sustainable Development will undertake broadscale land and marine resources planning so as to avoid the cumulative impacts of small, individual projects.
- 8. That the State and National Government officials and officers must work cooperatively in pursuing the above mentioned tasks.
- 9. That this Statement by the Technical Officials be submitted to the Chairman of the Senior Officials Seminar, with the request that it be given wide circulation.

In conclusion, we the Technical Officials and Consultants wish to express our appreciation to the Senior Officials for the direction, support and encouragement you are providing as FSM strives to improve on environmental management and EIA in particular. We believe EIA is a very important process which will help our developing nation make the correct development decisions, thus leading us to a better and sustainable future.

CRITERIA WHICH TRIGGER THE NEED FOR COMPREHENSIVE ENVIRONMENTAL ASSESSMENT INVOLVING THE PREPARATION OF AN ENVIRONMENTAL IMPACT STATEMENT

The preparation of an Environmental Impact Statement will be required if one or more of the following criteria are applicable to a project proposal:

The project is likely to cause a significant environmental impact on:

water quality

air quality

marine resources

cultural/historical resources

plants and animals

any sensitive environment

- 2. The project is likely to disturb more than 10,000 square feet of land surface.
- 3. The project is likely to require more than 5,000 cubic yards of fill.
- 4. The project is likely to fail to comply with the FSM's minimum environmental quality standards for water and air quality, noise control and waste management.
- 5. The project is likely to be incompatible with surrounding land uses.
- 6. The project is likely to be controversial.

SPREP TrainingWorkshop: Hypothetical Project #3 (This case study bears no relation to any other project- real or imagined)

Wastewater Treatment Plant: Pohnpei State Fish Processing Plant

Background

The Economic Development Administration, an instrumentality of the Pohnpei State Government is constructing a fish processing plant adjacent to the airport and two hotels at Deketik, Net. The plant will be capable of processing 10 tons of fish during an eight hour shift. It is designed so that a variety of fish products can be prepared by the plant. It is planned to only run the plant for one shift per day as this is the design capacity of the plant's wastewater treatment system.

A key aspect of the plant is the proposed wastewater treatment plant to manage the large amounts of water used in processing fish and washing down work areas. The key points regarding the treatment plant are outlined below.

Capacity

Designed to handle 60 m³/day (= 60,000 l/day or 16,000 gals/day) of wastewater.

Design

State of the art, very modern plant. It is of European design and manufacture. The equipment is metric and was adapted to run on U.S. voltage (110V/60 cycles) rather than European (240v/50 cycles). The plant will also handle wastewater from the existing coldstore and the airport.

Construction

To be constructed by a Danish firm, Sabroe over a 1.5 year period.

Operation

Sabroe will operate the plant under contract for one year after commissioning before handing over operations to the State Government.

Workforce

As the plant is very sophisticated, highly skilled operators will be required. Six such operators will be trained by Sabroe during the plant's first year of operation.

Costs

The capital cost of the wastewater treatment plant is approximately \$1.5 million. The ongoing operational costs are estimated at \$150,000 per year (%10 con construction cost). The cost of the project will be met by the Pohnpei State Government.

Life expectancy

The plant has a life expectancy of 20 years.

Wastewater management

The details of how the treatment system will operate are shown in Attachment 1.

Pollution Control

The wastewater treatment plant is a modern, sophisticated facility. It is designed to significantly reduce the pollution potential of the wastewater.

The plant will discharge a maximum of 60m^3 /day of treated effluent (equivalent to influent design maximum) via an ocean outfall extending approximately 20 meters off the southwest corner of the airport runway in 4 meters of water. Here the effluent will flow into the main ship channel which averages 16 meters in depth in this area. The quality of the discharged effluent will not cause any significant impact on the environment.

Dried sludge, grease and scum will be either disposed of in a landfill or used as fertilizer. At plant operational capacity it is estimated that about 3 metric tons of offal, 200 kgs of fats and oils and one metric ton of sludge will be produced daily.

Benefits

The wastewater treatment plant is a key component of the multipurpose fish processing plant. The processing plant will enable the Pohnpei State Government to generate income (estimated at \$2.5 million/year) by adding value to the fish harvested by the small scale commercial fishermen within the state. The project will enhance the economic development of Pohnpei and hence generate benefits to the wider community.

SPREP Training Workshop: Hypothetical P'roject #2 (This case study bears no relation to any other project- real or imaqined)

Nihkwe Dredge Site Background Information

Outline

The FSM Office of Planning and Statistics, as project manager for the construction of a new campus for the Community College of Micronesia, proposes to dredge 12,000 yds³ from coastal waters at Nihkwe, in the municipality of Sokehs. The material will be used primarily for construction of roads and building site preparation at the project site. Outlined below are the key points regarding the proposal. The project represents an expansion of an existing privately- operated dredge site.

Life of the operation

Two years, although most of the material will be removed within the first eight months.

Owner of the project

O.P.S. will sub -contract a private company to dredge the site.

Operational equipment

A dragline with a 1.53 meter bucket will be used. Material will be stockpiled at the site and loaded into three dump trucks (10 ton) by means of a front end loader.

Work hours

7:30 am -4:30 pm 6 days/week.

Workforce

Two heavy equipment operators (crane and shovel) plus dump truck operators.

Access

The existing road to the site has been upgraded through municipal grants employing material obtained from the existing dredge operator. It is a 1.5 lane coral capped secondary road that joins the paved circumferential road at the village of Sekere.

Vehicle Movements

Based on the volume of fill extracted within a eight month time frame it is estimated that 20 daily trips will be transported each day by 10 ton dump trucks hauling 6yds³ of material. Material will be hauled during working hours from the Nehkwe to the C.C.M. project site (road base and construction site fill) at Palihir, Sokehs, approximately four road miles west of the dredge site on the circumferential road.

Environmental safeguards

It is proposed to bund or dike the area to be dredged at low tide so that sediments generated by dredging will be contained on site. When dredging at the site is completed, the dikes will be removed and used as fill at the project site. (See attachment 1 for a map of the proposed site).

Justification

The Community College of Micronesia desperately needs a new campus as its current facilities are in poor condition and overcrowded. Developing a tertiary educational institution within the FSM is of high priority so its citizens can be adequately trained within the country. Many students who go elsewhere to college often fail to complete their courses or, conversely, do not return to the FSM. Nihkwe is the closest existing dredge site. (Note that State legislation confines dredging activities to a few designated sites around the island, of which Nihkwe is one.

Attachment 2 outlines the erosion and sedimentation control requirements, which are adequately addressed in this proposal.

SPREP Training Workshop: Hypothetical Project #1
(This case study bears no relation to any other project- real or imagined)

Nihco Resort Development at Pais. Sokehs.

Background

Nihco Corp., an international hotel chain, is negotiating to construct a luxury golf resort conveniently located 6 km west of Kolonia and the Pohnpei International Airport. The hotel will be largest and finest resort facility in the country and is expected to attract primarily Japanese tourists who will enjoy its facilities and the scenic beauty of Pohnpei.

Facilities

The hotel will have 250 double occupancy rooms in the main eight story building. Twenty -five luxury condominiums will be sited around the golf course.

The resort complex will have a formal dining facility on the ground floor of the main building; three restaurants, two in the main building and one at the golf clubhouse. There will also be a snack bar by the water park. In addition to the hotel bars, there will be a bar at the clubhouse and a poolside bar. A discotheque will be housed in the main building.

Recreational facilities include an eighteen hole golf course of international standards (Robert Trent Jones designed), water park with two swimming pools, a wading pool and water slides. The complex will have a fully equipped health center including sauna, gymnasium and massage facilities.

Arrangements have been made with a seperate water recreation company to build its new marina located three kilometer from the main hotel. Hotel quests will have free access to the various water related activities that will be based there. These will include scuba diving, jet skis lagoon tours and dinner cruises.

Cost

Total development cost is estimated to be \$45 million. Financing will be arranged through Nihco Corp.

Construction

Maeda Construction Corp. will be the primary contractor. Construction is planned to take two years. 650 people will be employed in building the resort complex. Maeda Construction has made a good faith commitment to maintain at least 25% local

participation in the worhforce.

Infrastructure

Freshwater needs are anticipated at 75,000 gals/day. This will be met by the development of high volume wells adjacent to the project site.

All power will be generated on- site by two 0.75 megawatt diesal generators.

Surfaced roads will be built to link all on- site facilities and link the resort to the circumferential road.

Wastewater will be treated in a state of the art "package" secondary treatment plant. Treated effluent will be discharged into the lower part of the Ninduwi river.

Workforce

The hotel will employ 450 people. One hundred entry level positions will be reserved for qualified local residents. The remaining positions will be filled by foreign nationals. Nihco Corp. will also endeavor to recruit 5 management trainees from the local population. Once trained, they will be employed in junior managerial positions.

Local Benefits

This project create a truly world class resort within the FSM.

This will contribute significantly to boosting the tourism industry in the country and in particular in Pohnpei. Tourists will undoubtedly spend some of money at local establishments, increasing business. Direct benefits include significant employment opportunities for local residents and tax revenue for State and National governments.

Attachment 1: site plan

EIA TECHNICAL TRAINING SEMINAR PALIKIR, POHNPEI, FSM 4 -1 MAY, 1992

EVALUATION FORM

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

1. How useful was the workshop and the way EIA is done?	in increasing your understanding of	of EIA principles
[] very useful	83 %	
[] useful	17%	
[] little use		
2. Do you think the workshop was		
[] too long?		
[] too short?	28%	
[] about right?	72 %	
3. Which particular sections of the	workshop were the most useful?	
all useful case studies EIA management group discussion EIA procedures and principle	es	
4. Which particular sections of the	workshops were of least value?	
legal aspects theory none	13% 7% 80%	
5. How do you rate the field exerc		
I lusefulI somevalueI l waste of time	88% 12%	
6 Are there any specific topics you in this technical workshop?		e not covered

an in depth study of EIA methods specific guidelines on particular developments case study on master planning

7. Are there sections of the workshop that should be expanded upon?

mitigation should be stressed more time on discussion of field studies awareness measures to the public

8. As an aide to learning		, the preparation	of the	outline of	an EIA
Report based on the case	studies was:				

I	l very valuable	94%
1] useful	6%
[] of little value	

9. The organisation of the workshop was:

[] excellent	50%
I] good	45%
] fair	5%
I] poor	

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

Qual i ty		Lenght	
[] good	94%	[] long	12%
[] fair	6%	[] about right	66%
[] poor		[] short	22%

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

provide hand outs use more practical examples more overheads more less formal presentations more discussions

11. Please feel free to make any further comments.

a follow up workshop is necessary to be rotated among Statea

NOTE: YOU DO NOT NEED TO PUT YOUR NAME ON THIS FORM.