

Preliminary assessment for the establishment of a community-based fisheries management programme in the State of Pohnpei, Federated States of Micronesia

FIELD REPORT
2007

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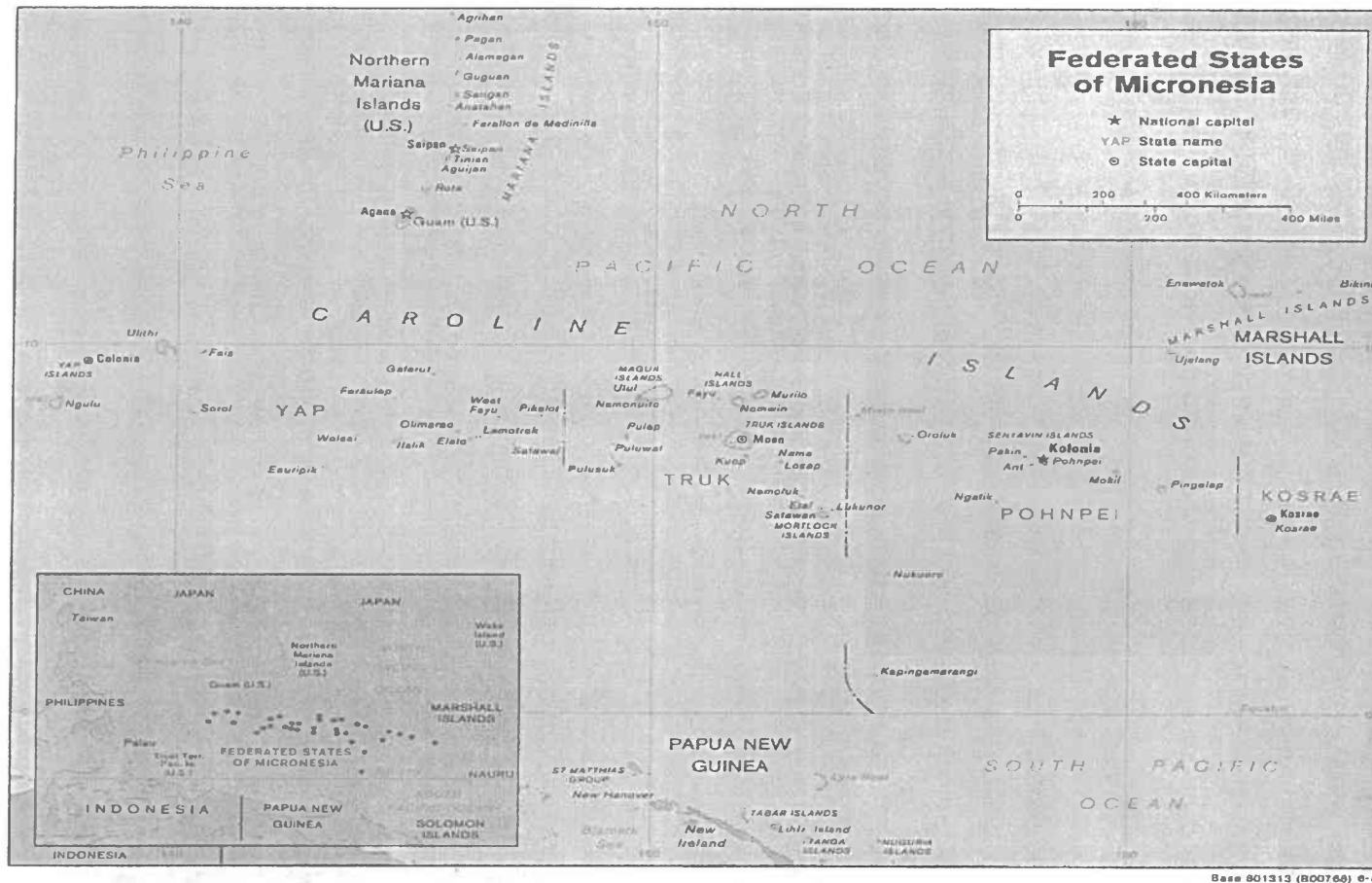
Lastly, special thanks to my colleague Donald David and his staff for their contributions and for facilitating this assignment.

Magele Etuati Ropeti

Acronyms and abbreviations

AG	Attorney General
CBFMP	community-based fisheries management programme
CFMS	Coastal Fisheries Management Section (SPC)
COM	College of Micronesia Land Grant Program
COM-FSM	College of Micronesia-FSM
CSP	Conservation Society of Pohnpei
DEA	Department of Economic Affairs
DFMC	Division of Forestry and Marine Conservation
DLNR	Department of Lands and Natural Resources
FSM	Federated States of Micronesia
HOF	Heads of Fisheries
MCT	Micronesia Conservation Trust
MRDS	Marine Resources Development Section
NGO	non-governmental organisation
OEA	Office of Economic Affairs
SOP	State of Pohnpei
SPC	Secretariat of the Pacific Community

Map of the Federated States of Micronesia, highlighting the State of Pohnpei



Source: <http://www.lib.utexas.edu/maps>

SUMMARY OF RECOMMENDATIONS

Recommendation 1

The current legislation should be reviewed to recognise community management initiatives, and/or an arrangement should be made whereby local communities, through their municipal governments, are legally recognised as custodians of marine resources on behalf of the state. The arrangements should not undermine state ownership of coastal areas and should not contradict any existing laws of Pohnpei State.

Recommendation 2

There should be a process whereby community rules are prepared in accordance with the relevant legislation and are accorded recognition in a court of law.

Recommendation 3

The state government departments involved with fisheries conservation and management should maintain partnerships with NGOs and continue the current practice of resource sharing when implementing work plans.

Recommendation 4

Extensive awareness programmes should be developed and implemented to increase the knowledge of local communities about the marine environment and ensure long-term support for coastal fisheries management programmes.

Recommendation 5

Programme staff should undertake appropriate training for facilitating community workshops and the application of other specialised tools in community-based fisheries management programmes (CBFMPs).

Recommendation 6

Selected programme staff should undertake an attachment with SPC's Coastal Fisheries Management Programme to develop a CBFMP model for Pohnpei.

Recommendation 7

A co-management approach to fisheries management should be developed through maximum community participation, which will result in ownership of community fisheries management plans as well as provide alternative sources of seafood and income-generating activities for local communities.

Recommendation 8

The state government should consider an increase in the Marine Resources Development Section (MRDS) budget for CBFMP activities and, where possible, offer financial support for community undertakings.

Recommendation 9

MRDS, through the Office of Economic Affairs (OEA), should seek assistance from SPC's Aquaculture Programme with the development of a market plan and farm management guidelines for the government pearl farming project.

1. Introduction

This report presents preliminary findings of a field study conducted for the development and establishment of a community-based fisheries management programme (CBFMP) for the management of coastal fisheries resources in the State of Pohnpei (SoP), Federated States of Micronesia (FSM).

The preliminary assessment on the need for a coastal fisheries management programme was carried out in response to a request from the SoP Office of Economic Affairs (OEA) through the FSM Department of Foreign Affairs, asking for such work to be conducted by the Coastal Fisheries Management Section (CFMS) of the Secretariat of the Pacific Community (SPC).

Since the inception of the SPC Strategic Plan for Fisheries Management and Sustainable Coastal Fisheries in Pacific Island Countries, and its endorsement by Heads of Fisheries (HOF) in 2003, CFMS has been actively involved in the development of management programmes for coastal fisheries resources in the region. As a result, management regimes have shifted from the conventional, centrally based type (known as the 'top-down approach'), where national governments impose a variety of legislation to control fisheries, to community-driven programmes (the 'bottom-up approach').

The CBFMP approach gives local communities, as the resource users, sole responsibility for the management of their resources. In this regard, the communities become part of the decision-making process. Management actions are identified by the communities themselves, with the government playing an advisory role in the proposed management undertakings. Additionally, the CBFMP approach emphasises the involvement in the process of all sectors of the community, especially women and youth. Through the implementation of CBFMPs, traditional cultural values, government institutions, non-governmental organisations (NGOs) and traditional knowledge are all incorporated to form the basis of management guidelines.

Furthermore, the bottom-up approach culminates in a fisheries management plan for each participating community. The plan for each community sets out the resource management and conservation undertakings of the community and the support undertakings of the local fisheries authority.

2. Background

Pohnpei is one of the four states that form the Federated States of Micronesia (the other three are Yap, Chuuk and Kosrae). It is located in the tropical Northern Pacific, in the middle of the Eastern Caroline Islands between Honolulu and Manila. The state comprises Pohnpei (main island) and eight smaller atolls scattered outside the barrier reef. The state has a land area of approximately 345 square kilometres.

The main island of Pohnpei, which has been labelled the Garden Island due to its fertile soil and luxuriant inland vegetation, is almost circular, with a diameter of approximately 21 kilometres and a circumference of about 112 kilometres. It hosts the capital of FSM, Palikir.

The state's population of about 40,000 live mostly on the main island and are involved in subsistence agriculture, fishing and small handicrafts operations.

3. Terms of reference for the assessment

The request from the SoP to SPC was mainly for advisory assistance in developing viable programmes and fisheries management plans that would promote the sustainable management and utilisation of coastal fisheries resources. Reference was made to the following key areas.

- i. Undertake a preliminary study to find out how such management plans may be developed.
- ii. Assess the level of resources available within the SoP at both the government and community level, with particular attention to personnel and finance.
- iii. Make recommendations as to how the management of the local pearl industry might be facilitated by local communities.
- iv. Provide assistance for the future management of inshore fisheries.
- v. Present the findings of the preliminary study to the state government at the end of the assignment.

4. Preparation of the report

This report is based on a literature review and on consultations with important stakeholders, including the Marine Resources Development Section (MRDS), NGOs,

state government agencies, the College of Micronesia (COM/COM-FSM), municipal authorities, and island communities. The State Office of the Attorney General was heavily involved with the consultations in regard to determining the legal framework necessary for the development of a CBFDP.

5. Coastal fisheries management and conservation in the State of Pohnpei

5.1 Responsible authorities

5.1.1 *Marine Resources Development Section*

MRDS is a sub-sector of the State of Pohnpei's OEA. OEA administers the delivery of technical services for economic development and is responsible for developing policies, plans and projects that encourage economic growth in the state. The Office is also mandated to collaborate with other state departments and with municipal governments in balancing development with conservation and sustainable use of the state's natural resources.

In terms of fisheries resources, MRDS has the following responsibilities:

- formulate marine resources and coastal zone plans, policies and programmes;
- develop and implement experimental trials for commercially viable ventures;
- provide information and technical assistance to fishers and aquaculture farmers;
- and
- develop an effective extension system that is capable of providing advice at the municipal government level and to development entities in an effort to improve economic opportunities for inshore operators.

5.1.2 *Division of Forestry and Marine Conservation*

The Division of Forestry and Marine Conservation (DFMC) is a division of the Department of Land and Natural Resources (DLNR). Its mandate is to establish and implement policies and plans to promote the efficient economic use of Pohnpei's natural resources. It is also responsible for the conservation and sustainable use of natural resources.

In terms of fisheries management, DFMC is mandated by law to establish and maintain sanctuaries, and to prepare and enforce relevant legislation for the

protection and management of Pohnpei's marine resources. DFMC's enforcement officers work closely with MRDS staff in matters relating to marine conservation and management. The enforcement officers have 'police powers', including the authority to serve and execute warrants, issue summons and citations, and arrest offenders.

5.1.3 *National fisheries development section*

Through the Fisheries Section of the Division of Sector Development within the Department of Economic Affairs, the national government provides support to state agencies involved in coastal fisheries development and management programmes. The support comes mainly in technical assistance, facilitating contacts between state agencies and external organisations, and coordination of FSM's development partners within the fisheries sector.

5.2 Involvement of NGOs

5.2.1 *Conservation Society of Pohnpei*

The state authorities responsible for the conservation and management of Pohnpei's fisheries resources enjoy a productive relationship and partnership with local NGOs. Various projects implemented under the umbrella of NGOs support the local government's goals, and in fact most of the NGOs' work plans are designed to meet state objectives in terms of sustainable management of terrestrial and marine resources. For example, the Conservation Society of Pohnpei (CSP) played a leading role in the development and implementation of the National Biodiversity Strategy Action Plan, for which all responsible government authorities are part of the state team.

CSP is a local NGO that is led by government initiatives. Its main objective is to complement the state governments' objectives. In its eight years of existence, CSP has developed from humble beginnings to a proactive organisation that realises the need to manage Pohnpei's natural resources. The organisation operates with a budget of over \$500,000 a year and employs about 20 technical and support staff. Its funding comes mainly from international donors.

CSP is currently involved with four major programmes: environmental awareness, terrestrial conservation, watershed management, and marine conservation and management. In its marine programme, CSP is actively involved in the establishment and management of a local Marine Protected Area (MPA) network, conservation of spawning and aggregating sites, and continuous monitoring of coastal fisheries

resources, including coral and inshore sedimentation. The organisation is also involved in community projects, especially the establishment of MPAs and small-scale income-generation activities.

5.2.2 *Micronesia Conservation Trust*

The Micronesia Conservation Trust (MCT) is a non-profit regional organisation sanctioned by FSM laws to support biodiversity conservation and related sustainable development for the people of Micronesia. The organisation seeks outside funding to support community-based organisations and other NGOs through a grant scheme. MCT funds community projects that are related to biodiversity issues through municipal and state governments.

6. Fisheries legislation

The FSM Constitution mandates each of its four state governments to have jurisdiction over its respective waters.

The Pohnpei State Fisheries Protection Act of 1995 declares the jurisdiction of the Pohnpei Government over its state waters and recognises the need to protect and preserve the marine resources therein for the people of the state. It further limits the use of Pohnpei State's resources to the people of Pohnpei. Section 5 of the Act reaffirms the state's powers within state waters. This means the government has sovereign rights for the purpose of exploring, exploiting, conserving and managing fisheries resources within territorial waters.

Other legislation that provides for coastal fisheries management and conservation includes the:

- Conservation and Resource Enforcement Act 1982 (26 PC 1-101 et seq.);
- Endangered Species Act 1975 (26 PC 2-101 et seq.);
- Soil and Water Conservation Act 1992 (26 PC 3-101 et seq.);
- Pohnpei Watershed Forest Reserve and Mangrove Protection Act 1987 (26 PC 3-101 et seq.);
- Marine Sanctuary and Wildlife Refuge Act 1999 (26 PC 4-101 et seq.); and the
- Marine Resources Conservation Act 1981 (26 PC 5-101 et seq.).

The management of FSM's exclusive economic zone is a responsibility of the national government.

The existing legislation appears to adequately cover the need for coastal fisheries management work. The exploitation and harvesting of fisheries resources are explicitly provided for by the existing legislation. However, as with any other government law, monitoring and enforcement are a challenge for the responsible authorities due to the high cost of enforcement and lack of human resources.

7. Status of coastal fisheries resources

In SoP, like many other island states, communities are highly dependent on the wide range of fish and shellfish obtained from easily accessible coastal areas. Exploitation of these areas has traditionally been purely for subsistence purposes. However, with increasing populations and the shift from a primarily subsistence-level to a cash-based economy, coastal fisheries resources and coral reef ecosystems are being subjected to enormous pressure from their users.

A Rapid Ecological Assessment (REA) and market surveys recently conducted by CSP and MRDS have revealed that coastal fisheries resources around SoP are declining in terms of number and size. Similar responses were received from community members during the consultations.

Reasons for the declining resources include:

- overfishing;
- habitat degradation and sedimentation due to poor land management practices;
- land-based activities and development;
- market demand for fresh fish and shellfish;
- crown of thorns starfish outbreaks; and
- dredging and coral reef mining.

The REA report calls for management actions and policies to be implemented for Pohnpei's coastal fisheries resources.

8. Pearl oyster farming trials

Pearl oysters (*Pinctada margaritifera*) occur naturally in the waters of FSM. Initial efforts to develop farming of pearl oysters as an income-generation activity for coastal communities were made by the state government in 1994 at Nukuoro Atoll .

At Nukuoro the government has been engaged in commercial production of black pearls based on wild oyster collection. Hatchery-based black pearl farming is currently in its trial stage. The trials are being spearheaded by the College of Micronesia (COM/COM-FSM), with major funding from US research funds. Three grow-out farms have been established in two island communities, Pakin and Mwoakilloa, and at Nett Point on Pohnpei as the COM/COM-FSM pilot farm. There are also two private pilot farms, in Nahlap on Pohnpei and at Ahnt Atoll. COM/COM-FSM is working closely with the municipal governments of the respective communities on the trials.

The Nukuoro community-owned farm depends largely on spats (juvenile pearl oysters) collected from the wild; all the other farms are based on hatchery-produced oysters. COM/COM-FSM experts have been developing hatchery methods and grow-out techniques since 2002. They have already produced tens of thousands of spats, which were then grown to seedable size for round-pearl nucleus implantation. Some of these hatchery-produced oysters were transferred to the outer islands of Pakin, Mwoakilloa and Ahnt and to the private pilot farms. Hatchery production and pearl production continue to be demonstrated at Nett Point on Pohnpei since the first black pearl production in 2004. The first harvest at Pakin Atoll was conducted in July 2007, with 3000 pearls harvested.

According to the expert in charge of the pearl oyster project, the aim is to conduct scientific research on the feasibility of pearl farming in Pohnpei and to gradually transfer ownership to the communities. The trials' major objectives are to produce a superior-quality pearl from the hatchery-based farming and to develop a new market, as well as to relieve pressure on wild pearl oyster stocks for existing operations in the region. The project has secured the assistance of a master pearl technician from Australia to conduct harvests and seeding as well as research into quality improvement. The master technician has also been providing seeding skill training for the project technicians since 2003. The farms are now in their fifth seeding activity and have harvested approximately 5000 pearls so far.

9. Discussion and recommendations

9.1 *Legal recognition of community ownership*

Recommendation 1

The current legislation should be reviewed to recognise community management initiatives, and/or an arrangement should be made whereby local communities, through their municipal governments, are legally recognised as custodians of marine resources on behalf of the state. The arrangements should not undermine state ownership of coastal areas and should not contradict any existing laws of Pohnpei State.

All land below the 'high water mark' – including all reefs and most lagoon areas within state waters – belongs to the state with certain exceptions (42 PC 8-101). The main objective of the Pohnpei Fisheries Act 1995 is to protect and preserve the marine resources within state territorial waters for the benefit of the people of Pohnpei. Within the purpose of the Act, it clearly spells out the intentions of SOP to restrict the utilisation of its coastal resources to its people. However, when it comes to management and conservation, these are always perceived by communities as the responsibility of government as the land is owned by the state.

Due to the open-access or 'free for all' nature of fishing in Pohnpei, fishers have the freedom to harvest resources from anywhere regardless of their location. In simple terms, the resources are for everyone and no one is responsible for their management.

For example, when consulted during the assignment, members of the Pakin community revealed that most of the fishers that indiscriminately harvest their reef and lagoon waters are from the main island and are mainly artisanal fishers. When asked what should be done, no one had any idea and all pointed to the state fisheries enforcement team.

To implement a successful CBFMP, local communities need to be legally recognised as custodians of their resources and take full responsibility for their preservation and management as state representatives. As a result, the development of management plans and policies is within the boundaries of local legislation, according to which

communities create their own fishing regulations and conservation rules that are respected by community members.

Alternatively, the state government could consider assigning 'Special Management Areas' to the local communities, whereby the communities, through their respective municipal governments, implement management programmes for particular areas. By doing so, communities would have ownership of those areas and control their utilisation and management.

9.2 Legal recognition of community rules

Recommendation 2

There should be a process whereby community rules are prepared in accordance with the relevant legislation and are accorded recognition in a court of law.

Community-based fisheries management programmes have the potential to create communities who have set their own fishing regulations and conservation rules and are abiding by them. If communities make their own conservation laws, as they have historically done so in the past, they are more likely to respect those laws.

Because communities are regulating fisheries for which they see themselves responsible, there is a considerable saving on enforcement costs that may otherwise fall on government agencies.

Following on from Recommendation 1, amendments in the legislation should give legal recognition to community rules. This will empower communities to take actions for the protection of their own marine environments. One avenue to be considered is a provision within the Pohnpei State Fisheries Protection Act 1995, Section 19 (codified as 29 PC 1-118).

Section 19: Authority to adopt regulations

- (1) The Office of Economic Affairs shall have the authority to adopt rules and regulations for the conservation and management of fish within state waters.
- (2) Regulations adopted by the Office shall have the full force and effect of the law.

Although this is an option, a process whereby communities develop their own rules to be adopted by the department as regulations under the department's authority should also be in place. To avoid delays caused by bureaucratic procedures, the process should be simple. For example, communities develop their fisheries management plan in consultation with the Marine Resources Division, then develop community rules and regulations; these are submitted to the AG Office for advice, endorsed by the Director and gazetted; and they undergo public announcement for a certain period of time, then become legally recognised.

9.3 Partnerships between state government departments and NGOs

Recommendation 3

The state government departments involved with fisheries conservation and management should maintain partnerships with NGOs and continue the current practice of resource sharing when implementing work plans.

The partnerships between state government departments and NGOs have proven to be an asset for marine conservation and fisheries management work in Pohnpei. The success of the partnerships is due mainly to all parties understanding their respective roles and mandates within the line of work. It is therefore recommended that MRDS and CSP should be partners in implementing the CBFMP and should share resources in terms of funding and personnel.

9.4 Developing a CBFMP

9.4.1 Awareness programmes

Recommendation 4

Extensive awareness programmes should be developed and implemented to increase the knowledge of local communities about the marine environment and ensure long-term support for coastal fisheries management programmes.

One issue of great concern identified from the consultations was the limited level of awareness among communities (especially in the outer islands) of fisheries issues in terms of resource use and management practices. Awareness programmes are currently conducted on the main island. However, there should be a statewide programme that targets rural communities.

MRDS and CSP should coordinate the awareness programmes, with the involvement of the Liaison Officer of the Public Affairs Office. The Liaison Officer is the link between municipal governments, where most of the island communities are represented, and the state government. The Liaison Officer has a statewide news programme (print, radio and TV) that could be used to convey some of the department's concerns regarding the status of fisheries resources and intentions for management.

MRDS and CSP should develop awareness materials in the various dialects used in SoP.

9.4.2 Facilitators' training programme

Recommendation 5

Programme staff should undertake appropriate training for facilitating community workshops and the application of other specialised tools in CBFMPs.

A training programme should be carried out for all staff concerned with CBFMPs (from MRDS, CSP and DLNR) to obtain the relevant skills before working in the first community. The main task for the training would be for the staff to learn how to utilise some of the readily available tools for community-based resource management programmes. Dealing with communities requires specialised skills, such as facilitating community workshops and meetings and the ability to assist with the drafting of community fisheries management plans.

The facilitators' training programme should offer practical exercises on facilitation techniques and at the same time gather background information from participants on the overall situation of current practices and existing management. Such information will be used to develop a CBFMP model to be used as a guideline for the programme in SoP.

It is also important for staff to be familiar with cultural and traditional protocols so that the programme will be accepted and so that they can motivate communities to participate in the various activities the programme offers. These skills do not necessarily require profound academic qualifications and may not be difficult to obtain if specialised training is received by every member of the programme staff. The training should be conducted by SPC's Coastal Fisheries Management Section.

Apart from community facilitating skills, the staff should acquire basic scientific knowledge on coastal fisheries issues, such as biology, conservation strategies, fishing technology, seafood handling, boat handling and safety at sea, aquaculture, and fisheries management practices. In-depth knowledge of these areas should be provided by the technical staff within the relevant authority if the need arises.

Given the expression of interest by the national MRDS for the establishment of similar programmes in other states, the national authority should invite some of its officers to the facilitators' training programme and fund their participation.

9.4.3 Developing a CBFMP model for Pohnpei

Recommendation 6

Selected programme staff should undertake an attachment with SPC's Coastal Fisheries Management Programme to develop a CBFMP model for Pohnpei.

Although similar programmes have been developed and successfully implemented in other Pacific Island countries, their approaches and processes are different from those of Pohnpei. This is simply because of the dissimilar cultural protocols, community structures and settings, institutional arrangements and provisions in the fisheries legislation for a CBFMP.

A CBFMP model applicable to Pohnpei will be based on local protocols and take into consideration the roles of the national, state and municipal governments and communities in coastal fisheries management initiatives.

9.4.4 Principles for CBFMPs

Recommendation 7

A co-management approach to fisheries management should be developed through maximum community participation, which will result in ownership of community fisheries management plans as well as provide alternative sources of seafood and income-generating activities for local communities.

The community-based fisheries management approach targets local communities to develop their own community fisheries management plans that can provide a framework for management activities to be implemented. It also targets communities,

as the resource users, to take responsible actions in the management of the resources.

The CBFMP process should be based on the following principles for any community-based resource management initiative.

a. *Maximum community participation*

Community ownership will be optimised if as many people as possible are allowed to contribute to the process of developing the district fisheries management plan. Wide community participation in the project's planning, development, implementation, monitoring and evaluation will eventually result in communities owning the plan and being committed to implementing project activities on their own.

b. *Motivation and education*

Obtaining an understanding of the resource's status through awareness and educational programmes coupled with traditional knowledge is very important to motivate people to manage their marine environment. This is the case for Pohnpei, where some of the old people consulted have expressed concern for the marine environment when asked about their experiences through the years.

The results of the various scientific researches conducted on the status of coastal fisheries resources and the marine environment should be translated into the local language and be easily accessible. Communities will be motivated to take necessary measures if they are well informed of the status and condition of the marine resources they depend upon.

c. *A management system that is demand-based*

For reasons of efficiency and sustainability, the management system must focus on communities that have a concern for the marine environment, are prepared to participate in and contribute to finding solutions to problems, and are willing to work with state authorities in implementing fisheries management activities. For Pohnpei, the Pakin community has expressed interest in participating in the consultation.

d. *The development of alternative sources of seafood*

Managing coastal fisheries is a delicate task as it can be perceived by fishing communities as depriving them of harvesting fisheries resources. Therefore, for a CBFMP to be successfully implemented and sustainable, the programme has to

provide alternative sources of seafood. Options include aquaculture ventures and promoting offshore fishing.

9.5 Budget and finance

Recommendation 8

The state government should consider an increase in the MRDS budget for CBFMP activities and, where possible, offer financial support for community undertakings.

MRDS, through OEA, should propose an increase in its annual operational budget to cover the expenses of the CBFMP. The increase will depend on the number of communities who participate in the programme and the logistics, given the isolation and distance of some communities from the main island.

The success of the CBFMP will, in the long run, save costs in financing enforcement programmes as communities will perform the enforcement themselves.

9.6 Pearl oyster farming trials

Recommendation 9

MRDS, through OEA, should seek assistance from SPC's Aquaculture Programme with the development of a market plan and farm management guidelines for the government pearl farming project.

Consultations with the expert in charge of the pearl oyster farming project revealed the following.

- The COM/COM-FSM pearl oyster farming project has already developed hatchery-based pearl oyster grow-out techniques and is now transforming its pilot farms to commercial activity run by communities in the outer islands and private business owners. COM/COM-FSM continues its research and extension work on pearl quality improvement and training local people for the development of a sustainable pearl industry.
- The long-term goal is to develop the pearl industry in Pohnpei, and hopefully in other states, before the end of the COMPACT-II in 2022. The pearl project work with the island communities is part of integrated economic development of the communities, and the COM/COM-FSM pilot farms will eventually be transferred to the communities as income-generation projects for them. Furthermore, the

pearl project itself will eventually be managed by COM-FSM's Cooperative Research and Extension. The trials provide a platform for community participation and 'hands on' training in farming and grow-out operations.

- The COM/COM-FSM pearl project team of experts has managed to build the capacity of local staff in hatchery and propagation techniques.
- COM/COM-FSM should seek the assistance of the SPC Aquaculture Programme in developing quality control measures and a market plan for the pearl industry well before the community-based pearl farms at Pakin and Mwoakilloa begin exporting their pearls and pearl-related products in around 2011. Additionally, farm management guidelines for community people should be developed and translated into the local dialects. This could be facilitated by MRDS.
- The SPC Aquaculture Programme should also be requested to collaborate with COM/COM-FSM in sharing information and knowledge on developing the handicraft industry. Although some handicraft makers in Pohnpei have begun producing and selling their products by using half-pearls ('Mabe' pearls) and oyster shells donated by the COM/COM-FSM pearl project, for example, craftspeople from Cook Islands and French Polynesia could work with their Pohnpei counterparts to improve local techniques. It should be noted that the COM/COM-FSM pilot farm in Pakin conducts a half-pearl seeding operation, which is carried out by Micronesian seeding technicians trained by the project. It has seeded more than 1000 oysters this year, implanting 2–3 half-pearl nuclei on each side of the shell. Apart from the production of 3000 round-pearls under the COM/COM-FSM research project, about 5000 'Mabe' pearls will be harvested in 2008. This venture awaits development of a marketing strategy for sales in Pohnpei and/or overseas under the Pakin community pearl farming activity.

10. Conclusion

The decline in inshore catches of fish and shellfish in the coastal waters of Pohnpei due to overfishing, pollution and habitat degradation from land-based activities, poor land management practices, poor infrastructure development and natural causes has greatly reduced the availability of marine protein resources, causing concerns for local communities.

Since government actions and national laws to protect fish stocks have not so far proven successful, local communities as resource users must be encouraged to take charge and be the instigators of management actions. The involvement of local

communities in the management process will result in ownership of management plans as well as a commitment to implement programme undertakings on their own.

The establishment of a CBFMP in Pohnpei needs legal recognition and the empowerment of local communities to develop their own community fisheries management plans. Community ownership of certain areas for management purposes should be recognised, and community rules must be developed through a legal process for them to be effective.

MRDS and CSP should take the leading role in facilitating community participation in resource management. The Liaison Officer of the Office of Public Affairs should be involved in the process given his/her close relationship with municipal governments.

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Appendices

Appendix 1: People consulted

Kikuo L. Apis Administrator Office of Economic Affairs Pohnpei State Government	Marion Henry Assistant Secretary Resource Management & Development Department of Economic Affairs FSM National Government
Hon. Richard Susaia Chief Magistrate Sokehs Municipal Government Pohnpei State	Valentin Martin Deputy Assistant Secretary Marine Resources Department of Economic Affairs FSM National Government
Youser Anson Director Department of Land & Natural Resources Pohnpei State Government	Dr Singeru Singeo Executive Director College of Micronesia COM-Land Grant Office
Leonito M. Bacalando Jr Acting Attorney General Office of Attorney General Pohnpei State Government	Masahiro Ito Director Pearl Project COM-Land Grant Office
Salomon Simon Assistant Attorney General Office of Attorney General Pohnpei State Government	Patterson Shed Executive Director Conservation Society of Pohnpei Pohnpei State
Dave Mathias Fisheries Specialist Forestry & Marine Conservation Division Department of Land & Natural Resources Pohnpei State Government	

Appendix 2: List of participants in the final presentation

	Name	Designation	Organisation
1	Valentine Martin	Deputy Assistant Secretary	FSM Marine Resources Unit, DEA
2	Alissa Takesy	Coordinator (Protected Areas Network)	FSM, DEA
3	Cindy Ehmes	Programme Manager	FSM, DEA
4	Marion Henry	Assistant Secretary	FSM Marine Resources Unit, DEA
5	Kikuo L. Apis	Administrator	Pohnpei State Office of Economic Affairs
6	Marcelo Peterson	Mayor	KTC
7	Patterson K. Shed	Executive Director	CSP
8	Donald David	Chief	Marine Resources Development, OEA
9	Petrick F. Ringlen	Chief Magistrate	Madol Government
10	Welsin E. Helgenbergen	Chief	
11	Sother Anthon		Lukemoanlap
12	Saimon Lihpai	Forester	Forestry Division
13	Kesdy Ray Lador	MPA Network Coordinator	CSP
14	Liz Terk	Deputy Director	CSP
15	Heinrick Stevenson	Liaison Officer	Public Affairs Office
16	Nelson David		Kitti Public Works
17	Kadalino Lorens		Agriculture, OEA
18	Masahiro Ito		COM, Land Grant Program
19	Adelino Lorens	Chief	Agriculture, OEA
20	Dave Mathias	Fisheries Specialist	MCU

Appendix 3: Letter from State of Pohnpei requesting assistance from SPC

May 23 07 05:03p

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DEPARTMENT OF FOREIGN AFFAIRS
of the
FEDERATED STATES OF MICRONESIA
P.O. Box P.S.123
Palikir, Pohnpei FM 96941
Telephone: (691)320-2641/2613 Fax: (691) 320-2933

May 23, 2007



Dr. Jimmie Rodgers
Director-General
Secretariat of the Pacific Community
B.P. D5 98848
Noumea, New Caledonia
Fax: +687263818

Dear Director-General Rodgers:

I present my compliments and wish to request for advisory assistance of the Secretariat's Coastal Fisheries Management Unit on development of a comprehensive and viable management plan for the Department of Economic Affairs (Marine Division) of the State Pohnpei. Given the importance and need of the request as it is in line with Pohnpei State's effort to promote sustainable management of coastal fisheries resources, the Department would appreciate your favorable consideration to this request.

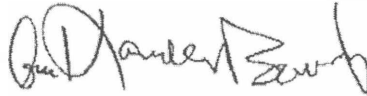
Generally, the request is to undertake the following:

1. undertake a preliminary study to find out how such management plans may be developed,
2. assess the level of resources available within the state of Pohnpei both at government and community levels with particular attention to the personnel and finance,
3. make recommendations as to how the management of local pearl industry may be facilitated by local communities,
4. provide assistance that SPC would assist for future management of Pohnpei's pearl industry and other inshore fisheries. and
5. present findings of the preliminary study to local government at the end of the assignment.

Please have your staff liaise directly with Mr. Donald David at pnimd@nlail.fim,
Chief, Pohnpei Office of Marine Development for further information and/or clarification
if needed.

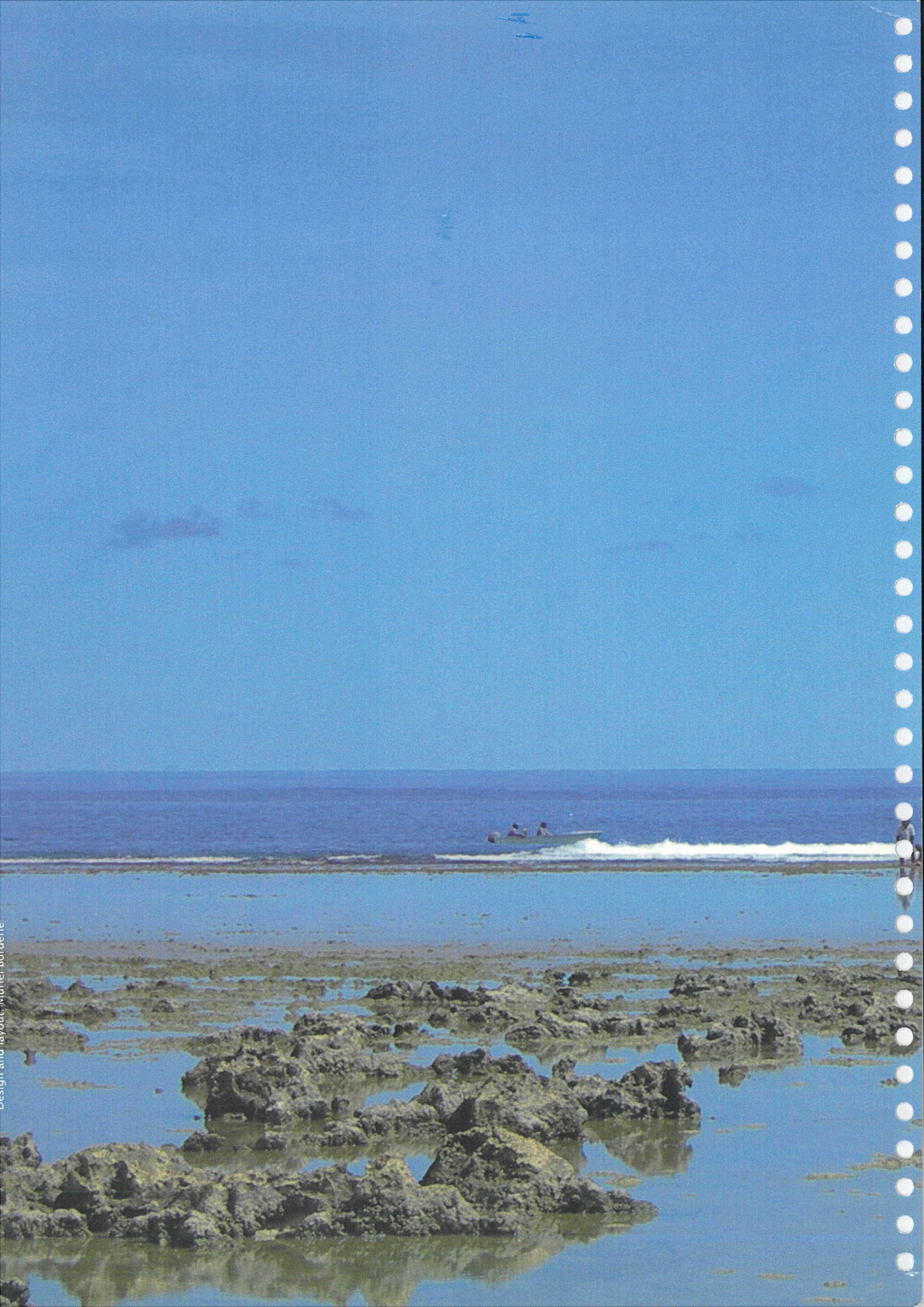
With kind regards, I am,

Sincerely,



Lorin S. Robert
Acting Secretary

Xc: Secretary, Department of Economic Affairs
FSM Embassy, Fiji



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