



Secretariat of the Pacific Community

FIELD REPORT No. 7

**REVIEW OF
THE VILLAGE FISHERIES
MANAGEMENT PLAN OF
THE EXTENSION
PROGRAMME
IN SAMOA**

Ueta Fa'asili

Community Fisheries Adviser

Community Fisheries Section

Secretariat of the Pacific Community

Noumea, New Caledonia

Autalavou Taua

Senior Fisheries Officer–Extension

Fisheries Division

Apia, Samoa

New Zealand Official Development Assistance

Australian Agency for International Development

All rights for commercial / for profit reproduction or translation, in any form, reserved. The SPC authorises the partial reproduction or translation of this material for scientific, educational or research purposes, provided that SPC and the source document are properly acknowledged. Permission to reproduce the document and/or translate in whole, in any form, whether for commercial / for profit or non-profit purposes, must be requested in writing. Original SPC artwork may not be altered or separately published without permission

Original text: English

This field report forms part of a series compiled by the Community Fisheries Section of the Secretariat of the Pacific Community's Coastal Fisheries Programme. These reports have been produced as a record of individual project activities and country assignments, from materials held within the Section, with the aim of making this information readily available. Each report in this series has been compiled within the Community Fisheries Section to a technical standard acceptable for release into the public arena.

The authors wish to thank Patricia Martin for the cover design and Marie-Therese Bui for the layout.

Secretariat of the Pacific Community
BP D5
98848 Noumea Cedex
New Caledonia

Telephone: +687 26 20 00

Facsimile: +687 26 38 18

email: spc@spc.int

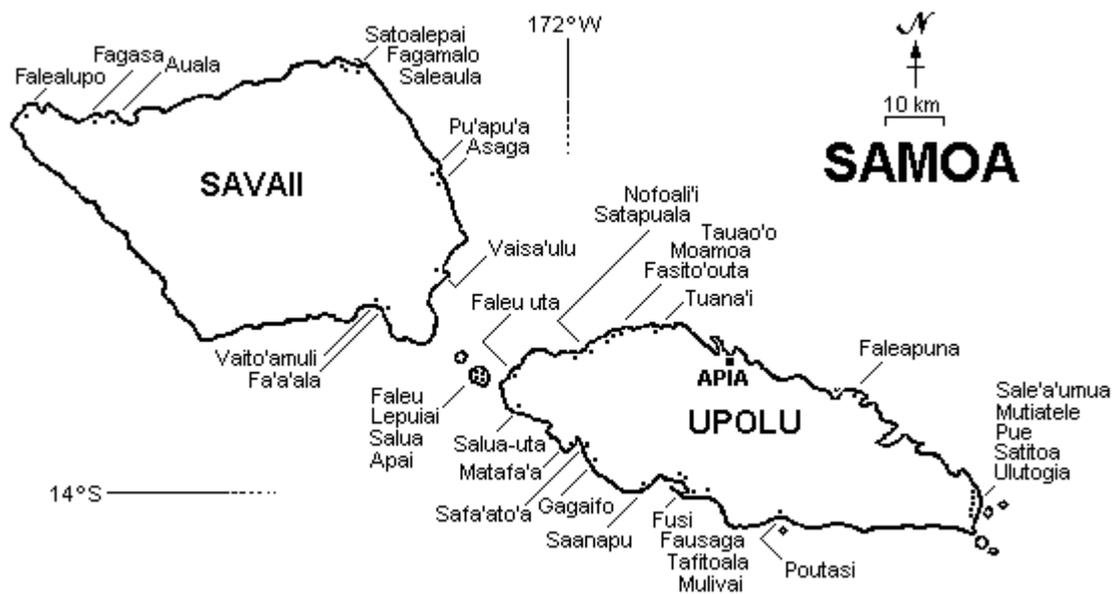
<http://www.spc.int/>

Published with financial assistance from
the Governments of Australia and New Zealand

Prepared at the
Secretariat of the Pacific Community
Noumea, New Caledonia, 2001

CONTENTS

MAP OF SAMOA	V
ACKNOWLEDGMENT	VII
EXECUTIVE SUMMARY	IX
1. SUMMARY OF RECOMMENDATIONS	1
2. BACKGROUND	3
3. PURPOSE OF THE ASSIGNMENT	4
4. THE FISHERIES EXTENSION PROGRAMME IN SAMOA	5
4.1. <i>The staff</i>	5
4.2. <i>The extension process practiced in Samoa</i>	6
5. MONITORING THE EXTENSION PROGRAMME	10
6. KEY FINDINGS AND RECOMMENDATIONS	10
6.1. <i>Review of the Village Fisheries Management Plans (VFMPs)</i>	10
6.2. <i>Final version of the VFMPs</i>	12
6.3. <i>English translation of VFMPs</i>	13
6.4. <i>Format for writing up of VFMPs</i>	13
6.5. <i>Village Community Undertakings</i>	14
6.6. <i>Undertakings by the Fisheries Division</i>	17
6.7. <i>Giant clams</i>	17
6.8. <i>Small fishing boats</i>	18
6.9. <i>Monthly visits</i>	18
6.10. <i>Village Fisheries By-laws</i>	19
6.10.1. <i>General problems</i>	19
6.10.2. <i>Low penalties</i>	20
6.10.3. <i>Difficulties from the prosecutor's perspective</i>	20
6.10.4. <i>Inconsistencies with other legislation</i>	21
6.10.5. <i>Inconsistencies with other by-laws</i>	22
7. CONCLUSION	22
8. REFERENCES	23
9. APPENDICES:	
1. TERMS OF REFERENCE	25
2. REVIEW FORM	27
3. SUMMARY OF MISTAKES OBSERVED DURING THE REVIEW OF VFMPs	35
4. NORMAL UNDERTAKINGS BY THE FISHERIES DIVISION REQUESTED THROUGH VFMPs	41
5. COMMON COMMUNITY ACTIONS AND REGULATIONS PRACTICED BY VILLAGE COMMUNITIES IN SAMOA	43
6. PEOPLE CONSULTED	45



ACKNOWLEDGMENTS

The assistance of the Assistant Director and senior staff of the Fisheries Division during the term of the assignment is very much appreciated. Thanks are due to the Legal Adviser of the Ministry of Agriculture, Forests, Fisheries and Meteorology for his contribution in Fisheries By-laws. Special thanks go to the Head of the Extension Section, Eteuati Ropeti, who has facilitated this assignment a great deal. The contribution of Senior Fisheries Officer Autalavou Taua in the production of this report is very much appreciated. Last but not least, I acknowledge the invaluable comments by Dr. Mike King of the AusAID Fisheries Project in Samoa.

Funding for this assignment and production of this report was provided by the Governments of Australia and New Zealand.

EXECUTIVE SUMMARY

The Fisheries Extension Programme in Samoa was established in 1995 with the assistance of AusAID, to motivate village communities to undertake responsible actions in order to manage their subsistence fisheries and marine environment. The provision of 18 Fisheries Division staff members to deliver the services required by village communities signals the degree of priority the Samoa Government has placed on the importance of its subsistence and inshore fisheries. Since the inception of the programme, of the 71 village communities that have worked with the Fisheries Division, 67 have drawn up Village Fisheries Management Plans (VFMPs) and 57 have put in place Fisheries By-laws.

The strategy employed by the Fisheries Extension Programme is to seek a community-developed Fisheries Management Plan from each participating village community. Each participating community is encouraged to analyse its fishing problems and to find solutions. The overall approach for the success of the programme is based on four principles – **i)** maximum participation to involve all groups in the community; **ii)** motivation rather than education as all village communities already know the importance of responsible exploitation of their fishery resources; **iii)** a demand-based extension system using the 'bottom-up' approach; and **iv)** the development of alternative sources of seafood to the present heavy exploitation of lagoons and near-shore reefs.

All VFMPs produced by village communities under the extension process exist only as final drafts and have not yet been revised in the light of the comments produced at the final *fono*. A review of the 63 available VFMPs clearly revealed repeated errors common to almost all of them. This had occurred as there was no proper checking procedure to be followed when the VFMPs were formulated. Occasionally, foreign parties that closely follow the development of the Samoa Fisheries Division's community-based programme would request a copy of a VFMP. However, the VFMPs do not exist in English apart from the demonstration management plan for "Fiaola", an imaginary village. A VFMP is a result of an important and extensive community exercise that could take over a month to accomplish. It contains invaluable data that would be hard to retrieve if it is not properly documented and put in safe keeping. Given the importance of this information, all VFMPs produced under the Extension Programme must be finalised and translated into English.

The role played by the Custom Facilitator in the Extension Programme is absolutely important throughout the extension process, beginning with the first *fono* and including the series of group meetings until the final *fono*. The service of the Custom Facilitator is needed to lead dialogue consultations with village communities in order to encourage active participation from those that do not perform up to expectations under their VFMPs and are about to withdraw. Regular contact between members of the respective Fisheries Management Committees (FMC) and fisheries extension staff through monthly visits provides a good opportunity for consultations and must be encouraged. As these consultations emulate customary procedure, it is for the success and sustainability of the Extension Programme that the position of Custom Facilitator must continue to exist and must form part of the Fisheries Division's approved staff establishment.

The most common request from village communities which forms part of the Fisheries Division's undertakings is the provision of giant clams for their marine protected areas. This is one of the aspects which motivates communities to enter the Extension Programme. Eight communities have not been supplied with giant clams for over a year. It is expected that the first hatch of the newly established Fisheries Hatchery will not be ready until the end of 2001. This means that some village communities will have to wait for about two years before they are given their first lot of giant clams. The big delay in satisfying this community demand can lead to the complete loss of community morale thus affecting the future progress of the Extension Programme. As a matter of urgency, therefore, giant clams must be bought from overseas to fill in the gap while awaiting the first hatch of the Fisheries Hatchery.

The cessation of the EU programme which used to provide 65% of the costs of small fishing boats for village communities has disadvantaged those communities that have only recently entered the programme. Since this incentive can no longer be used to their benefit, the Fisheries Division must work out other alternatives in order to facilitate the purchase of small fishing boats for village communities.

The Fisheries Act 1988 enables village rules to obtain legal recognition by way of By-laws. These Village Fisheries By-laws are seen as vital management tools to the success of the Extension Programme. However, there is a need to review the By-laws provisions in order to avoid inconsistencies with the Lands, Survey, and Environment Act 1989. The level of penalty imposed for breaches of Fisheries By-laws should also be reviewed so that it reflects the degree of importance placed by Samoa on its marine environment.

1. SUMMARY OF RECOMMENDATIONS

1. It is recommended that the following procedure should be employed by the Extension Section in assisting village communities to develop their VFMPs and treated as a policy procedure of the Fisheries Division:
 - (a) The first draft of the VFMP is to be prepared on behalf of the CFMAC by the extension facilitator responsible for the extension process in a particular village.
 - (b) The first draft is to be thoroughly checked by the responsible Senior Fisheries Officer in order to produce the second draft.
 - (c) The second draft must then be scrutinized by the Head of Extension in order to produce the final draft to be presented before the Council of Chiefs at the final fono.
 - (d) This final draft must be edited to take into account alterations required and errors discovered at the final fono and then becomes the VFMP.
 - (e) Four original copies of the VFMP must be produced, of which two are given to the particular village community and two remain at the Fisheries Division. For the Fisheries Division's copies, one is to be kept by the Extension Section and one as a library copy.
1. It is recommended that all final drafts of VFMPs produced since the inception of the Fisheries Extension Programme be written in their final forms using Appendix 3 as guidance to make corrections.
2. It is recommended that all VFMPs produced since the commencement of the Extension Programme be translated into English after they are written in their final forms. Similarly, future VFMPs must be translated immediately after the final drafts are approved by the Council of Chiefs at the final fono.
3. It is recommended that the format of VFMPs should closely follow that of the "Fiaola" with a summary of the undertakings of the respective village communities and the Fisheries Division to be included at the start of each VFMP.
4. The Fisheries Division Management should work out a strategic process in order to encourage and maintain the interest of those communities who are departing from their obligations under their VFMPs. This should be treated as a policy procedure for the Extension Staff to follow when dealing with cases of this nature.

5. Given the importance of the role played by the Custom Facilitator in the Extension Programme, it is recommended that this position be made an approved position under the Staff Establishment of the Fisheries Division.
6. It is recommended that the Extension Section make arrangements for workshops to allow members of FMACs to discuss their problems and to share experiences and ideas. These could be organized once every year.
7. It is recommended that a yearly workshop should be held to invite women who are members of FMACs to exchange experiences and to share ideas on the operation of their VFMPs. Workshops may be held regionally depending on the number of women participating in the management of VFMPs.
8. It is recommended that the collection of giant clam data for analysis by the Fisheries Division should be made the responsibility of the FMAC of the respective village communities. It is therefore very important that the Research Section of the Fisheries Division undertakes community training to enable FMAC members to provide the information needed by the Division.
9. It is recommended that, in order to relieve pressure on the demand for giant clams by village communities that last joined the Extension Programme, the Fisheries Division must purchase two shipments of clams from overseas (Fiji) while awaiting the result of the first spawning of the Fisheries giant clam hatchery.
10. Given the cessation of the EU program, it is important that the Fisheries Division finds other options to assist in facilitating the purchase of small fishing boats for village communities as requested under their VFMPs.
11. The extension staff must continue regular contacts with village communities through monthly visits.
12. As the advertisement of Village By-laws is the responsibility of the Government, it is recommended that the Fisheries Division must budget for this activity in its annual estimate.
13. It is recommended that the suggestions made in the legal opinion regarding the shortcomings of Village By-laws should be pursued in order to alleviate the shortcomings identified.

2. BACKGROUND

Subsistence and inshore fisheries are very important in Samoa as they provide the main source of protein for the Samoan people. However, the responsible management of these fisheries, as contrasted with the continued practice of destructive fishing methods such as dynamiting, poisoning, and coral breakage to name a few, is often difficult to achieve. It was thought that the communities, being the resource users, should be charged with the responsible exploitation and management of their subsistence and inshore fisheries. In order to implement this, the *Fisheries Extension and Training Project* was created under the Fisheries Division with assistance from the Government of Australia. The duration of the project is six years, broken down into two phases of three years each. The Fisheries Extension Programme was one of the main components of the project in its first phase that ended in 1998. The purpose of the Fisheries Extension Programme during the first phase was to establish community fishing practices which are consistent with maximum productivity and sustainability of marine resources. The second phase began in 1999 under a different name, *The Fisheries Project*. The change was made in order to cater for other new initiatives such as Research, Aquaculture and Commercial Fisheries, with which the project was to be involved with in its second phase. Despite the change in the project name, the Fisheries Extension Programme remained an ongoing and important component of the project.

The primary goal of the Extension Programme in Samoa is to target village communities, being the resource users, to take charge of the responsible exploitation and management of their subsistence and artisanal fisheries. The involvement of fishing communities in the management of these fisheries is considered the most effective way to resolve most of the problems threatening their sustainability. Although Samoa has legislation, the Fisheries Act 1988, to manage its fisheries resources, enforcement has always been difficult due to the lack of personnel and resources. The Police Department, which is the enforcement authority in Samoa, does not have adequate personnel to properly monitor all national legislation. The fisheries legislation, designed to prevent the destructive harvests of Samoa's fisheries resources, thus has very little impact on the management of Samoa's marine environment. The alternative, therefore, is to work closely with village communities through the *matai* (chiefly) system in order to encourage the responsible exploitation and management of their subsistence and inshore fisheries. The key task is to convince communities that since they are the resource users, **they**, not the Government, have the primary responsibility to manage their marine environment and its resources.

3. PURPOSE OF THE ASSIGNMENT

The assignment required 10 working days to carry out the following tasks:

- (a) promulgated by village councils (*fono*) as By-laws that may need careful scrutiny in order to avoid conflicts with related Government legislation and make suggestions as to how potential conflicts may be Examine the existing village management plans and point out if any inaccuracies are severe enough to warrant reformulation of the current village fisheries management plan format.
- (b) Examine the series of works obligated as part of the village communities' undertakings, advise on the degree of their proper applicability and suggest any improvement that may be needed in the future.
- (c) Examine the usefulness of the Fisheries Division inputs into the village fisheries community management program in terms of the technical aspects of the program and make suggestions for improvement.
- (d) Identify village rules resolved.

The Terms of Reference for the assignment are attached as Appendix 1.

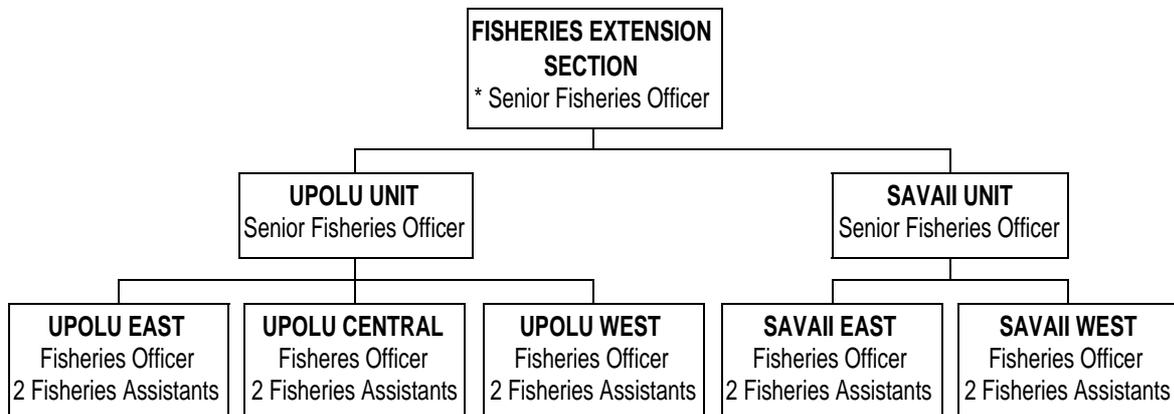
4. THE FISHERIES EXTENSION PROGRAMME IN SAMOA

4.1. The Staff

The services provided under the Fisheries Extension Programme were established in 1995 as the Government of Samoa's contribution to the Fisheries Extension and Training Project co-sponsored by the Government of Australia through AusAID. The aim of the Extension Programme is to motivate coastal communities to undertake initiatives in order to properly manage their subsistence and inshore fisheries. The Extension Section of the Fisheries Division was originally created with 16 staff. A Senior Fisheries Officer was made the head of the section with 3 fisheries officers in Upolu and 2 in Savaii. In addition, the Upolu and Savaii units had 6 and 4 fisheries assistants respectively, with one Fisheries Extension Adviser for each unit provided by AusAID. In the second phase of the project, 2 more senior fisheries officer posts were established, one to head each of the Upolu and Savaii units. This has brought the total number of local staff to 18 to deliver the services required by the village communities in managing their marine environment. Figure 1 provides the present organizational structure of the Fisheries Extension Section in Samoa.

* Senior Fisheries Officer to be promoted as Principal Fisheries Officer

Figure 1: Organizational structure of the Fisheries Extension Section in Samoa



4.2. The Extension Process practiced in Samoa

The extension process is designed on the basis of cultural appropriateness, as a result of recognising the fact that, in Samoan village communities, village councils and chiefs are the prime instigators of change. However, the process still allows ample opportunities for other community groups to participate. The extension process developed to motivate village communities to prepare their own Fisheries Management Plans is summarized in Figure 2 below.

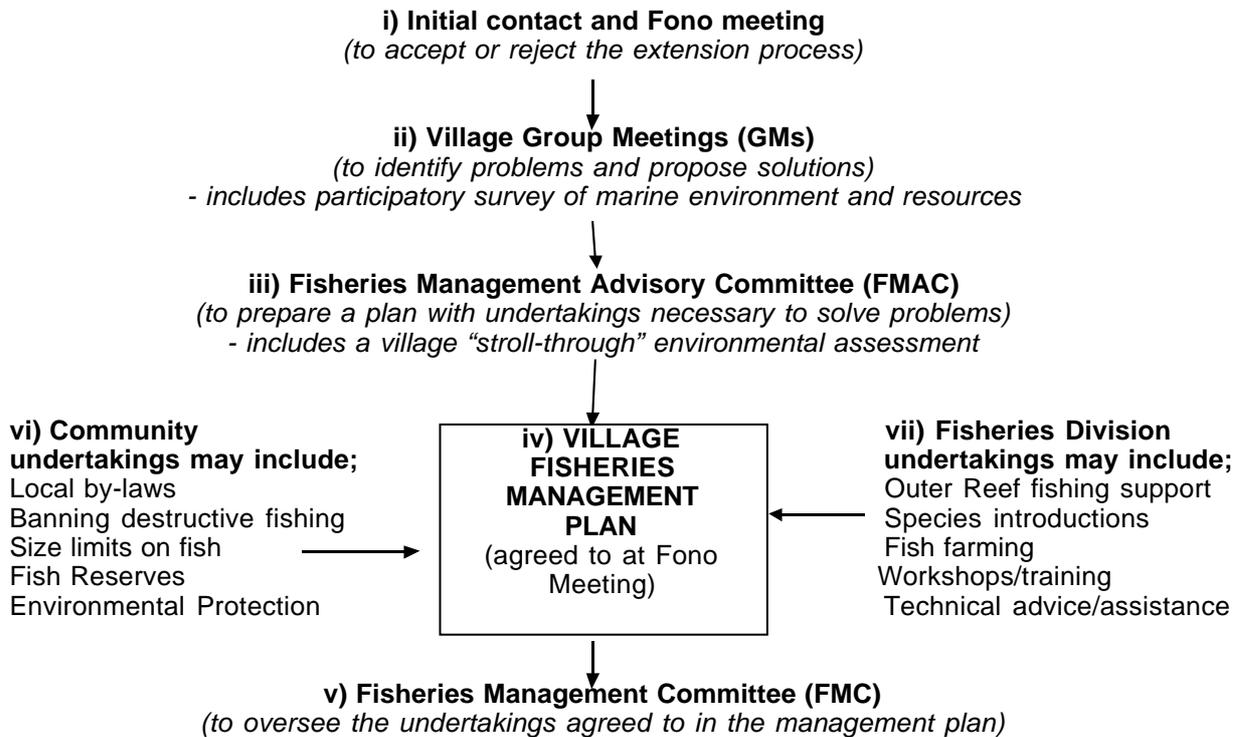


Figure 2: The Fisheries Extension Process in Samoan villages.

- i) *Initial contact and the first village council (fono) meeting* - In the early stages of the programme, villages were first contacted by a Village Extension Facilitator (VEF). Later in the programme, this became less necessary as village leaders approached the Fisheries Division themselves to express interest in the programme. Following an expression of interest, a meeting was arranged with the village council, at which the community was provided with information to allow them to either accept or refuse the extension programme. Senior fisheries staff were present at the fono meeting to signify the importance of the occasion. If the fono decided to accept the process, it was then asked to arrange for meetings of several village groups, including women and untitled men.

ii) *Village Group Meetings* - Several village groups, including women (*faletua ma tausī, aualuma*), untitled men (*aumaga*), fishers, and titled men (*matai*) held separate meetings to analyse the condition of their marine environment and fish stocks by considering a series of questions. These questions were in the form of a Rapid Historical Appraisal or RHA (McArthur, 1994) to assess the degree of change that fishing, seafood catches, and the marine environment had undergone over recent years. Subsequently, each group decided on what the key problems were, determined their causes, proposed solutions and planned remedial actions. These were written as a problem/solution tree on a portable white board by a trained facilitator (Figure 3). At a second meeting, the groups continued to examine the most practical solutions to the problems in greater detail. Finally, a village Fisheries Management Advisory Committee (FMAC) was formed for each participating village community with three people nominated from each group.

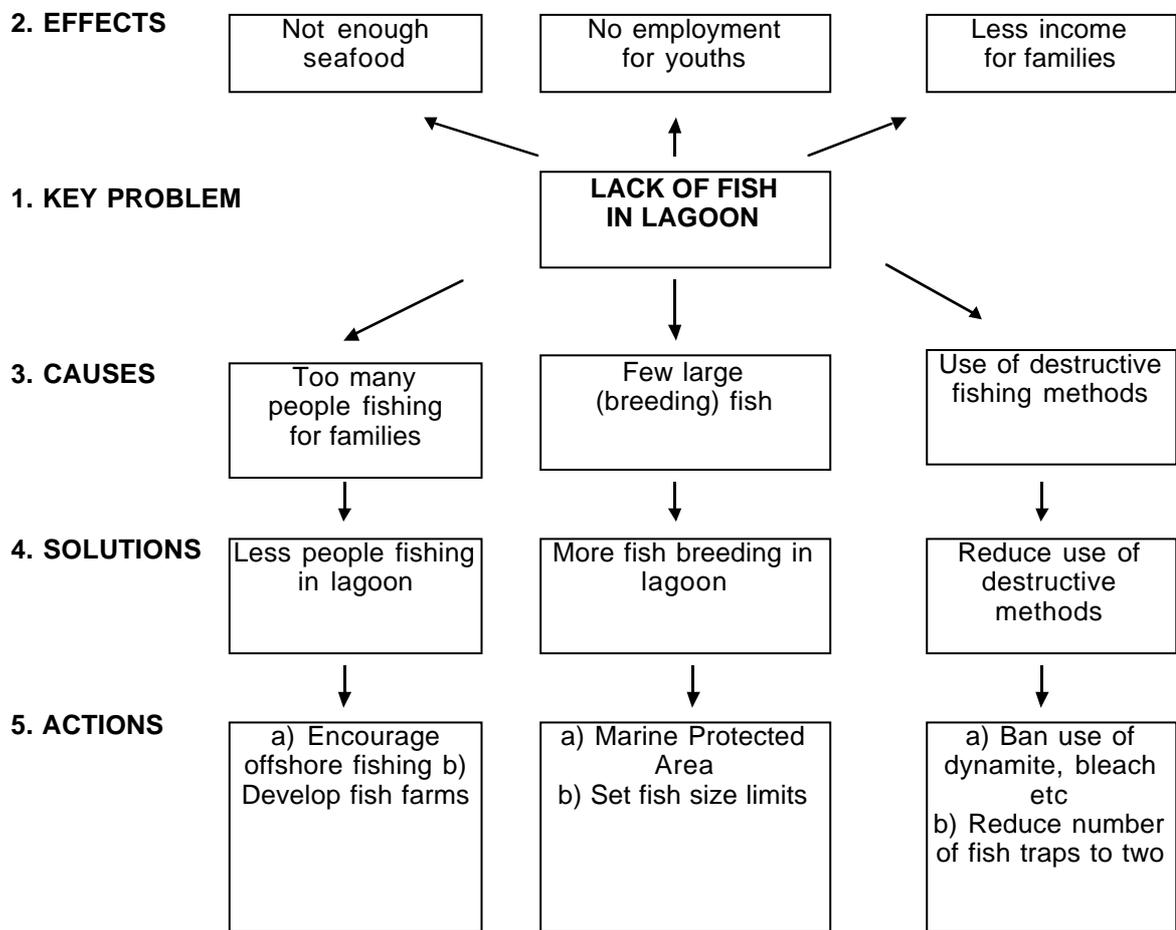


Figure 3: Example of a problem/solution tree as constructed by community members. The process begins with step 1 (Key Problem) before proceeding in the numerical order shown. All information is provided by the community, with the facilitator acting as a recorder.

- iii) *The Fisheries Management Advisory Committee (FMAC)* - Each participating village community had a FMAC. The respective committees held a series of meetings, typically 3, to further consider the problems and solutions identified by each group and combined these into a single problem/solution tree. The committees then decided how the solutions could be made to work, which actions were required from the respective village communities and what types of support were required from the Fisheries Division.

At either the first or second FMAC meeting, committee members and Fisheries Extension Officers conducted “stroll-through environmental assessments” for the respective villages. These involved walking through the villages examining and noting the environmental features which had either been discussed in meetings, or which should receive community attention. The purpose of the assessments was to prompt and direct community discussions toward environmentally critical areas and to avoid wasting time on unrealistic undertakings - for example, the farming of tilapia fish when there is no permanent (year-round) source of fresh water. The assessments served to estimate the likely success of proposed community actions and were not meant to substitute more detailed scientific assessments, which if necessary would be completed by Fisheries Division scientific staff.

At the FMAC meetings, FMAC members assisted by Extension Officers prepared draft Village Fisheries Management Plans for discussion and approval by the village councils (*fono*). The final drafts of these plans were completed by the respective FMACs at the Fisheries Division, where scientific staff were available to provide additional, plan-related and technical information that were needed.

- iv) *The Village Fisheries Management Plan and final council (fono) meeting* - The extension process culminated in a Village Fisheries Management Plan for each participating village community. These community-owned plans are in the form of agreements between the respective villages and the Government. They list the resource management and conservation undertakings of the communities and the servicing and technical support undertakings required from the Fisheries Division. The plans were presented to the *fono* by the respective FMACs, in the presence of senior Fisheries Division staff, signifying the meeting’s importance. If a plan was accepted by the *fono*, then both the *fono* and the Fisheries Division had agreed to carry out their respective roles and undertakings. Each village *fono* then appointed a Fisheries Management Committee to oversee the working of the plan.

- v) *The Fisheries Management Committee (FMC)* - The respective FMCs were appointed by the fono to administer the undertakings of the villages. In most cases, members of FMACs were appointed to FMCs. Once the fisheries management plans were formally agreed to, the Fisheries Division then provided the technical support agreed to under the management plans and maintained regular contact with the respective FMCs.
- vi) *Community Undertakings* - Community undertakings include decisions to support and enforce Government laws banning the use of chemicals, dynamite and plant-derived poisons (ava niukini) to kill fish. Many villages have banned traditional destructive fishing methods such as the smashing of coral to catch sheltering fish (fa'amo'a and tuiga). Most villages have made their own rules to support national laws banning the capture of fish smaller than the minimum size and some have set their own minimum size larger than that specified in national laws. Some villages have placed controls on overly efficient methods of fishing such as the use of nets and the use of underwater torches for spearfishing at night. Community conservation measures include collecting crown-of-thorns starfish as well as banning the removal of beach sand and dumping of rubbish in lagoon waters. An unexpectedly large number of villages have chosen to establish Fish Reserves (in which all fishing is banned) in part of their traditional fishing areas. Many villages have made their rules into Fisheries By-laws (Faasili, 1997), so that these can be applied to people from other villages fishing in their village waters.
- vii) *Fisheries Division Undertakings* - The Fisheries Division's undertakings listed in the VFMPs include the reciprocal actions necessary to support the community undertakings. The Fisheries Division's undertakings mainly involved the provision of technical advice on how to care for the marine environment and on the development of alternative sources of seafood to the present heavy exploitation of lagoons and damaged near-shore reefs. For instance, undertakings include the provision of assistance with the translocation and farming of new types of fish and shellfish and assistance in facilitating the purchase of medium-sized boats to allow villagers to fish outside the lagoons. Surveys suggest that catches from areas immediately beyond the reefs would support the purchase of such boats by village fishers (Matthew, 1997). In response to community demand, the Fisheries Division ran supporting workshops on tilapia farming, growing giant clams, fish handling, fish smoking, safety at sea, outboard motor maintenance and on methods of fishing outside the reefs.

5. MONITORING THE EXTENSION PROGRAMME

Monthly extension meetings are held to review and assess progress and to plan extension activities for the coming month. An important function of the meetings is to review the agreements contained in the VFMPs of all villages in the programme; this is to ensure that the undertakings of both the villages and the Fisheries Division are progressing.

After a certain number of villages (normally 20) have completed management plans, a national workshop on the "Village Management of Fisheries and the Marine Environment" is called. Each village with a management plan is invited to nominate two participants from their respective FMCs. The purpose of the workshop is to allow committees from different villages to exchange information and to decide how villages can assist each other. The meeting is also used to obtain community feedback in order to improve the extension process. Media coverage on the day serves to further promote the extension programme in rural communities.

6. KEY FINDINGS AND RECOMMENDATIONS

6.1. Review of the Village Fisheries Management Plans (VFMPs)

Since its inception in 1995, the Extension Program has worked with 71 village communities to develop their VFMPs. Of the 71 villages, 4 withdrew due to village disputes and 67 continued to operate with various degrees of success. Of the 67 communities, 42 are from Upolu and 25 are from Savaii. During the assignment, 63 of the 67 VFMPs were carefully examined. The remaining 4 plans were not reviewed because they were in Savaii. During the review, the following errors were noted:

- Wrong translation of legislative terms = 61
- Misspelling/typing errors = 6
- Unconverted units/confusion in measurement units = 24
- Wrong abbreviation = 3

Most of the mistakes observed were repeated in most of the plans. The wrong translation of legislative terms used in most VFMPs was commonly observed in the use of the term By-law which should be translated as "*tulafono lait*" instead of the term "*tulafono a le Malo*". Similarly, the use of the term regulation should be translated as "*tulafono faatonutonu*" instead of the use of the general term "*tulafono a le Malo*". Quite often, two different units were used in one measurement line item causing confusion. In one particular case, Gagaifoolevao Lefaga village, an undertaking spelt out in its VFMP contradicts with that contained in its Village By-law.

From the mistakes observed during the review, it appears that there was no policy procedure for the staff of the Extension Section to follow when assisting village communities in developing their VFMPs. The normal practice, supposedly, was for the extension staff responsible for each village community to assist in drafting the plans. The plans were discussed during the FMAC meetings until every detail was finalized by the respective committee members, with the help of responsible extension staff as facilitators. The plans were finally scrutinized by the Senior Fisheries Officer as a last check before they were presented to the final *fono* for approval.

From the nature of the mistakes noted in the plans, it certainly appears that the extension staff did not properly follow the practice they were supposed to follow in assisting villages to develop their VFMPs. This may be due to the fact that no extension staff was senior enough to supervise the activities of the Extension Section, other than the two senior fisheries officers who were appointed in the second phase of the project to take charge of extension activities in the respective islands of Upolu and Savaii. With the return from university of one senior extension staff member who is now taking charge as the Head of Extension, a procedure to deal with the development of VFMPs should be followed properly.

Appendix 3 produces the summary of mistakes identified in the 63 VFMPs that were reviewed.

Recommendation 1.

It is recommended that the following procedure should be employed by the Extension Section in assisting village communities to develop their VFMPs and should be treated as a policy procedure of the Fisheries Division.

- i. The first draft of the VFMP to be prepared on behalf of the FMAC by the Extension facilitator responsible for the Extension process in a particular village.
- ii. The first draft is to be thoroughly checked by the responsible Senior Fisheries Officer in order to produce the second draft.
- iii. The second draft must then be scrutinized by the Head of Extension in order to produce the final draft to be presented before the council of chiefs at the final fono.
- iv. Alterations and errors discovered at the final fono must be processed in order to produce the final version which becomes the VFMP.
- v. Four original copies of the VFMP must be produced of which two are to be given back to the particular village community and two are to remain at the Fisheries Division. For the Fisheries Division's copies, one is to be kept by the Extension Section and one as a library copy.

a. Final Version of the VFMPs

Since the inception of the Fisheries Extension Program in 1995, no VFMP has ever been written in its final form. Errors discovered during the final council meetings of chiefs (*fono*) were not corrected. Copies of the respective VFMPs that were presented at the final *fono* for approval were only final drafts of the VFMPs. Alterations and corrections resulting from the final *fono* need to be processed in order to produce the final versions of the plans. This is important in order to avoid a negative reflection on the project as a whole: a party interested in the community-based management work the Fisheries Division is doing might wish to consult a VFMP and only get an unedited plan. It should be ensured that village communities are well informed during the final *fono* through the presentations by the respective FMACs that the documents presented are only final drafts which, subject to corrections and final editing, would become VFMPs.

Recommendation 2.

It is recommended that all final drafts of VFMPs produced since the inception of the Fisheries Extension program be written in their final forms using Appendix 3 as guidance to make corrections.

b. English Translation of VFMPs

A sample VFMP drawn up for an imaginary village referred to as "Fiaola" was documented in both Samoan and English. However, none of the other VFMPs developed for village communities since the start of the Extension Programme have an English translation. It should be noted that the community-based management programme operated by the Fisheries Division of Samoa has a wide reputation amongst the region. Interested parties that have asked for copies of VFMPs practiced by Samoan local communities should have been given real copies rather than an imaginary sample plan. Further, the Samoan Government operates in two official languages, Samoan and English. Thus for the sake of completeness and convenience for foreign interested parties, VFMPs should be translated into English. This should not be difficult given the close similarities between the VFMPs. It could be time-consuming to translate the 67 plans already in place but, with a properly organized schedule, this task should not impact on the current obligations of the Extension Section to continue working with village communities.

Recommendation 3.

It is recommended that all VFMPs produced since the commencement of the Extension Program must be translated in English after they are written in their final forms. Similarly, future VFMPs must be translated immediately after the final drafts are approved by the council of chiefs at the final *fono*.

c. Format for writing up of VFMPs

The format presented in the sample referred to as "Fiaola" was designed to facilitate the writing up of VFMPs. The plans should be simple and easy to understand by the village people. In reviewing the current format of the existing VFMPs which follow that of the "Fiaola", there is really no need to suggest a new formulation. The current formulation is easy enough to understand and to follow. The only addition needed is a summary of undertakings by both the village communities and the Fisheries Division. This is quite necessary especially for the sake of the Assistant Director or a member of the Fisheries Management team who will be sitting in at the final *fono*. Quite often, the Assistant Director or a member of the Management would only access the final draft of the VFMP on the day of the final *fono*. Thus there would be no time to properly peruse all the details of the VFMP. However, the Management needs to quickly examine the undertakings of the Fisheries Division in order to warrant the Fisheries Division's approval of the plan. Further, it was observed during the review that most of the VFMPs are slightly departing from the format presented in the "Fiaola".

Recommendation 4.

It is recommended that the format of VFMPs should closely follow that of the "Fiaola" with a summary of the undertakings of the respective village communities and the Fisheries Division to be included at the early start of each VFMP.

6.5. Village Community Undertakings

The most common undertakings by village communities in their FVMPs include the need to:

- Develop and enforce village rules on destructive methods of fishing and integrating them into Fisheries By-laws.
- Restrict the number and length of fish fences (traps).
- Ban the use of underwater torches.
- Protect mangroves.
- Prevent the catching of small fish.
- Ban the dumping of rubbish on the shoreline.
- Establish fish reserves.
- Introduce new types of seafood into village fishing areas.
- Reduce the numbers of crown-of-thorns starfish (*alamea*).
- Encourage fishing outside the reef.
- Offer prayers for the marine environment.

The usefulness of the above undertakings in the management by the community of their marine environment varies from village to village. In well-organized villages, these undertakings are taking effect and are seen as good management tools to conserve the marine environment. Other villages are not so well organized and their undertakings are not really taking effect, thus reducing their ability to fully benefit from their marine resources in future years.

In order to assess the success of village community undertakings, the Extension Section undertakes six-monthly reviews of all the communities operating under the programme. The reviews are carried out using the comprehensive checklist appended as Appendix 2. The last review was done in December 2000. The result of this review is summarized in Table 1 below.

Degree of Success	Upolu	Savaii	Total	Achievement rate
85% and over	14	11	25	42
50 - 84%	22	10	32	53
Less 50 %	3	0	3	5
Total	39	21	60	100

Table 1: Summary of the six-monthly review carried out in December 2000

The review indicated that about 42 % of the village communities were doing very well, 53% were doing well but needed encouragement, and 5% were not performing to expectation. Of the 67 participating villages, 7 were not part of the December 2000 review, either because they were not available during the time of the review exercise, or because their reviews were yet to be due. Further, it is part of the work programme of the extension staff to pay monthly visits to village communities to encourage those who are not operating very well. The strategy employed in dialogue consultations during these visits is extremely important. Communities who are not well organized can be reformed if the messages delivered through these consultations are absorbed by the village chiefs. Since consultations are based on the *matai* system, the role to be played by the Custom Facilitator during these consultations is extremely important. It was noted that the position of Custom Facilitator would cease after the second year of Phase Two of the AusAID project. If this position does not continue, its removal will have a major impact on the progress of the Extension Programme. The position is important to the success and sustainability of the programme and must form part of the core staff of the Extension Section.

Recommendation 5.

The Fisheries Management should work out a strategic process in order to encourage and maintain the interests of those communities who are departing from their obligations under their VFMPs. This should be treated as a policy procedure for the Extension Staff to follow when dealing with cases of this nature.

Recommendation 6.

Given the importance of the role played by the Custom Facilitator in the Extension Program, it is recommended that this position be made an approved position under the Staff Establishment of the Fisheries Division.

One approach that may help maintain the eagerness of village communities to successfully operate their VFMPs is to organize regional workshops to allow members of FMACs to share experiences and to exchange ideas as to how they are managing their marine environments. This can be arranged once every year and could be organized to take place immediately before the Fisheries Open Day.

Recommendation 7.

It is recommended that the Extension Section make arrangements for workshops to allow members of FMACs to discuss their problems and to share experiences and ideas. This may be organized once every year.

The participation of women in the management of the marine environment has always been an important component of the Fisheries Extension Programme. While this remains important as seen in the women's contribution in group meetings and in FMACs, hardly anything is done to signal the importance of the women's contribution to the Extension Programme. Only one workshop had been arranged for women since the commencement of the programme.

Recommendation 8.

It is recommended that a yearly workshop should be called inviting women who are members of FMACs to exchange experiences and to share ideas on the operation of their VFMPs. Workshops may be held regionally depending on the number of women participating in the management of VFMPs.

Staff of the Research and Extension Sections of the Fisheries Division, under their work schedules, pay monthly visits to assess the condition of village marine reserves and to monitor the growth of giant clams. Proper caring for giant clams has always been a good indicator in assessing the commitment and enthusiasm of the villages. The growing of giant clams is an important activity which attracts village communities to be included in the Extension Programme. Since the start of the programme, research and extension staff have been taking measurements of the clams in order to monitor their growth rate. This type of work can easily be performed by the communities themselves. The respective community FMACs can be trained on how to measure and record the required measurements. The data sheets requiring village communities to fill in monthly information about the growth of giant clams can be collected at assigned periods. Thus this will relieve Fisheries Division staff from the additional work of taking clam measurements but at the same time play the important role of assessing the degree of success of the respective community VFMPs.

Recommendation 9.

It is recommended that the collection of giant clam data for analysis by the Fisheries Division should be made the responsibility of the FMACs of the respective village communities. It is therefore very important that the Research Section of the Fisheries Division undertakes community training to enable FMAC members to provide the required information needed by the Division.

6.6. Undertakings by the Fisheries Division

The Fisheries Division undertakings listed in the VFMPs include the reciprocal actions necessary to support community undertakings. The Division's undertakings mainly involve the provision of technical advice on how to care for the marine environment and on the development of alternative sources of seafood to the present heavy exploitation of lagoons and damaged near-shore reefs. For instance, undertakings include the provision of assistance with the translocation and farming of new types of fish and shellfish and assistance in facilitating the purchase of medium-sized boats to allow villagers to fish outside the lagoons. Surveys suggest that catches from areas immediately beyond the reefs would support the purchase of such boats by village fishers (Matthew, 1997). In response to community demand, the Fisheries Division ran supporting workshops on tilapia farming, growing giant clams, fish handling, fish smoking, safety at sea, outboard motor maintenance, and on methods of fishing outside the reefs. The performance of the above undertakings by way of provision of technical support helps to maintain community interest in participating in community activities which in turn helps in the management of subsistence fisheries and the marine environment.

6.7. Giant Clams

The undertaking on the part of the Fisheries Division to provide giant clams for village marine reserves is the most popular one among the village communities. The clams were normally bought from Fiji and American Samoa. For over a year now, the Extension Programme has not provided giant clams to those communities that last joined the programme. There are 8 village communities that are still waiting for giant clams and there will be more as the programme progresses. The recently completed giant clam hatchery of the Fisheries Division established primarily for the purpose of providing giant clams to village communities will not produce its first hatch until November 2001. This means that some villages have to wait for about 2 years before they receive giant clams to stock their marine reserves. It is important at this stage that the Fisheries Division buys some clams from overseas to relieve the demand by villages while awaiting the outcome of the first spawning at the Fisheries Division hatchery. The purchase could be financed from local funds, AusAID project funds or from the Project Development Funds (PDF) from the Forum Fisheries Agency (FFA).

Recommendation 10.

It is recommended that in order to relieve pressure on the demand for giant clams by village communities that last joined the Extension Program, the Fisheries Division must purchase two shipments of clams from overseas (Fiji) while awaiting the result of the first spawning of the Fisheries giant clam hatchery.

6.8. Small fishing boats

The Extension Programme had previously assisted in facilitating the purchase of small fishing boats to enable village communities to fish outside the reefs. The boats were heavily subsidized by the European Union (EU) through the provision of 65% of the total cost. The Fisheries Division's undertaking to facilitate the purchase of small fishing boats was therefore a popular one amongst the village communities. The EU funding has now ceased and the last village communities that joined the programme as well as the new ones that will be joining miss out on this incentive programme. Since the demand for these boat continue to come from village communities, the Fisheries Division must find a way to handle the situation.

Recommendation 11.

Given the cessation of the EU programme, it is important that the Fisheries Division finds other options to assist in facilitating the purchase of small fishing boats for village communities as requested under their VFMPs.

6.9. Monthly visits

One of the important activities of the extension staff is their monthly visits to village communities. These visits are important because they maintain regular contacts with the respective FMC members. During the visits, members of FMCs and extension staff dialogue on the progress of village undertakings and on how the communities can be further assisted. At the same time, the FMCs have an opportunity to question the Fisheries Division on some of the undertakings which may not have been fulfilled by the Fisheries Division itself. These dialogue consultations are important to both village communities and the Fisheries Division in order for each to get a better understanding of the other side's situation. Quite often, if a community is not visited for a long time, there is an impact on community morale in progressing through with its undertakings as contained in its VFMP. It is therefore important to maintain regular contacts with village communities through monthly visits.

Recommendation 12.

The Extension Staff must continue regular contacts with village communities through monthly visits.

The undertakings by the Fisheries Division common to all VFMPs are listed in Appendix 4.

6.10. Village Fisheries By-laws

Village Fisheries By-laws are village rules that have been prepared in accordance with the relevant provisions of the Fisheries Act 1988 and are accorded legal recognition in the courts of law. The By-laws can cover any measure which assists in the management and conservation of the fishery resources. Since the inception of the Fisheries Extension Programme, 57 village communities have already put in place Fisheries By-laws. The By-laws may include restrictions of the sizes of fish and shellfish provided they are not smaller than the sizes set out in the Fisheries Regulations 1996, bans on certain types of fishing gears and methods, allocation of fish quotas, restriction on mesh sizes for nets and fish traps (again provided they are not smaller than those set out in the Regulations) and closure of fishing seasons or areas to allow fish to reproduce. Importantly, the By-laws must apply to all citizens equally and not just to people from outside the sponsoring village. Appendix 6 lists some of the common fisheries regulations now being taken up by village communities as their own By-laws.

6.10.1. General Problems

While the By-laws are seen to be working effectively, there have been associated problems identified within both the village communities and Government agencies themselves.

In some village communities, internal differences amongst the chiefs themselves disrupt the village *fono*. When this happens, the *fono* can no longer function properly and enforcement of By-laws becomes ineffective. Two such cases have been reported to the Fisheries Division since the inception of Village By-laws.

On the Government's part, the process involved in putting in place By-laws, which involves other Government agencies, is not prompt enough to meet the expectations of village communities. When there is a delay in the process, the village *fono* often goes ahead and enforces its By-laws before the legal procedure is completed. While the By-laws can be enforced at this stage against the residents of that particular village itself, enforcement against outside villagers is difficult and can quite often involve the use of physical force. Thus there is potential for inter-village physical disputes as a result of delays in the Government process.

One problem the Fisheries Division has realized is the cost involved in the advertisement of the By-laws. For instance, if Fisheries is targeting 10 village communities for its annual work programme, this will cost over \$5,000 Samoan tala in advertising. This is quite a large amount for one line item in a divisional budget. However, it is not expensive in relation to the expected long-term beneficial impact it produces for the marine environment.

Recommendation 13.

As the advertising of Village By-laws is made the responsibility of the Government, it is recommended that the Fisheries Division must budget for this activity in its annual estimate.

The following is the legal opinion in connection with the shortcomings of Village By-laws.

6.10.2. Low penalties

The penalty (\$100 for breach whilst it is \$20 per day for every continuing breach) that the Court could impose upon conviction for breach of by-laws is too low, which means:

- (a) a breach could be viewed as not “serious”; and
- (b) deterrence might not be effective.

One possible way to increase the penalty is to amend Section 3 (5) of the Fisheries Act 1988 to allow for higher penalties.

But it should be noted that the village council could impose its own penalty in accordance with the Village Fono Act 1990 to alleviate the above problems.

6.10.3. Difficulties from the prosecutor’s perspective

The by-laws should be re-drafted to:

- (a) clearly state that it is an offence to fish in the fish reserve to assist with prosecutions. The current wording of “Fishing of any nature in the fish reserve is prohibited” in the By-laws should be re-drafted to read “No person shall undertake or attempt to undertake fishing of any nature in the fish reserve”;
- (b) make it an offence to assist the commission of any offence under the By-laws, ie to make the secondary party liable for prosecution. This can be achieved by adding in a clause to make it an offence to aid or abet the commission of any offence under the By-laws to avoid having to refer to the Crimes Ordinance 1961 to make a secondary party to the offence liable.

The difficulties with the wording of the provision that creates the offence of fishing in a Fish Reserve and lack of any provision to make a secondary party to the offence liable was discovered when there was an attempt to prosecute a person (who was assisted by another) for allegedly fishing using a cast net in the Fish Reserve of Vailuutai contrary to the said village's By-laws. Although the charge was filed, the person could not be located to be served with a summons. The charge was subsequently withdrawn thus depriving the Ministry of Agriculture, Forestry, Fisheries and Meteorology (MAFFM) of the opportunity to "test" the effectiveness of the By-laws in court.

6.10.4. Inconsistencies with other legislation

Some By-laws have a provision dealing with the export of coral that is inconsistent with sections 119 and 120 of the Lands, Surveys and Environment Act 1989. That provision in some By-laws allows the export of coral upon the issuance of a permit by the Fisheries Division, but neither mentions nor considers the relevant sections in the Lands, Surveys and Environment Act 1989. Sections 119 and 120 of the Lands, Surveys and Environment Act 1989 require the prior consent of the Minister of Lands, Surveys and Environment before any coral can be removed from the foreshore.

Where there is any conflict between the Lands, Surveys and Environment Act 1989 and By-laws, then according to common law the former will prevail because it is an "Act of Parliament" (ie legislation) whereas the latter is a "delegated legislation". In addition, Section 94 (2) of the Lands, Surveys and Environment Act 1989 (ie statutory law) clearly states that where there is any inconsistency between the said Act and any other Act, By-laws or other laws, the Lands, Surveys and Environment Act 1989 will prevail.

However, future By-laws should be carefully reviewed and all clauses dealing with corals be either omitted or re-drafted to be clearly read as subject to sections 119 and 120 of the Lands, Surveys and Environment Act 1989.

In addition, there should be more consultation between the Department of Lands, Surveys and Environment (DLSE) and MAFFM on such issues, particularly since Section 4 of the Agriculture, Forests and Fisheries Ordinance 1959 calls upon both departments to work together to promote the "...conservation, production and development of natural resources of Western Samoa..."

It should be noted that the duties of both departments could overlap and in certain situations as seen above, conflict, given the nature of their work. To avoid such problems, the departments need to clarify their respective duties and to work closer together.

6.10.5. Inconsistencies with other by-laws

Although each By-law is tailored for each village's needs, there should still be some consistency in all By-laws on certain pertinent issues such as pollution. Some By-laws do not have the provision seen in other By-laws which requires the polluter to restore the environment to its original state before pollution: compare Gagaifo By-laws 1999 and Vailuutai By-laws 1998.

The By-laws need to be reviewed again with recommendations to be made as to what pertinent issues should be present in all By-laws for consistency.

Recommendation 14.

It is recommended that the suggestions made in the legal opinion regarding the shortcomings of village By-laws should be pursued in order to alleviate the shortcomings identified.

7. CONCLUSION

The success of the Community Fisheries Management Programme of the Fisheries Division in Samoa is related to community ownership of marine resources and VFMPs. Despite legislation and enforcement mechanisms, the responsible management of Samoa's marine resources can only effectively be achieved when Samoan village communities themselves see it as their responsibility to manage their marine environment. The Samoan village communities who set their own VFMPs through the "*matai*" system are more likely to respect and abide by the village rules contained in those plans than those set by a government authority. Village Fisheries By-laws, promulgated by village communities themselves, represent a fisheries management tool which has great potential for solving many problems relating to the conservation and management of the inshore marine environment. The Community Fisheries Management Programme in Samoa has been successful in achieving its goals and will continue to do so if the recommendations discussed in this report are implemented.

8. REFERENCES

- Fa'asili, U. 1997. The use of village by-laws in marine conservation and fisheries management. Pacific Science Association Intercongress, July 1997, Fiji.
- Fa'asili, U. et al. 1997. Fisheries Extension Manual. Fisheries Division, MAFFM, Samoa.
- Horsman, N. and A. Mulipola, 1995. Catch data and collection from market surveys in Western Samoa. South Pacific Commission and Forum Fisheries Agency Workshop on the Management of South Pacific Inshore Fisheries. Integrated Coastal Fisheries Management Project Technical Document. South Pacific Commission, New Caledonia. 17 p.
- Kallie, J., A.Taua, U. Fa'asili, 1999. An assessment of community-based subsistence fisheries in Samoa. Paper prepared for MRAG (Marine Resources Assessment Group) Coastal Fisheries Management Conference, Fiji.
- King, M. 1989. Fisheries research and stock assessment in Western Samoa. FAO Terminal Report TCP/SAM/8852. 24 p.
- King, M. and U. Fa'asili, 1997. Community-based management of subsistence fisheries in tropical regions. Pacific Science Association Intercongress, July 1997, Fiji.

Appendix 1: TERMS OF REFERENCE

The work needed to be carried out by SPC include the following:

1. Examine the past village management plans and point out if any inaccuracies are severe enough to warrant reformulation of the current village fisheries management plan format.
2. Examine the series of works obligated as part of the village community undertakings and advise on the degree of their proper applicability and of any improvement needed in future.
3. Examine the usefulness of the Fisheries Division input into the village fisheries community management program in terms of the technical aspects of the program and make suggestions for improvement.
4. Identify rules promulgated by village councils as By-laws that may need careful scrutiny to avoid conflicts with related Government laws and make suggestions on how to resolve them.

Appendix 2: REVIEW FORM

Joint review of Community-Based Management

The purpose of the review is to assist the Fisheries Management Committee (FMC) to analyze its performance and to make any improvements necessary. The review attempts to measure how effective the Village Fisheries Management Plan has been, and how well the community has carried out its own undertakings.

The Joint Review, between the Fisheries Management Committee and Extension staff of the Fisheries Division, should take place about 6 months after the Village Fisheries Management Plan has been approved, at a time proposed by the community (and recorded in the plan). Because the village must consider this review as their own, extension staff must be very open in their investigation and avoid being seen as policeman. No investigation should be made by extension staff without the full knowledge of the FMC.

Before going to the village:

a) collect all relevant information from records

Then at the village:

b) interview FMC members as a group

c) interview other people in the village

d) make and record your own observations.

The following form should be used to record the information collected and to calculate a total score for the village.

The percentage contribution of each section of the review is:

Section A: Information from Records	25
Section B: Interview with FMC members	15
Section C: Interview with FMC on undertakings	40
Section D: Interview with other villagers	10
Section E: Extension Observations	10
TOTAL	100

The Village name, date of the review and the score should be recorded on a database, as well as proposed actions for the following 6-12 month period.

VILLAGE:**DATE OF APPROVAL OF MANAGEMENT PLAN.**

STAFF: DATE OF REVIEW:

A) INFORMATION FROM RECORDS

Staff should use information from their work

If the village has a Fish Reserve, do records show that the community has shown good care by;

Cooperating and participating in surveys?

[very good] [good] [average] [poor] [very poor] SCORE/4
4 3 2 1 0

Marking and maintaining reserve boundaries?

[very good] [good] [average] [poor] [very poor] SCORE .../4

Enforcing rules banning fishing?

[very good] [good] [average] [poor] [very poor] SCORE .../4

SUBSECTION SCORE = (out of 12)

If the village has giant clams, do records show that the community has shown good care by:

Removing predators regularly?

[very good] [good] [average] [poor] [very poor] SCORE .../4

Cleaning cages regularly?

[very good] [good] [average] [poor] [very poor] SCORE .../4

Preventing loss by theft?

[very good] [good] [average] [poor] [very poor] SCORE .../4

Having reasonable growth and survival rates?

[very good] [good] [average] [poor] [very poor] SCORE .../4

SUBSECTION SCORE = (out of 16)

If the village has tilapia, do records show that the community has shown good care by;

Feeding the fish regularly?

[very good] [good] [average] [poor] [very poor] SCORE .../4

Maintaining the pond?

[very good] [good] [average] [poor] [very poor] SCORE .../4

Making regular catches or harvesting fish

YES score 2 SCORE...../2
NO score 0

SUBSECTION SCORE = (out of 10)
If the village participates in the ORS boat program, do records show that the community:

Uses the boat to fish outside the reef

YES score 2 SCORE...../2
NO score 0

Uses the boat on a regular basis

YES score 2 SCORE...../2
NO score 0

Provides accurate information on catch and effort

YES score 2

NO score 0

SCORE...../2

SUBSECTION SCORE = (out of 6)

ACTUAL SCORE (Add the score in the small boxes) = out of possible marks (add the total for any subsection marked).

This section contributes 25% of the total score so must be corrected to reflect this.

CORRECTED SCORE

NOTE If village only has a reserve ie out of 12, then times by 25/12; if village has reserve and clams ie out of 28 then times by 25/28; if village has reserve, clams and ORS boat out of 34 then times by 25/34 etc.

B) INTERVIEW WITH FMC MEMBERS

On the day of the Review, meet with the FMC members to discuss the review. Suggest that the process should be as honest/unbiased and thorough as possible and that it would be desirable, for example, to interview a range of villagers not involved in the FMC.

How many people were on the FMC originally?people
How many people are on the FMC now?people
If people have left the FMC, why is this?

..... ..

Allocate a score out of 3 to reflect whether FMC membership changes have had any effect on performance SCORE = /3
Give 3/3 if FMC is still representative and keen.
Give 0/3 if membership is non-representative and very disinterested.
Give a mark of 2/3 or 1/3 depending on how negative the changes are in your judgement.

What additional relevant activities has the FMC undertaken other than those in the management plan?

.....
.....

For 3 or more activities, score 3; For 2 or more activities, score 2; For 1 activity, score 1; For no activities, score 0

SCORE = /3

In the last three months:

How many times has the FMC held meetings? _____ times

If 3 or more meetings score 3; if 2 score 2; if 1 score 1, if 0 score 0

SCORE = /3

On average, how many people attend each FMC meeting? _____ people

If more than 7 people score = 3; if 6 to 7 =2; if 3 to 5 =1, if 1 to 3 = 0
SCORE = /3

How many times have meetings been held with other people in the village _____
 times

eg monthly meeting

If 3 or more meetings score 3; if 2 score 2; if 1 score 1, if 0 score 0
SCORE = /3

ACTUAL SCORE =out of 15.

This section contributes 15% so the score does not need to be corrected

ACTUAL/CORRECTED SCORE

C) INTERVIEW WITH FMC MEMBERS ON UNDERTAKINGS

Before attending the review, check the Management plan and note the relevant undertakings for this village. Highlight them on the sheet. Then examine each undertaking one by one, considering:

If the undertaking involves:

a rule or regulation:

- a) In the last three months, has the rule been enforced?
 (Score 3 For very well; 2 For well; 1 For not well; 0 For very poorly)
- b) In the last three months, how many people have broken the rule?
 (Score 2 Nobody; 1 1 or 2 people; 0 3 or more people)
- c) If the law has been broken, in the last three months, has a penalty been imposed?
 (Score 1 Yes 0 No)

a conservation activity:

- a) In the last three months, has the activity been carried out?
 (Score 3 For very well; 2 For well; 1 For not well; 0 For very poorly)

FILL



UNDERTAKING	Carried out or enforced Score /3	# breaking rule <i>Score /2</i>	Penalty imposed Score /1	U/T Total	Actual score	Possible score
Ban fishing in reserves				6		
Ban dumping of rubbish				6		
Ban fish poisons				6		
Ban smashing coral				6		
Ban dynamite/ bleach				6		
Set mesh size limits				6		
Set fish size limits				6		
Ban taking sand				6		
Ban clearing mangroves				6		
Ban underwater torches				6		
Ban export coral				6		
Control fish fences				6		

Remove crown of thorns				3		
Other						

▲ ▲
TOTAL THESE COLUMNS

Fill in the last two columns for the specific undertakings for this village. Divide the Actual score by the Possible score for this village. This section contributes 40% of the total score so must be corrected. Example: If a village scores 12 out of a possible 18, the corrected score would be: $12 \times 40 / 18 = 26.7\%$

CORRECTED SCORE

What more could the village/FMC/agency be doing to protect its fish stock and its marine environment?

.....
.....

D) INTERVIEW WITH OTHER VILLAGERS

Choose 5 adults (not FMC members) at random. Include males and females as well as representatives of all ages. Ask the following questions:

	PERSON	1	2	3	4	5	SUM
Do you know that this village has a Fisheries Management Plan?							
Have you seen the Fisheries Management Plan?							
Do you think that having a Fisheries Management Plan is a good one?							
Do you know the name of at least one of the FMC members?							
Are the FMC members are effective managers?							
TOTAL							

ACTUAL SCORE =out of 25.

This section contributes 10% of the total score so must be corrected to reflect this.

CORRECTED SCORE

Times by 10 to correct

E) EXTENSION OBSERVATIONS

Is the seashore under good care eg no rubbish?

GOOD score 2; FAIR score 1; POOR score 0

SCORE.....

Does the FMC show keen interest eg visit FD with requests

HIGH INTEREST score 2; SOME score 1; NONE score 0

SCORE.....

Does the FMC generally keep appointments?

ALWAYS score 2; USUALLY score 1; FREQUENTLY MISSES score 0

SCORE.....

Has any village dispute, negatively affected the management plan, in any way?

NO score 4; YES score 0

SCORE.....

If the village has a Fish Reserve are the marking poles and no-fishing signs in good condition, and is the reserve guarded by a roster?

ALL score 5; ONE MISSING score 3, TWO OR MORE MISSING score 0

SCORE.....

Add the scores. Since most villages have reserves, the mark will be out of 15. This section contributes 10% of the total score so a correction is needed. Multiple the score by 10/15

CORRECTED SCORE

TO OBTAIN THE TOTAL SCORE ADD THE FIVE LARGE BOXES

PERCENT SCORE

ASSESSMENT OF FISHERIES DIVISION PERFORMANCE

Explain that this is a joint review, and that FMC members have the right to comment on the performance of Fisheries Division staff. Encourage members to be honest in their comments, and to highlight any areas where support should be improved.

	Poor	average			excellent
CLAMS	1	2	3	4	5
TILAPIA	1	2	3	4	5
ORS BOATS	1	2	3	4	5
WORKSHOPS	1	2	3	4	5
EXTENSION STAFF	1	2	3	4	5

TOTAL (out of 25)

PERCENTAGE (Multiply by 100)

Appendix 3: SUMMARY OF MISTAKES OBSERVED DURING THE REVIEW OF VFMPs

Management Plan	Number of Mistakes	Page Number
1. Savaia	Different units used	5
6th September 2000	1 wrong application of terms (wat)	10
	2 wat	12
	2 wat	13
	1 wat	14
	1 wrong application of terms	15
	2 EU funding ceased since Nov 2000	17
2. Vaovai	2 mis spelt	9
25th November 1999	1 wrong application of terms	10
	1 wrong application of terms	11
With bylaws	1 wrong application of terms	12
	2 wrong application of terms	13
	2 wrong application of terms	14
	2 wrong application of terms	15
	1 wrong application of terms	16
	1 wrong application of terms and village rule	17
	1 EU funding ceased since Nov 2000	18
	1 undertaking omitted	19
3. Fagae'e	1 no penalty given	10
28th September 1999	1 EU ceased funding since Nov 2000	11
With Bylaws	1 wrong appreciation for one term	3
4. Saleilua	1 wrong application of terms	10
5th July 1999	1 wrong application of terms	11
	2 wrong application of terms	12
With bylaws	1 wrong application of terms	13
	1 wrong application of terms	14
	1 EU funding ceased in Nov 2000	16
	1 ORS boat program ceased	17
5. Mulifanua	2 different units used	5
11th June 1999	1 wrong application of terms	10
	1 wrong application of terms	11
With bylaws	6 wrong application of terms	12 – 16
	EU ceased funding	17
6. Faala	2 different units used	4 or 9
28th July 1997	1 wrong application of terms	9
	1 EU funding ceased in Nov 2000	14
With bylaws	1 missed out penalty	16
7. Saleaumua	5 wrong application of terms	9-11
17th October 1997	1 wrong application of terms	14 – 15
With bylaws		
8. Faleu-tai	1 wrong application of terms	8
26th September 1996		
With bylaws		
9. Auala	4 different units used	4

16th September 1996	1 wrong application of terms	9
With bylaws	2 wrong application of terms	10
10. Saleaula	2 different units used	4
18th November 1996	1 EU funding ceased	13
With bylaws		
11. Satoalepai	1 unclear description of terms	8
23rd August 1996		
With bylaws		
12. Mulivai	5 wrong application of terms	9 – 11
25th July 1997	1 EU funding ceased in Nov 2000	14
With bylaws		
13. Faleula	4 using of different units	5
28th April 1999	6 wrong application of terms	10 – 14
With bylaws	1 EU ORS program ceased since Nov 2000	16
14. Fagasa	Unclear description of terms	9 – 12
14th April 1997		
With bylaws		
15. Falealupo	2 using of different units	4
22nd November 1996	1 omit the word "fai"	10
With bylaws		
16. Fusi Safata	2 using of different units	4
22nd November 1996	Wrong application of terms	8 – 9
With bylaws		
17. Ulutogia	6 wrong application of terms	9, 10, 11, 12
1st August 1997	1 EU program of ORS boat has been ceased since Nov 2000	15
With bylaws		
18. Satapuala	2 different units used	5
31st October 1997	9 wrong application of terms	11,12,13,14,15
With bylaws	1 undertaking deleted due to EU program	16
19. Gagaifolevao	Wrong application of terms	9,10,11
10th October 1997	1 missing letter, typing error	11
With bylaws		
20. Satittoa	Wrong application of terms	9,10,11,14
26th November 1996		
bylaws		
21. Moamoa	1 two separate words	2
Faleasiu	VFMAC	9,11,12,13,14,15,16
3rd April 1996	ORS Programme ceased	13
Bylaws		
22. Lotopue	Typing error, wrong application of terms	9,10,11,12,13
27th March 1997		
Bylaws		
23. Tuanai	Wrong application of terms	9,10,11 – 14,17
5th May 1997		

Bylaws		
24. Tafitoala	2 different units used	4
13th November 1996	Wrong application of terms	9,8,12
Bylaws		
25. Satui	Wrong application of terms	9,10,11,12,13
Fasitoo-uta		
21st May 1997		
Bylaws		
26. Malaela	wrong application of terms	9,10,11,12,13
24th April 1997		
Bylaws		
27. Lepuiai-tai	wrong application of terms	8
26th November 1996	2 not consistent to the Fisheries Regulation	9
Bylaws	1995, size limits	
28. Puapua	2 different units	4
18th March 1997	wrong application of terms	9,16
Bylaws		
29. Salua tai	wrong application of terms especially	8,9
27th September 1996	Fish Regulation on size limits	
Bylaws		
30. Apai-tai	wrong application of terms	8,13
27th September 1996	Incomplete undertaking "upega ma tili"	9
Bylaws		
31. Poutasi	wrong application of the term Bylaws	9,10,11,12,13
25th June 1996		
Bylaws	Undertaking is no longer valid as part of new management plan	15
32. Utu faalalafa	Wrong application of the term Bylaws	10 – 13
13th August 1998		
Bylaws		
33. Vailuutai	Village information list not completed	4,5
3rd July 1998	Wrong application of terms	14
Bylaws		
34. Fasitoo-tai	1 typing error	2
4th June 1998	9 wrong application of the term Bylaws	10 - 15
Bylaws		
35. Vailoa Aleipata	Wrong application of the terms bylaws and Fish Regulation	9 – 13
22nd April 1998		
Bylaws		
36. Faleu-uta	2 different units used	5
27th March 1998	Wrong application of bylaws	10 – 13
Bylaws	ORS boat program ceased	18
37. Asaga	1 wrong application of bylaws	9
8th July 1997		
Bylaws		

38. Vaisaulu	2 different units used	4
7th October 1996	1 wrong application of bylaws	9
Bylaws	1 undertaking deleted due to ORS program	14
39. Vaitoomuli	2 wrong application of the word bylaw	9,16
12th August 1997		
Bylaws		
40. Papa, Palauli	2 different units used	4
1st July 1998	1 typing error	8
Bylaws	1 wrong application of Bylaws	
	1 missing word	12
41. Faleapuna	2 units used	5
16th March 1998	Wrong application of bylaws	10 – 14
Bylaws		
42. Saoluafata	7 wrong application of bylaws	9 – 12
23rd April 1998	1 ORS boat program ceased	12
Bylaws		
43. Fagalii	Application of bylaws	10 – 13
23rd November 1998	1 ORS boat program ceased	16
Bylaws		
44. Nofolii	6 application of bylaws	7 – 13
11th June 1999		
Bylaws		
45. Samatau	2 different units used	5,6
18th August 1998	5 wrong application of the term bylaws	10 – 14
Bylaws		
46. Safaatoa	4 wrong application of bylaw term	10 – 12
10th December 1997	ORS boat program ceased	16
Bylaws		
47. Fausaga	5 application of bylaws	9 – 12
12th June 1997		
Bylaws		
48. Matafa'a	3 different units used	6
13th November 1997	6 bylaw term application	10 – 14
Bylaws		
49. Saanapu	5 application of bylaws	9 – 14
8th August 1997	1 ORS boat program ceased	17
Bylaws		
50. Tauo'o Faleasiu	2 Appreviation of FMC/VFMAC	3,7,14,
15th May 1996	FMP/FEA	9,10,15
Bylaws		16,17,18
51. Satalafai	2 different units used	4
18th April 1997	2 application of regulation	10 –11
No bylaws		
52. Lelepa	Wrong application of term	8
1st December 1998		

Bylaws		
53. Falefia Malaeta	2 units used	4
18th April 1997	3 wrong application of terms	9 – 11
No bylaws		
54. Saletagaloa	2 different units used	4
18th April 1997	3 wrong application of terms	9 – 11
No bylaws		
55. Fagamalo	2 different units used	4
17th April 1997	2 wrong application of terms	9 – 11
No bylaws		
56. Papa Sataua	2 units are different	4
28th April 2000	2 wrong interpretation of bylaws	9 – 11
No bylaws		
57. Fatuvalu	4 units are different	9 - 10
26th April 2000		
No bylaws		
58. Vaisala	2 different units used	4
3rd July 2000	2 wrong interpretation of bylaws	8
No bylaws		
59. Sataoa	2 units used, typing error (aau)	5
1st May 2000	2 wrong application of terms	10 – 15
Process	1 ORS boat program ceased	16
60. Salani	4 application of wrong terms	8 – 11
11th May 2000	ORS boat program ceased	13
Bylaws		
61. Solosolo	unconverted units	4
27th April 1998	Wrong application of terms	9 – 12
Bylaws		
62. Salua-uta	Unconverted units	4
18th March 1997	Wrong application of terms	9 – 13
Bylaws		
63. Mutiatele	Interpretation of the term bylaws	10
2nd December 1996		
Bylaws		

Appendix 4: NORMAL UNDERTAKINGS BY THE FISHERIES DIVISION REQUESTED THROUGH VFMPs

- The Fisheries Division will assist the village undertaking through its Village Community Fisheries Management Program.
- The Director of the Ministry of Agriculture, Forestry, Fisheries and Meteorology shall sign every regulation by the village for protecting of their marine waters so that it can be transferred into bylaws. The advertising of these regulations will be the Fisheries Division's responsibility
- The Fisheries Division will provide information through its program to maintain and support this regulation.
- The Fisheries Division will provide advice on different issues considering the effects of the marine environment and its resources to the village people
- The government has no existing programs to provide any funding assistance for collecting or damaging the Crown-of-thorns, but the Fisheries Division will provide information on this issue.
- The Fisheries Division is giving out support through the enforcement of these regulations. Information Sheets about this issue will be provided.
- The Fisheries Division will have public awareness programs on protecting and conserving the corals.
- The Fisheries Division will give full support of the issue mentioned.
- The Fisheries Division will provide assistance on the issue such as removing sand from the marine environment of Fasitoo Tai.
- The Fisheries Division will provide information sheets about the importance of Mangroves
- The Fisheries Division will give full support and assistance to enforce this regulation.

- The Fisheries Division will:
 - ◆ Assess and survey the marine area necessary for a marine protected area.
 - ◆ Prepare a report on the assessment and give it to the Fisheries Management Advisory Committee (FMAC) and the Village Fonu.
- The Fisheries Officer from the Research Section will assess the village marine area to find out whether it is suitable for farming any species. Shellfish will be translocated if the area is suitable for this activity.
- When these activities are in actions, there will be;
- Technical assistance and support from the Fisheries Division in monitoring the growth rate of the species.
- Provide educational training for public awareness of the nature of these species.
- Since most of the villages have no access for fishing outer reef, the Fisheries Division seeks assistance to provide boats for this matter. Training and workshops on fishing techniques will be provided for the villages, which are under the program. The important issues such as Fish handling, Sea Safety, Caring for Outboard Motors, Fish Smoking will also be covered.
- The Fisheries Division will also assist village pastors by providing information sheets and speeches to help with their preparations on the protection and conservation of the marine environment and its valuable resources.

Appendix 5: COMMON COMMUNITY ACTIONS AND REGULATIONS PRACTICED BY VILLAGE COMMUNITIES IN SAMOA

(Figures in the right-hand column indicate the percentage of all villages using the particular action or Fisheries regulation as their own by-laws).

ACTION/REGULATION	PERCENTAGE
• Banning the use of chemicals and dynamite to kill fish.	100%
• Banning the use of traditional plant-derived fish poisons.	100%
• Establishing small protected areas in which fishing is banned.	86%
• Banning other traditional destructive fishing methods (e.g. smashing coral).	80%
• Organizing collections of crown-of-thorns starfish.	80%
• Enforce (national) mesh size limits on nets.	75%
• Banning the dumping of rubbish in lagoon waters.	71%
• Banning the commercial collection of sea cucumbers (Holothuroidea).	41%
• Banning the capture of fish less than a minimum size.	41%
• Banning removal of mangroves (in villages with mangroves).	27%
• Restricting the use of underwater torches for spear fishing at night.	21%
• Banning the removal of beach sand.	14%
• Placing controls or limits on the number of fish fences or traps.	<10%
• Prohibiting the collection of live corals for the overseas aquarium trade.	<10%
• Banning the coral-damaging collection of edible anemones (Actinaria).	<10%

Appendix 6: PEOPLE CONSULTED

Ianielu Sua, Assistant Director (Fisheries)

Atonio Mulipola, Principal Fisheries Officer (Head of Research Section)

Eteuati Ropeti, Senior Fisheries Officer (Head of Extension Section)

Autalavou Taua, Senior Fisheries Officer (Head of Upolu Extension Unit)

Totive Aloaina, Senior Fisheries Officer (Head of Savaii Extension Unit)

Savali Time, Senior Fisheries Officer (Head of Development Section)

Anne Trevor, Senior Fisheries Officer (Research Section)

Lui Bell, Fisheries Adviser (Aquaculture–AusAID Project)

Peter Watt, Fisheries Adviser (Commercial–AusAID Project)

Fuli Muiltalo, Representative (Saoluafata Village Community)