



*Marine Studies*

The University of the South Pacific

# Technical Report

**WOMEN, MARINE AWARENESS AND  
MARINE CONSERVATION IN SAMOA**

by

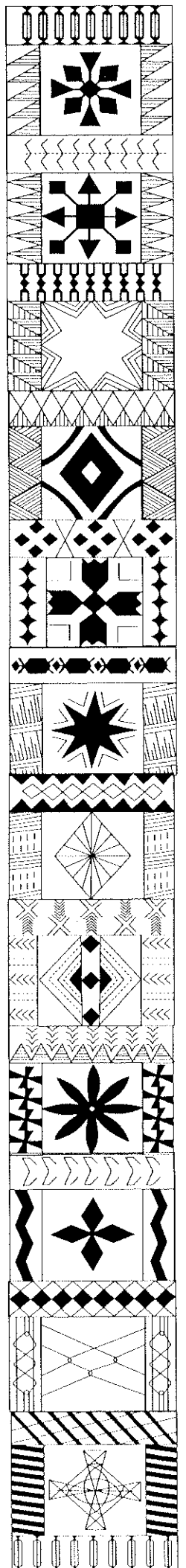
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CONSERVATION  
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## INTRODUCTION

Marine Awareness and the related topic of Marine Conservation are important concepts in the sustainable development of our marine resources. At the United Nations Conference on Environment and Development (UNCED), held in Rio de Janeiro in June 1992, the world's nations endorsed the concept of sustainable development. For the marine and coastal areas, these concepts were contained in Agenda 21, Chapter 17 of UNCED. Sustainable development means the management and development of our resources in such a way that these resources will remain for our children, for their children and for all future generations. **In all sustainable development strategies, the important role of women has been universally declared.**

As a lead-in to UNCED, Samoa developed National Environment and Development Management Strategies (NEMS: SPREP, 1993); as well as a State of the Environment Report (Taule'alo, 1993). In the NEMS, the protection of the sea and marine resources is identified under Target Environmental Component 6.4, and contains the following 5 objectives:

- ◇ **Objective 1: To increase the harvestable stocks of fish and other marine resources.**
- ◇ **Objective 2: To conserve and protect marine breeding and feeding areas.**
- ◇ **Objective 3: To integrate the sustainable development of marine resources into environmental planning and assessment.**
- ◇ **Objective 4: To promote better understanding and improved knowledge of marine resources.**
- ◇ **Objective 5: To create public awareness of the need for sustainable development of marine resources.**

The State of the Environment Report (Taule'alo, 1993) states that the reefs and lagoons of Samoa are under threat. Zann (1991a, 1991b) concluded that they are among the most degraded in the Pacific. Coastal habitats have been damaged by the illegal use of dynamite and poison to catch fish, by the reclamation of inter-tidal areas and lagoons, coral sand mining, nutrient pollution and surface run-off (Taule'alo, 1993).

The concept of conservation, including the establishment of Marine Reserves, Parks or Conservation Areas is a long term goal of the NEMS. Samoa has been a leader in the setting-up of such areas. The establishment of *O le Pupu-Pue National Park* in 1978 was the very first such National Park for the South Pacific region. The Palolo Deep National Marine Reserve, initially established in 1974 as a Marine Reserve under the National Parks and Reserve Act, was another first of its kind (Lovell & Toloa, 1994; Robinson and Haska, 1994). More recently, Samoa has initiated a programme focussing on the development of village-based Fisheries Management Plans (King & O'Sullivan, 1996) and another on the development and management of village Fish Reserves (King, 1996).

## WOMEN AND THE SUBSISTENCE FISHERY

The subsistence fishery includes collecting shellfish, and trapping, spearing and trolling fish, involving both men and women using *paopao*, diving in the lagoons, or going on foot along the coral reefs (Taule'alo, 1993). The fish, shellfish and seaweeds harvested are largely used for consumption by the fishers themselves, or for barter.

There are few reliable indicators of the numbers of women involved in the subsistence fishery in Samoa. In the 1989 Agricultural Census it was revealed that 59 percent of agriculturally active households engaged in fishing and reef gleaning activities, and 67 percent of these households used all their catch for home consumption. This survey, however, excluded women as fishers. In the survey of inshore resources of Upolu by Zann (1991a) data on the role of women in the subsistence fishery are not clearly segregated, and are biased towards fishermen. The percentage of women involved in the subsistence fishery in Samoa, however, is considerably lower than in other Pacific Island countries. In the survey of Zann (1991a) the percentage of women fishers ranged from 0 to 43%, with an average of 12% in the 22 Districts surveyed.

The need for accurate data on women's involvement in subsistence fishing is vital. Any future surveys should therefore have properly gender segregated data. As stated by King and O'Sullivan (1996):

*The Government is very concerned about marine environmental damage and low fish catches. However, the Government recognises that fish stocks cannot be effectively protected simply by passing national laws. This program [Village Fisheries Extension Program] is different in that it acknowledges that the real solution to the problem lies in the hands of the village people and their Fonos.*

The greatest problem facing the subsistence fishery in Samoa is the lack of data on the coral reefs, lagoons and mangrove areas. Various surveys have recorded data on landings and consumption, but there is little information on

the size and sustainability of the stock. This situation makes it very difficult to regulate the subsistence fishery, and to establish size and catch limits. In all, it is nothing more than a prescription for disaster, since it is widely accepted that the current levels of subsistence fishing not only in Samoa but also in many other Pacific Island countries, are unsustainable. Of even more concern is the fact that women are often excluded from various training programmes or marine awareness activities, and from decision-making at the village level.

The State of the Environment Report (Taule'alo, 1993) advocated a number of future options for local fisheries, which were:

1. the protection and conservation of coastal lagoons and habitats;
2. monitoring of stocks and replenishment of stocks through the development of stock hatcheries;
3. aquaculture; and
4. development of commercial fishing to harness offshore resources.

The questions considered here are firstly, how can women have an effective voice in decision-making at the village level concerning the development of their *Village Fisheries Management Plan*. Secondly, how they can play a role in the implementation of the plan towards the conservation and sustainable management of the fishery.

## **WOMEN IN DECISION MAKING AT THE VILLAGE LEVEL**

The involvement of women in decision making at the village level in most Pacific Island cultures requires a concerted effort, and involves traditional and cultural changes that must be accepted by all if they are to work. Advocacy for the role of women in fisheries has taken on a regional as well as national importance in the Pacific Islands. A regional leader in this area is the South Pacific Commission, through their Women and Fisheries Project. A second regional initiative has been the establishment of the Women and Fisheries Network, headquartered in Suva, Fiji. The Network's goals include the empowerment of women in decision making, in raising their levels of understanding of marine awareness and marine conservation, and in the management of their family finances.

Under Samoa's *Village Fisheries Management Plan* project, every attempt is now being made to involve women (King and O'Sullivan, 1996; King and Fa'asili, 1997; Fa'asili and King, 1997). Three groups are consulted in the development of the Plan: Fishermen, untitled men, and Women's Committees (*Faletua ma Tausi, Aualuma*). With the assistance of Fisheries Extension Officers, these three groups analyse the present condition of their marine environment and fish stocks, identify the various causes of the problems, and consider solutions (King & O'Sullivan, 1996). At later meetings the same

groups examine the most practical solutions to the problems. The Plan lists actions required to protect the marine environment and increase fish catches. While the actual actions may vary from village to village, they include community actions, *Fono* by-laws, and Fisheries Division Support.

It is perhaps paradoxical that the Village Fishery Management Plan programme includes the goal of increasing the fish catch. Given the presently depleted state of most of Samoa's reef and lagoonal fisheries, the only immediate option will be to develop the offshore fishery (Future Option 4 under the State of the Environment Report), until sufficiently effective conservation plans have been implemented.

The above formula does appear to give adequate provision for consultation with and involvement of women in the development and implementation of the Plan, and provides a workable arrangement for collaboration between the village and the Fisheries Extension officers. What might need to be considered, however, is the actual level of marine awareness in the community, at all levels.

## MARINE AWARENESS

A need for raising marine awareness at all levels of society, from Government to the private sector, the general public and the education system is recognised in all Pacific Island countries. It is currently identified as a key element for sustainable development of marine resources, and features in the funding strategies of the major regional donors. The development of village-based fisheries management plans in Samoa will require adequate levels of marine awareness in the entire community, and the involvement of all stakeholders, including women. There is a risk that in the absence of an appropriate Marine Awareness programme, some of the important conservation issues relevant to the sustainable development of the fishery could be overlooked.

In Fiji, the International Ocean Institute - South Pacific recognised the need for a village-based marine awareness programme. It entered into a partnership with the Fiji Dive Operators Association and the Fiji Recompression Chamber Facility, in the delivery of a successful nation-wide village-level Marine Awareness programme (IOI-South Pacific 1996; 1997). More than 360 villagers have been directly involved in the series of five workshops which have resulted in many recommendations and actions focussing on Marine Conservation Areas (MCAs), tourism, the fishery, and marine pollution. Gender participation at the workshops has, however, been very disappointing. While some women participated, there was no proper representation. It was concluded (IOI-South Pacific, 1997) that the traditional attitudes to women as non-decision makers [at the village level] may have influenced their not being involved, even though it was requested by the workshop organisers. This was disappointing given the fact that in Fiji women are the principle fishers at the subsistence level. During the

workshops this short-coming was pointed out to the participants, who were forced to accept the important role of women in fishing. It is hoped that the impact of the awareness will be that the message will get back to the villages.

In Samoa the Womens Committees have an important role to play: what is needed, however, is a strategy to enhance their levels of marine awareness. At a recent Regional Marine Awareness Workshop hosted by the IOI-South Pacific in Suva, Fiji, a formula for the development of marine awareness programmes was shared with participants from seven Pacific Island countries, including Samoa. The Fisheries Division of the Ministry of Agriculture, Forestry, Fisheries and Meteorology is now planning to run a pilot marine awareness workshop here.

## OPTIONS AND STRATEGIES

Women's involvement in Marine Awareness and Conservation in Samoa has a good start through the role played by the Womens Committees in those villages electing to develop Village Fisheries Management Plans. The Womens Committees may need to look to additional resources if they are to make the best of this opportunity. It is recommended that:

1. Village Womens Committees ensure that they are fully involved in the proposed Marine Awareness workshops to be held in Samoa.
2. At the village level, women should strongly advocate the involvement of church groups, youth groups (such as guiding, scouting, etc.) and schools in Marine Awareness activities.
3. At the National Level women's groups should strongly advocate the importance of marine awareness and marine conservation, and the involvement of women in all related activities.
4. At the regional level, Samoan women's groups should seek support from the SPC's Women in Fisheries Programme in Noumea, New Caledonia, and the Women and Fisheries Network, in Suva, Fiji in the development of strategies for their involvement in decision-making in the marine sector.
5. Women should be involved in the gathering of urgently needed data on the subsistence fishery, as a step towards the development of appropriate management and conservation strategies.
6. Women should, at the village level, be directly involved in the implementation of the Village Fisheries Management Plans, and in their regulation.
7. Women should be strong advocates of sustainable fishing practices.

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