

INTRODUCTION

The independent state of Western Samoa consists of four inhabited islands, all volcanic in origin and lying in the central Pacific between 13 and 15 degrees South and between 171 and 173 degrees West. Two of the islands Savaii (1810 sq. km) and Upolu (1115 sq. km) are larger, with chains of coastal villages, most dense on Upolu's north coast, where the capital Apia is sited with 21% of the total population. Only 27% live on the biggest island, Savaii.

Western Samoa has a tropical and maritime climate, with pronounced wet and dry season. Narrow coral reefs fringe most of the coastline, and enclose a mainly shallow lagoon. The reef front drops rapidly into deep water.

In Western Samoa, coral reefs have traditionally served as source of building materials, landfill, road construction, cement mixing and many others.

PRESENT DANGERS

In listing the exploitation pressures suffered by the reefs today, dynamiting is the greatest present threat to the marine environment of Western Samoa. It is without doubt that in a circumference of many metres, all sea animals and the corals die where a single cartridge of this material explodes. The lagoons and reefs have suffered degradation. Partly as a result of the greatly increased inputs of sediments, nutrients and chemicals from deforestation and subsequent agricultural activity, and partly due to reclamation of highly productive coastal margins (particularly mangroves), the inshore fishery is thought to be in an advanced state of ecological collapse.

POLICIES AND PROGRAMMES

With the increase of exploitative and destructive pressures on Samoan reefs, and the traditional restraints and responsibilities so weakened at village level, some urgent questions of social policy arise for Western Samoa. Their resolution will call for planning and implementation, at communal and central government levels. They will involve new awareness in the educational, social and in the religious and Christian sphere.

The Five Year National Development Plan for 1980 - 1984 recommends establishment of an Environment Management Unit with the following

1. The establishment of procedures for the environmental assessment of development projects
2. The promotion of inter-departmental consultations on environmental management.
3. Assisting in the further development of environmental education in schools, among the public, and for decision-makers.
4. The formulation of environmental management legislation appropriate for Samoan conditions.
5. The collection and maintenance of data on the status of the Samoan environment.

These goals are not yet being met with significant action. It is doubtful too how far they can be adequately realised without a new awakening of

The following is a draft proposal for coral reef and coastal management studies. The study would very comprehensive and would emphasize the need for :

- * regional cooperation in approaches to coastal zone management,
- * training of indigenous managers of coastal management,
- * collection of data as a basis for recommending appropriate coastal zone environment standards,
- * establishment and development of a consultative network on coastal zone management,
- * improved coastal zone resources data base,
- * increased understanding of ecological interactions in the coastal zone, including human activity,
- * improved recognition by regional governments of the need to adapt approaches to coastal zone development which do not unduly interfere with the bases for sustainable resource management.

The emphasis in the above - mentioned proposals are to be :

- * development of coastal zone resources through wise management and,
- * preventive rather than remedial approaches.

The regional themes are :

- * traditional coastal zone management,
- * resource assessment and monitoring techniques,
- * coastal zone management policy, administration and legislation,

- * education and training,
- * protected coastal areas and species,
- * ecological processes of the coastal zone.

CONCLUSION

It is vital to note that the coral reef alone contributes tremendously to all marine resources. These take into account living and non - living resources plus other economic benefit. Coral reefs are valuable resources for the tourism industry due to its aesthetic appeal, biological richness, clear waters and relative accessibility. Coral reefs are also known as good laboratories for ecological sciences : *i.e. as the main topics and areas for coral reef ecosystems research.*

The reef itself serves as breakwater, especially for low - lying atolls. The reef fishes and invertebrates serve as the major protein source for the island people, therefore, proper management is a priority for the conservation of our coral reefs.

REFERENCES

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