Report on the

INSHORE AND NEARSHORE RESOURCES TRAINING WORKSHOP

Suva, Fiji

13-17 July 1981

SEA GRANT

RESOURCES MANAGEMENT

Dr. Arthur Dahl, South Pacific Commission, Noumea

Management refers to actions that are directed toward some end, which requires the definition of goals or policies. Resources are something with a use or potential use, and in the coastal zone include the uses of the coastal water itself, the uses of the bottom and bottom materials, and the living resources. Resource uses are multiple and interacting, and may be mutually exclusive.

Different management approaches are required for renewable and non-renewable resources. For non-renewable resources, management means efficient and economic extraction until exhaustion, while minimizing the economic, social and environmental impacts both before and after resource depletion. For renewable resources, management should aim to achieve sustainable yield.

A general criterion for successful management is to use a resource with minimal negative effects on other resources, and ultimately to achieve the balanced use of all resources for maximum multiple benefits.

The first element needed for sound resource management is information on the resource and its interaction with other resources. Even where scientific or traditional information exists, it is frequently not used. This information should be compiled through comprehensive planning to enable the best choice of resource uses. Development projects can then be defined and subjected to economic analysis, and environmental social impact studies, in order to achieve the most probable nett benefit. Both plans and projects should be monitored to ensure that the defined goals are being met and to identify unexpected impacts.

Inshore and nearshore resources and the whole coastal zone require an integrated management approach which may require the coordination or restructuring of the responsible government departments. Much effective resource management can also be done at the local or village level.

Inshore resources such as coral reefs and reef fisheries form a complex, largely closed system which is difficult to manage. There is

natural variability in the system depending on the stage of reef development, population fluctuations and extreme events such as storms. If the system is pushed beyond its limits, it is easily degraded, and is slow and difficult to re-establish. The rapid technological changes in inshore resource utilization in the tropical Pacific have created new management needs for which answers must still be found.