FAO and Fisheries Departments. These links include networking, information sharing, attendance at technical meetings of partner organisations, conduct of joint projects, and sharing of human and physical resources. The USP frequently engages in activities of an advisory or consultative nature with other regional organisations, and engages in regular dialogue regarding identification of priorities in training, education and research.

It is anticipated that the PHFDP will enhance SPC programmes such as the Women's Fisheries Development programme whose activities include training for women and coastal communities in post-harvest fisheries techniques.

There are a number of existing Fisheries Department programmes in the region to which the PHF Development Project can be linked. Projects include Samoa Fisheries Division's AusAID assisted Fisheries Extension & Training Project and Fiji Fisheries Division's Commodity Development Framework for Inshore Fisheries Project.

Linkages with existing regional programmes with their local background knowledge will help focus the PHF Development Project on priority PHF development issues and help guarantee sustainability. Further to this, by collaboration with these organisations, care will be taken not to unduly disturb the traditional strengths of communities; but build on and utilise these strengths.

There are also a number of other potential linkages including the UNDP's Sustainable Development and Utilization program, FAO, and the Women & Fisheries Network based in Suva. It is anticipated that the already strong linkage between the USP's Institute of Applied Science (IAS) and the Marine Studes Program (MSP) will be further enhanced. The IAS is able to provide services for testing foods, and human resources for training.



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Empowering communities for coastal zone management

by Aliti Vunisea

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In Fiji as in other Pacific Island states traditional resource bases and community sources of sustenance and livelihood are increasingly threatened by changes primarily arising from factors beyond their control. Modernisation and monetisation, which result from globalisation, have had a profound impact on social structures, institutions, protocol, customs and traditions. Increasingly evident is a more modernised or westernised lifestyle, patterned on 'western perceptions' of development. In the process, social structures, institutions, beliefs and traditions that saw the traditional subsistence societies survive for centuries, even millennia, start to crumble. Consequently, intimate knowledge, behaviour and skills associated with indigenous people's use and management of their coastal resources are slowly being eroded.

Increasingly communities undergo change through development but lack the necessary empowerment to fully exploit benefits brought about by these changes. For example a new beche-de-mer market may not have much impact on a coastal community that has limited control or access to the means of transport available. Lack of preservation facilities and inaccessibility to electricity may hinder full participation of communities. The people regularly utilising resources are almost always the least empowered in decision making, are not aware of information networks and of avenues for assistance or redress. When the custodians and users of the resources are at such a disadvantage, there is a need for more effort to achieve greater community awareness of their resources and how best they can participate or become involved in development ventures. At the same time, researchers, developers and other stakeholders in development or management programmes should have a better understanding of the communities they are dealing with.

Pacific societies, which are basically subsistence in nature, are threatened by the effects of the market economy and the shift to individualism and competition as opposed to community efforts. Vunisea (1996) highlighted the importance of the mixed mode of production taking over the previously predominantly subsistence lifestyle of Pacific Island people. For not only were these resources the economic bases of island nations but the very source of survival for future generations.

The alternatives provided by coastal areas in Fiji and other Pacific nations are immense and provide a fundamental fall-back option for people. More so coastal fisheries provide a vital alternative to stagnant and falling economies. The semi-subsistence nature of coastal zones ensures a strong 'informal fisheries sector' base for people who otherwise would not find formal employment.

In some coastal locations in Fiji, there are in existence management strategies which people continue to utilise. Although not direct stringent measures, customs or norms currently in place serve to play a significant role in the management of resources at the village level. Designated community working days for example, take the pressure off most fishing activities. Taboos implemented on the death of a chief usually last from three months to a year. In Verata on Viti Levu in Fiji, other conservation strategies include the setting aside of certain fishing areas for subsistence purposes. This is a modification of what used to be the chiefly fishing grounds. In addition there are strict taboos on food types consumed amongst the different clans. People from the Verata district cannot consume fish and other marine products in the presence of their warriors (the Naitasiri and Vugalei clans) (Vunisea, 1996). Most of these taboos have their roots in kinship relationships.

Also significant at the community level are networks and groupings that the people utilise to adapt to modern-day changes. In the case of Fiji, women who are the major participants in the subsistence fishing sector have set up their own networks and groupings, through which they organise harvests, processing and distributing responsibilities. Women in Verata for example have their own fishing groups; they share boat fares out to the reefs. The groups also assist in marketing, where each member takes turns at taking everyone's products to the market. The process results in each woman taking a turn at marketing once every four or five weeks. Although lacking economic security, these networks are a cost-cutting measure and have enabled women and other fishers in coastal communities to compete in the fisheries development arena.

The focus on 'community'-based development or management emphasises the need for a thorough understanding of 'communities'. Communities in most cases are seen as uniform institutions thus there is the tendency to put in place generalised structures and programmes. As in the case of Fiji, communities are like small governments. They are very dynamic systems with different hierarchies in leadership and modes of authority with traditional rules regulating resource use. At the same time they have different priorities and differ in the way they function. Different villages or communities have specifically defined clans with specifically designated roles. For example in a village there would be the chiefly clan (*mataqali turaga*), the warriors (bati), traditional fishers (gonedau), traditional carpenters (matai). These again differ depending on location and traditional systems of authority.

Thus the community is a complex system that depends substantially on the natural environment. In additional to a defined system of governance there are also programmes of work which people have adapted to suit their needs. For example there are communal working days, and special meeting days for different groups within the village. Traditional, religious and official government programmes have a profound impact on what people do and how they perceive and use resources. The church, for example, plays an influential role in how people use resources and how people use their time. An underestimation of the influence of the church could mean not taking into account a major factor contributing to resource use. Traditional totems, taboo areas and fishing rituals are practices that are embedded into the whole structure of the village and in most cases are not just management strategies as they may be related to kinship and historical ties and may mark significant happenings within the community.

Community-based participation usually entails involvement of people at the initial stages: getting people's consent for the development of a project or for the implementation of a resource-management venture. There are meetings to create awareness and local people are involved in the initial planning of the project. The donor agency or the NGO at most times has experts or resource people facilitating the whole initiation process.

Development and management projects should involve people's participation at all levels—that is at the initial awareness, implementation, monitoring and assessment. Key locals, especially those knowledgeable on marine resources or those identified as traditional fishers could be used to co-facilitate the programme. In this manner there is challenge for local accountability if the project collapses. It also allows for follow-up programmes by the local community. The local community should be trained or educated on the value of the monitoring process. Monitoring procedures should use local, easily accessible and understandable materials. The use of too much modern technology at the monitoring level undermines the existing knowledge of people. At the same time it creates dependence on external experts and may hinder continuity as the methods used may be too narrowly defined and interpreted. Utilising local people and local knowledge in monitoring species abundance for example, could eradicate biases on seasonal fluctuations and location bias of certain species.

The success and failure of development or management ventures usually are in the forms of reports to the donor agencies. These assessments are usually narrowly defined in that they focus on the specific objectives outlined at the beginning of the project. Such objectives do not always agree with what people perceive as their goals in projects. The targets are usually narrow and the success indicators are confined to these narrow targets. They often do not assess how the development venture benefits people on a wider scale. If people have in the process of the project bettered their living conditions, sent their children through higher education, contributed to the buying of a village lorry, these are successes. Assessment then should be broad-based and should incorporate people's living standards and socio-economic functions.

At the same time there is a need to view communities as dynamic institutions with changing structures and inspirations.

To adapt to modern day changes there are in existence at the village level new modes of associations and groupings. These are groups that are no longer based solely on traditional or kinship ties. Increasingly, new associations based on gender, age and education are being formed. These include religious groups, women's and men's groups, youth groups and other educational groups which are all part of the complex 'communities' systems.

There is thus an urgent need for a re-look at institutional attempts at management and development. Communities need to be specifically defined according to the different situations in which they occur. An attempt at re-assessing communities can hopefully take into account the marginalised sectors of the communities and in the process see societies as diverse structures, with different groupings, associations and networks.

Gender composition and roles of women can then be viewed realistically, within the total structure of the village or community set up. Fundamental to the understanding of communities is the notion that managing resources is basically managing people. If the people are not managed or included, then management cannot succeed.

Important too will be the assessment of traditional knowledge and skills, not as just descriptions of people's tasks but with an understanding of how they contribute to the functions of societies. For example, an understanding of seasonal abundance of marine and terrestrial species is vital to resourceuse patterns in villages. In the modern context, seasonal fluctuation of certain wild fruits can take the pressure off marine exploitation as they offer an alternative means of income generation. People's understanding of the seasons regulate how they forage or fish. In Fiji for example the yam-growing season has a lot of significance for the utilisation patterns of other terrestrial and marine species.

People's familiarity with their coastal habitats ensured their exploitation of a diverse range of species. At the same time the multiple uses of the coastal area were well known and regulated. With the gradual dependence on technology, traditional knowledge of seasons, habitats, tides, storms and their impact on coastal populations is slowly being lost or eroded. In other cases, introduced technology and knowledge are not always compatible with people's understanding. If existing knowledge, skills and behaviours are not acknowledged, this may result in the loss of the basis of the survival of coastal communities.

Too much emphasis on modern scientific technology may result in over-dependence on structures that people may not financially be able to maintain in the long run. There is thus the need for an integration of modern scientific explanations, methods and skills into existing traditional structures and functions. Communities cannot go back to the way their ancestors lived but there is definitely room for incorporation of their knowledge and skills into modern-day development and management attempts. Researchers, developers and other people coming in to work with communities should attempt to strike a balance between traditional and modern scientific knowledge by interpreting and using traditional technologies with the modern. As stated earlier, management fundamentally deals with people and how they deal with resources. Thus, understanding the structures and systems that govern people is a primary starting point.

Regional Course on Seafood Business Operations and Management for Pacific Island Women

The Fisheries Training Section of the SPC is continuing its regional training programme on the management of fisheries enterprises with the running of a four-week course on seafood business operations and management for Pacific Island women. The course will be held at the New Zealand School of Fisheries in Nelson from 12 April to 7 May 1999.

The regional training programmes of the SPC target commercial fisheries enterprises in the Pacific with the aim of assisting an emerging regional fishing industry and as a means of creating job opportunities. The main objective of this course is to enable Pacific Island women involved in seafood business operations to upgrade their technical skills and to develop strategies to enhance the commercial viability of their businesses. Course content will remain flexible enough to address participants' specific training needs but will also cover three main subject areas:

- 1. Seafood production system:
 - an outline of production systems, HACCP principles, seafood handling and quality control, value adding, marketing and trading practices, site visits, practical production trials;
- 2. **Business management practices:** the commercial ethic, personnel management and development, problem solving;

3. **Business planning and accounting:** spread sheets and computers for accounting, interpretation of financial information, the business planning process, management of a businessplan;

The course has been developed in collaboration with the New Zealand School of Fisheries and the New Zealand seafood industry to meet the regulatory and quality control requirements of international seafood markets.

Therefore, it provides an excellent base for upgrading the skills of Pacific Island women in all aspects of seafood business operation and management.

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