

# 3. The importance of subsistence fishing

## The role of subsistence fishing

Fishing has always played a very important role in Pacific Island communities, for cultural, nutritional and, more recently, economic reasons. Many coastal communities developed a strong cultural identity based on fishing and the marine environment as a result of their dependence on the sea and its resources. For many countries with limited productive land and a lack of potential for agriculture, the sea has provided the major source of protein. Subsistence activities and informal employment are recognised for the contribution they make to the economic and social well-being of Pacific island communities.

## Traditional culture and the division of labour

In most countries fishing offshore with boats has been the domain of men while women have concentrated their activities on the inshore areas, collecting a wide variety of species from the reef and inshore area. Separate fishing roles and areas for men and women reflect community and family obligations of both. Women and children collect from the inshore areas, often as a way of supplementing the diet when the weather is too rough for the men to go out in their boats. By gleaning the reef, they can stay close to the village and not neglect other necessary tasks such as gardening and the preparation of food. Men on the other hand often fish from boats or canoes and are away from the village for much longer time periods. Community fishing methods such as fish drives and palm frond sweeps may involve men, women and children.

Women seldom collect or fish alone. They are often accompanied by friends, relatives and children. Reef gleaning can be a way family and friends can enjoy a communal activity. The social values of such enjoyment are difficult to quantify.



**Figure 3.1:** Fishing is often a social activity in the Pacific (drawing courtesy of AusAID).

A number of customs and traditions have developed as a result of the intimate relationship of coastal communities with the sea, both to protect the resource and to ensure harmony within the village. In many cultures throughout the Pacific the distribution of excess catch throughout the community is based on customary obligation towards certain family and community members. Women are often the ones responsible for this customary distribution of the catch.

Some fishing cultures developed specialised roles dictating exactly what form of fishing a fisherman was entitled to pursue given his social standing. In Palau offshore fishing for several species of shark was practised only by a few prestigious specialists – with the prestige being related to the danger of the fishing method rather than an appreciation of the shark as food. In some societies there existed a professional class of men whose occupation in the community was fishing. Other cultures placed restrictions on who can catch, cook or consume certain species—such as turtles in some parts of Polynesia. Before the introduction of Christianity to the Pacific, religious taboos and magic were often associated with fishing. In Kiribati, the significance and ritual associated with fishing tied the fisherman to the sea spiritually and gave him a feeling of respect for the marine environment (Mollica, 1999).

Although many customs, traditions, taboos and rituals have been eroded in Pacific Island fishing communities, the importance of fishing to the cultural identity of the community remains very strong.

## **Nutrition**

In the past a traditional Pacific meal included a variety of starchy root and tree staples (taro, tapioca, breadfruit) along with a side dish of green leaves and seafood either boiled or cooked in coconut cream. Wild fruits and bush nuts provided snacks between meals. This diet was not only nutritious but the physical work involved in obtaining the food (hunting, fishing, gardening and collecting bush foods) kept people active and fit. Today people have changed their food habits and their lifestyles. They rely more on imported foods and do less physical work.

Since the 1970s there has been increasing concern at the appearance of non-communicable diseases such as diabetes, hypertension, stroke and heart disease in many countries in the Pacific (English et al., 1996; Coyne, in press.). Dietary deficiencies, particularly of vitamin A and iron, are affecting mothers and infants. These diseases and conditions often result from the increased consumption of refined and processed foods as well as cheaper meat cuts. Many of these foods are imported into Pacific countries, and are high in energy levels but low in essential nutrients. Imported meats, such as frozen lamb ribs (lamb-flaps) and turkey tails, as well as canned corned beef and lamb contain very high quantities of fat. The consumption of fat is directly related to the incidence of heart disease.

Besides the personal tragedies of poor health caused by poor diets, there are considerable economic implications. Pacific communities spend millions of dollars each year not only on importing low-quality food, but on solving/counteracting the long-term health and medical problems caused by the consumption of food which is high in fat and poor in nutrition.

Because of the health and economic problems related to imported foods, people are now being encouraged to eat more local foods – that is to eat plants and meat that are traditional and indigenous. One of the most traditional and appropriate foods for people living on islands is, of course, seafood. Fish meat contains very little damaging fat and is regarded as high-quality protein. Seafoods contain health-giving nutrients and many, particularly seaweeds and shellfish, contain essential minerals including iron. Fish flesh, fish liver oil and even fish eyes contain vitamin A.

But it is no use encouraging people to eat more seafood if it is difficult to get and expensive to buy. The most accessible seafood, the fish, seaweed and shellfish of the lagoons and reefs, is now in short supply. Subsistence fisheries based on inshore species need to be managed just as much as commercial fisheries do.

## **Informal Employment**

Informal and subsistence employment has traditionally formed the basis of Pacific Island economic and social structure. The informal sector includes the production, home consumption, trade and marketing of surplus agriculture and marine products, handicrafts and services. A significant proportion of people's livelihood in the Pacific is still derived from informal production. This is especially the case in islands and villages away from the main population centres where the cash economy and formal job opportunities are limited.

The low levels of unemployment and poverty in Pacific Island countries are largely due to the subsistence sector, which provides a livelihood to people who might otherwise be destitute. Pacific Island governments recognise the importance of supporting the subsistence sector and enhancing its productivity, as it supports the majority of Pacific people.

Measuring the non-market output of subsistence activities is very difficult. Collecting catch data from numerous and widely distributed fishing communities is time consuming and impracticable for the often understaffed fisheries agencies. Dalzell et al. (1996) estimated that 80% of the catch from inshore fisheries in the South Pacific, whether from reefs, estuaries or fresh water, is taken for subsistence purposes with the remainder going to commercial markets.