

Socioeconomic status of fishing communities

Seaweed: A promising option for women's small business development in the Pacific region

by Dr Irene Novaczek¹

In Fiji, Vanuatu and Papua New Guinea there are women engaged in turning a locally abundant but underutilised resource — marine plants — into saleable market products. I came to the South Pacific region in 1999 as a marine botanist to work on a fisheries post-harvest project at USP, funded by Canada-South Pacific Ocean Development. As I travelled around the Pacific Islands performing a needs assessment for the project, I noted that although sea plants were frequently used as medicines in Asia and Southeast Asia, they were rarely used by Pacific Island herbalists engaged in rural health care. Outside of Fiji, where a half a dozen species are eaten and sold in the market, there is also relatively little use of seaweeds as food. Although seaweeds are prized as valuable organic fertilizers for home gardens in other parts of the world, this use is not evident in the Pacific.

To ignore the value of local marine plants is to miss out on many opportunities. Marine plants have been used traditionally as medicine in many parts of the world, and according to recent scientific findings, many diseases and health conditions may be prevented or alleviated through the use of these plants. One can expect different sea plant preparations to be useful for basic home first aid (constipation, diarrhoea, cuts and burns). There are also published studies that indicate that sea plant extracts can be used as preventative medicine for heart disease, cancer, high blood pressure, obesity, diabetes and viral infections, and can strengthen the immune system generally. There is folkloric information on the use of sea plant extracts for lung conditions, colds and flu, and sexual dysfunction. Some sea plant extracts

have potential for prevention and/or treatment of some viral infections (dengue, HIV) and parasites (malaria). Others have been clinically proven as effective ingredients in skin care products. Finally, sea plants are a source of vitamins and minerals, especially micronutrients.

Marine plants would therefore appear to be a valuable resource, especially for food on atolls where agriculture is difficult, and for preventative health care on small islands where access to western medicine is limited. Small businesses based on the careful harvesting and value-added processing of marine plants is a development option that has received scant attention, yet has great potential both for domestic and export markets. There is a vibrant and expanding international market for marine plants as health food and also as ingredients in fine cosmetics and health spa treatments. Although exporting sea plant products may be uneconomical for many small Pacific Island businesses, there are clearly opportunities to provide products and services to tourists, thus “exporting” the products without having to worry about transportation costs and trade restrictions.

In 2001 and 2002, I worked in the Pacific region developing and delivering training workshops on the use of sea plants for food, agriculture enhancement, medicine and income generation. Village people, NGO staff and government staff were introduced to the various uses of sea plants in the course of two workshops in 2001. In 2002, I developed three booklets that were published. “Sea Plants” is an overview of how to find, harvest and use marine plants. “A Guide to the

1. Marine botanist, University of Prince Edward Island, Canada

Common Edible and Medicinal Sea Plants of the Pacific Islands” provides pictures, descriptions and other information on 34 genera of tropical seaweeds. “Sea Vegetable Recipes for the Pacific Islands” includes recipes for a wide array of sweet and savory dishes that can be used for family food or market products. These booklets are available from SPC offices and from the Marine Studies Program at USP.

In 2002, I received the Canadian Bureau for International Education’s Professional Leadership Award, which allowed me to spend two months in the Pacific region, based at USP, delivering a series of three workshops. With assistance from UNDP, a workshop was developed with the explicit aim of providing information, skills and support to selected women who might develop a small business. Seven trainees from Papua New Guinea, Solomon Islands, Vanuatu, Samoa and Kiribati worked with myself and several Fijian trainees at USP. Most of the trainees were traditional healers. One was a seaweed farmer and one already had a small business in herbal cosmetics. The response of these women to information on sea plants was strong and positive.

Alice Athy in Vanuatu now has a vibrant business, with natural therapy clinics in Port Vila and Santo employing more than 10 people. Another trainee, Liviana Madanavatui, has a successful small business in Suva, Fiji, selling sea plant-based cosmetics, tonics and other preparations. Minnie Bate in PNG has developed a seaplant product line to add to her existing herbal business. These preliminary efforts have proven that women who have the entrepreneurial spirit can be effectively trained to develop or diversify small businesses using underutilised sea plant resources. The start-up capital requirements are minimal and the women report positive satisfaction with being able to produce and sell products that are beneficial to people’s health.

Other trainees are still in the early stages of business development; most require follow-up assistance. Similarly, workshops targeting women in villages, fisheries officers and NGO staff have borne fewer tangible results in terms of stimulating local economic development or improved health care. This is because most people do not have the energy and ambition required to be an entrepreneur, or the gift to be a healer. However, with follow up assistance from NGOs and government extension officers, coastal villagers could benefit from diversification of their food sources, home remedies for simple ailments, and from the use of sea plants to improve the yields from gardens. With this in mind, Foundation for Peoples of the South Pacific International has developed a project

proposal that, if funded, will allow them to carry on with the support of the existing trainees, the training of more prospective entrepreneurs and the extension of basic information into coastal villages.

I am also interested in working with Atoll Seaweed Company in Kiribati, with the Department of Fisheries in Fiji, and with the Rural Fishing Enterprise Project in Solomon Islands. In each case the agencies are working with communities to grow seaweeds commercially. Communities engaged in seaweed cultivation should examine their options for capitalising on this resource through local processing and use; for example, the manufacture of cosmetics, health products and agricultural aids.

Because sea plants are available for free to coastal herbalists and mothers who traditionally look after family health, their use should be optimised. Although trainees are reporting much success in their own practices, there is a need for scientific research into the applications of the types of simple extracts that rural women can produce using just a cooking pot and fire. I am currently working to bring together an international research team to do detailed studies. If funding support is forthcoming, commonly available sea plants can be screened for medicinal properties to determine which species are most effective for different conditions. These would then be tested in a clinical setting. With this information in hand there would be sound scientific backing for recommending which species women should use for home and community health care, and at what concentration or frequency.



Wattsia mossambicus
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