

Gathering edible seaweeds to augment the family income.

he reef flats of Bolinao and Anda northwest of Lingayen Gulf, Philippines, have been fished and gleaned for as long as their inhabitants can remember. Women, until recently, dominated the gathering of food from accessible areas of the reefs. They foraged close to home, handpicking organisms for the day's meals, while the catch from fishing was mostly sold. Thus, the biomass harvested mainly by women comprised the major diet of fishing households (as is also the case throughout Oceania. See the review by Margaret D. Chapman. 1987. Women's fishing in Oceania. Human Ecology 15(3):267-288.)

Today, dwindling returns from fishing by the menfolk have altered patterns of gleaning and the role women play in it. At least 2,000 households of Bolinao and Anda directly depend on the coralline resources. With an average family size of six, and assuming two of four children are able to glean, there are about 6,000 women and children collecting in the reef flats of this area alone. As well, about 2,000 fishermen there switch opportunistically between fishing and gleaning to supplement their diminishing catch. Altogther, a fishing household derives a monthly income of about US\$20 from fishing, or barely a third of what it needs for subsistence. Other occupational activities earn a family on the average another \$6.50.

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Above: Sorting gleaned catch.
Below: A woman and child forage
a reef flat for seaweeds, conch
shells, bivalves, sea urchins and
other edible organisms.

Everyday, women and children comb the reef flats, gathering edible seaweeds, conch shells and bivalves, among others. Men collect reef species using simple implements such as hooked metal rods for prying abalone off rocks, and jigs for luring octopus out of crevices. They use bamboo rafts and tiny sailboats for greater mobility. Small shells, mostly Strombus and Cypraea, are harvested with nets in triangular bamboo frames,

and sold to the shellf-craft industry. Other organisms caught mainly for cash are sea urchins and sea cucumbers, both prized Chinese gourmet items which fetch high prices from exporters. Even sea anemonies are collected and sold in nearby wet markets. Thus, like the harvest obtained from fishing, an increasing portion of the gleaned biomass is sold. Gathering by hand has become, not just a means to obtain food, but one to generate much-needed income.

Gleaning as an economic activity imposes a heavy workload for women in particular. The increasing rarity of commercially-important organisms in degraded habitats means longer gathering hours. Women sort, process and market the family's catch using routes and channels they themselves set up. Processing the raw catch includes sorting, roasting and cutting shells; removing and preserving sea urchin roe; and boiling, smoking and drying sea cucumbers. Mending nets, baiting hooks, packing dynamite and other forms of gear preparation are very much a part of keeping house.

Indeed, the role of women in providing for their families has become crucial with the declining returns from artisanal fisheries. Gleaning as one of their activities will probably outlive other forms of mechanized fishing. Deteriorating habitats will constrain how much they can harvest but perhaps these women will manage to earn enough for food while the men find viable alternatives to the dying occupation that is small-scale fishing.

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