Sulawesi fisherfolk

A bridge to remote communities

Through bottom-up planning, an NGO in Sulawesi shows how to bridge the gap between government and remote local communities

n a map, the 13,000 or so islands that comprise Indonesia seem strategically placed like so many stepping stones bridging the ocean that divides Singapore and Australia. West to east they straddle 5,000 km of sea, from the Straits of Malacca a just north of the Torres strait. And north of south, they extend over 2,000 km, from the southern shores of Sumba to the northernmost point of Sumatra.

The island of Sulawesi—formerly Celebres—lies at the very heart of this sprawling archipelago, stretching across the equator like a dancer.

It has for centuries been home to the seafaring Bugis people. Their reputation as highly able sailors and navigators, skilled fisherfolk and expert boat builders is legendary.

The southern part of Sulawesi (Sulawesi Selatan) produces the largest of Indonesia's proud *pinisi perahus*—huge sailing craft which trade in all manner of goods throughout the multi-thousand is-land archipelago, but which are rapidly dying out as motorisation replaces sail power.

The rich diversity which characterises In-donesia—over 300 ethnic groups speaking more than 250 languages—is reflected in microcosm in the island peoples and the ecology of Sulawesi.

On the extreme southern tip of eastern Sulawesi is Kolono Bay. It comprises a narrow channel about 15 miles long and two to three miles wide, lying in the lee of the northern tip of the island of Button (Pulau Butung).

The western side of the bay offers little shelter, being bordered by steep hills and

dense forest. The breeze tends to whip up a wild and choppy sea over the long fetch of the bay.

This makes venturing out in small boats an arduous and hazardous task, fraught with the risk of capsize. The long fetch and lack of shelter render most of the bay an insecure anchorage.

Towards its northern end there are tidal mud flats which at low tide stretch up to 500m into the bay. The eastern side is a maze of tidal channels, mud flats and dense mangrove forests, which are home to a rich and unique fauna and flora.

The combination of highly productive mangrove swamps and shallow seas reaching far offshore, multiple coral reefs and small islands provides for a rich and diverse fishery.

The people who live in this area fall into three main groups. The indigenous people—the Telakis—follow a traditional way of life based on shifting 'slash-and-burn' agriculture and fishing.

There are two groups of immigrants—the Bugis and the Bajos—who are mainly seafaring coastal people deriving their livelihood from the sea.

Subsistence livelihood

They operate the hundreds of lift net platforms which cluster around the shallow sheltered coastal waters, often many miles offshore. While they also works as crew on the perahus trading inter-island, they mainly derive a subsistence livelihood from the sea and the coastal belt through a diverse range of fishing and farming activities.

The Department Perikanan (Department of Fisheries) works with community

groups throughout the Kolono Bay area. Its activities incorporate the usual services of a government fisheries department.

n his particular area, a British NGO, Voluntary Service Overseas (VSO), provides advisory services through a vso Fisheries Specialist, Dr Steve Creech. He is on a two-year assignment to help the Department Perikanan to improve its 'bottom-up planning' mechanisms.

One of the specific problems faced by the department is that its headquarters staff (who are responsible for managing its programmes of work) live in the regional capitals, which is a four to six hour drive over rough terrain from the field projects.

This situation has les Dr. Creech to place more emphasis on working directly with the fishing groups, supporting their organization and strengthening their in situational structure.

The department has established a prawn hatchery for tiger prawns (*Penaeus monodon*) and is encouraging fishing groups to build prawn ponds in the lower tidal areas of the mangrove swamps.

However, there seems to be a conflict between this activity and a central government decree which prohibits the clearance of mangroves for any purpose. The clearance of mangroves for prawn ponds is a violent and destructive process. Trees have to be felled to allow for access. For each pond, up to one hectare of mangrove has to be completely cleared.

It is not possible to extract and use timber for productive purposes, given the distance of the prawn ponds from the centres of population.

Thus, from the magnificent 40-60 ft high trees, the potentially valuable mangrove wood is simply cut up and burned on site. The fishing groups who build these ponds are very aware of the need for a rational policy on conservation.

They are thus actively lobbying the Department Perikanan to establish conservation zones where the construction of prawn ponds will not be allowed.

in the short term, the unrestrained destruction of one of the most valuable coastal habitats may not have a serious impact on the larger environment. But unless action is taken now to establish a rational conservation policy, the longer-term capacity of the coastal environment to provide a sustainable livelihood will be seriously threatened.

In many of the communities around Kolono Bay, there is a well-structured division of labour. Men involve themselves with sea-based tasks and women take responsibility for Indonesia

shore-based tasks like making nets and marketing fish.

Traditionally, much of the catch is dried on simple reed mats. While this technique has the advantage of using locally available materials of low cost, it is relatively labour-intensive and the quality of the product is quite poor. The fish have to be regularly turned to expose their lower sides to the sun and air.

This demands constant attention and labour. When it rains, the mats are rolled up and stored under or inside the houses. This rolling up of the mat crushes and misshapes the fish, resulting in much spoilage and wastage.

The vso/Department Perikanan project is supporting a local initiative in the Bugis village of Warwaranu, where a group of women has come up with a novel method of fish drying. Their idea is to substitute the traditional reed mats with small-meshed netting, which is spread over $2 \ge 1.5$ m wooden frames raised one metre off the ground.

This system allows for even drying of both sides of the fish. In case of rain, the frames can be stacked underneath the Bugis houses (which stand on stilts) or covered with plastic sheeting.

There is almost no wastage of fish dried by this method and improvements in quality mean that the new product commands a 70 percent premium over the old one. Moreover, the new system of drying is only marginally more expensive than the traditional system.

These community-based project activities seem to be making an important contribution. They strengthen the local communities' capacity to initiate and implement their own projects.

At the same time, these activities help them voice their concerns and needs to those in positions of authority.

Hopefully, the bridge that VSO is trying to build between these remote communities and the government fisheries department will enable their voices to be heard. This article, written by Brian O'Riordan of the Intermediate Technology Development Group, UK. is based on a short visit to the south-east part of Sulawesi island.