Malaysia: Penang's mangroves and biodiversity conservation

The Penang Inshore Fishermen Welfare Association (PIFWA) has recently held a workshop on the importance of mangroves. Fisherfolk had there the opportunity to highlight what they already knew: that mangrove forest is an inherent part of their livelihood since it is closely related to fish catch. Without mangroves there will be no fish in the sea since they play a vital role as intermediaries between marine and terrestrial ecosystems.

This rich ecosystem is home to several aquatic species --all kinds of fish, snails, cockles, shrimps and crabs--, reptiles like snake and monitor lizards, migratory and local birds, insects and mammals such as monkeys, wild boars and otters. There, the tide allows the formation of mudflats where trees grow, with a complex system of roots that shoot out of the mud and become a haven for many aquatic species which find there shelter to breed and feed their offspring.

But mangroves serve other functions: their strong roots hold firmly the soil and protect inland from soil erosion, storm and flooding. Also mangrove wood can be used for construction, to build jetties, houses, fences and pole markers. It can be used for fuel and even the process of burning it to turn it into charcoal is beneficial: the smoke is channelled into a funnel where condensation turns it back into water. This water has many useful properties, one of them is medicinal for cough and skin disease. Even the bark of the tree has a certain quality that strengthens clothes and nets if put to boil in water, something that fisherfolk take profit of. With proper technology, the bark serves also as anti-rust and protective paint for boats and jetties.

As a source of food, mangrove fruits are edible and mangrove leaves are a good food for goats and sheep, while the honey from bees which have built their hives in a mangrove forest is said to be more potent because such bees tend to be bigger and wilder. Roots are appropriate to make handles, axes and knives.

However, all these qualities of such a complex and prodigal ecosystem are being destroyed. In the island of Penang, there remain only 900 hectares of mangroves, only half of them considered forest reserve. Destruction since 1966 amounts to 130 hectares of mangroves per year. Unfortunately, this process is happening worldwide, and is related to shrimp farming carried out by big corporations (see WRM Bulletin 51).

In Balik Pulau, Penang, what used to be an exuberant stretch of mangrove forest has been invaded with hundreds of hectares of shrimp ponds in Kuala Sungai Pinang and Pulau Betong. The same happens in Sungai Chenaam and Batu Kawan, in Seberang Perai Selatan. Inshore fisherfolk from Batun Kawan remember that not long ago they did not need to fish deep into the sea because they found in the mangrove forest the catch for the day and more. Now the place is covered with roads and buildings, and the Jejawi River is polluted since aquaculture requires a high use of chemical inputs. Fisherfolk reported that areas where mangrove forests have been felled, register a gradual decline in fish catch over the years.

When a mangrove is destroyed, gone is with it the whole living system which it contains and

irretrievably lost are the long term and long reach benefits it yields. Business for profit (for just a few) irresponsibly plunders local peoples' resources and destroys biodiversity ... the same biodiversity that the Malaysian government has committed itself to protect. If international agreements are to make any sense, then the government should support the fisherfolk --eager to conserve biological diversity-- against the shrimp farming industry --only eager to make profits. Will it?

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