

**Editorial**  
**Surmounting the people vs. parks conundrum - conservation lessons from marine resource management in India**

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The atmosphere in India is charged once again over a recurring controversy which pits forest people's rights against wildlife conservation. Over the last few months, 'human rights groups' and 'wildlife lovers' have argued about whether tribal land rights promised under the Scheduled Tribes (Recognition of Forest Rights) Bill, 2005 will result in support for India's deteriorating wildlife habitats or destroy any chances for its survival. Like its colonial predecessor, the Government of India protects terrestrial species' habitats by declaring them as national parks and sanctuaries from which people are excluded entirely. The resulting conflicts persist unabated and unresolved. The rigidity of this exclusionist approach in terrestrial area management is in stark contrast to the flexible case-specific methods applied for the management of marine resources by government and non-government agencies. Marine ecosystems require management measures that are distinctly different from those currently practiced in terrestrial areas. In fact, there may be lessons for the conservation of terrestrial areas from marine management strategies.

Much more densely inhabited than most forests, the coasts are necessarily used by numerous fishing communities concurrently. Community-based systems of fisheries management include fishing gear restrictions, closed seasons in specific areas, or bans on particular forms of fishing such as night fishing or dynamite fishing. In the late 1970s, modern fishing methods threatened the livelihoods of these communities and coastal ecosystems; mechanised craft and gear, principally trawlers with bottom trawling methods, severely impacted fishing stocks. By the early 1980s, many coastal states in India had responded by introducing legislation and formalized some of the existing management measures in the form of Marine Fisheries

(Regulation) Acts. For example, the Orissa Marine Fisheries (Regulation) Act (OMFRA), introduced in 1982, prohibits all trawlers from fishing within 5 kilometres (km) of the shore. Through this law, the state has also regulated the use of certain fishing gears and permits only low impact fishing practices in areas of turtle congregation. These laws are not designed to exclude people from their marine environments. The fisheries departments and government institutes, such as the Central Marine Fisheries Research Institute, have systems in place for monitoring stocks of marine species (even if only variably reliable). It appears that these kinds of conservation measures also recognise that humans have historically 'used' or consumed marine species, including those now classified as 'endangered'. Therefore, fisheries management prescribes conservation options that allow for the presence of humans and human activity, but calls for modifications in the range, intensity and nature of such activity.

Unfortunately, the official style of managing terrestrial systems is being extended to the management of marine species and their habitats as well. Furthermore, the little data that exist on marine species and their habitats have not been able to inform appropriate management decisions. In reality, the official response to demands for marine management has been to create a conservation mechanism identical to the terrestrial style as seen in the five marine protected areas created in the country: Gahirmatha in Orissa, Gulf of Kutch in Gujarat, Gulf of Mannar in Tamil Nadu and two protected areas in the Andaman and Nicobar Islands. In response, fishing communities have objected to the complete ban on human presence in these areas. These conflicts manifest themselves in varying forms and to differing degrees depending on the intensity with which these bans

have been enforced. The example of Orissa is apt here. For the last few years, conservationists have been trying, in vain, to prevent olive ridley turtles from being trapped in trawl fishing nets. National and international efforts to introduce Turtle Excluder Devices and to keep trawlers out of the Gahirmatha Marine Sanctuary have failed, due to the strong resistance from the trawling community. Already there was considerable discontent among various fishing communities, since the 1997 declaration of the Gahirmatha Marine Sanctuary, which denied them all fishing rights within a delineated core zone. Conservationists now recognise that a more effective strategy would be to focus efforts on the protection of offshore turtle congregation patches. They also recognise that within the congregation areas, certain forms of fishing might be benign. Unmindful of these facts, the Orissa Forest Department is planning to declare the other two known congregation areas – off the Devi rookery and the Rushikulya rookery as marine sanctuaries. This would impinge on the rights of even the non-mechanised sector rather than simply restricting harmful activities. Ironically, since most major turtle congregations occur within 5-6 km of the shore, merely enforcing the fishing regulations of the OMFRA, which bans all mechanised fishing within 5 km of the coast, would effectively help in conserving these turtle populations. In contrast to laws governing protected areas, the OMFRA also has the flexibility to formulate creative rules that are area, activity and time specific.

Marine conservation is widely believed to have lagged behind terrestrial conservation. However, it is possible that marine management rules are more successful since they view the protection of the

environment as the conservation of 'resources' that have human uses; this being perhaps a more appropriate and realistic approach within this particular context. Many believe that wildlife conservation can succeed if it is done through means that protect people's livelihood rights rather than those of a single endangered species. For example, protecting the interests of the traditional fisherfolk through the implementation of the OMFRA would protect the turtle congregations, albeit inadvertently. Today, conservationists and fisherfolk have rallied under the banner of the Orissa Marine Resources Conservation Consortium. This



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alliance is possible because the fisheries laws only exclude certain activities rather than people. Not only can this practical, context-specific model form the basis for marine conservation in future, it could also serve as a powerful tool in refining terrestrial conservation methods as well.

The challenges to marine management systems are not uncomplicated. Marine management systems based on restricting activities work well only where fishing communities are an integral part of the monitoring and enforcing mechanisms. Rapid technological advancements in fisheries and a noticeable systemic breakdown within the fishing communities make conformity to rules difficult. It is seen that only where fishing communities are still socially organised (such as the Mogaveera fisher caste members in Karnataka) and where the levels of awareness and political representation is greater, have the communities been able to enforce some form of indigenous or official fishing regulations. Therefore, an important lesson is: people are central to successful conservation efforts.