

GREEN WARRIORS: CONSERVING LOCAL BIODIVERSITY THROUGH COMMUNITY CONSERVATION INITIATIVES IN ORISSA, INDIA

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The state of Orissa is one of the most resource-rich states in Eastern India, with diverse ecosystems that boast a wide variety of flora and fauna. In a way, Orissa symbolizes the contradictions in modern India between very high ecological and social diversity and extreme poverty and destructive processes of industrialization. Efforts by Government agencies to conserve wildlife in strictly protected national parks and sanctuaries often create conflicts with local communities who reside in and around these areas, because the physical presence of humans is considered to be harmful. This exclusionary approach to protected areas not only inhibits the fair and equitable sharing of benefits of conservation with local communities, but also disproportionately imposes the costs of conservation upon them. Lack of recognition of or respect for their fundamental rights contributes to hostility towards Government conservation initiatives, which reduces the overall efficacy of conservation efforts and, ironically, further exacerbates degradation and local poverty.

Despite these complex challenges, local communities are driving their own initiatives to conserve wildlife and biodiversity in general and to generate sustained livelihoods (see Box 1)¹. Across community-owned lands, government-owned lands, and lands whose ownership is disputed, these initiatives are helping conserve a variety of ecosystems and habitats of wild flora and fauna through a wide range of institutional mechanisms, rules, and regulations. Even though these Community Conservation Initiatives (CCIs) are much older than the Government-managed protected areas, they remain unrecognized in federal and state law. While they have been functioning effectively without legal recognition, there are arguably some instances in which recognition of CCIs would further enable them to support biodiversity conservation and sustainable livelihoods.

Box 1. Overview of Community Conservation Initiatives (CCIs).

CCIs play a crucial role in the conservation of vital ecosystems, critical wildlife habitats, and threatened species. Many function as wildlife corridors and establish biological linkages between official State protected areas. Some are responsible for the maintenance of essential ecological services such as soil conservation, water security, and conservation of traditional crop varieties. They integrate links between traditional agricultural systems and forest ecosystems, thereby conserving at the landscape level. Some CCIs are crucial aspects of local economies; thousands of people depend upon them for survival and social and cultural values and uses. CCIs can be seen as community-based models of development built on local ecological knowledge systems that integrate traditional knowledge with current advancements in conservation science.

THE SOCIAL AND ECOLOGICAL CONTEXT OF THE MOUTH OF THE DEVI RIVER

The mouth of the Devi River, located about 60 kilometers from Bhubaneswar, the capital city of Orissa, has great ecological, historical, and economic significance. The Devi River mouth is one of the three mass nesting sites of the Olive Ridley turtle in Orissa². It also provides habitat for the Indo-pacific humpback dolphin (*Orcaella brevirostris*), the finless porpoise (*Neophocaena phocaenoides*), and the smooth-coated otter (*Lutra perspicillata*)³, as well as many species of residential and migratory birds. The surrounding forest area is also home to many wild animals such as chital, hyena, and jackal. This rich diversity in flora and fauna adds immeasurable value to local communities' livelihoods and well-being.

Around 15 000 traditional fisher-folk from 36 fishing villages are directly dependent on the river mouth for their daily livelihoods⁴. The traditional fisher-folks live in small *tandas* (hamlets) adjoining the main revenue village. They collect fishes and crabs from the river mouth and fish within 5-10 kilometers from the shore, using fibre boats or motorized

1 Pathak, N., S. Bhatt, B. Tasneem, A. Kothari, and G. Borrini-Feyerabend, 2004. *Community Conserved Areas: A Bold Frontier for Conservation*, IUCN-CEESP Briefing Note 5. Last accessed August 30, 2010, at: http://cmsdata.iucn.org/downloads/cca_briefing_note.pdf.

2 Three mass nesting (*arribada*) sites in Orissa are the Gahirmatha sanctuary, Rushikulya, and Devi River mouth.

3 The smooth-coated otter is listed in Schedule II, Part II, of the Indian Wildlife (Protection) Act, 1972, Appendix II of CITES, and as Vulnerable (VU A2cd) in the IUCN Red List.

4 Sea Turtle Action Programme, 2005 (unpublished report). The organization conducted a survey in and around Devi River mouth in 2005, supported by the Orissa Marine Conservation Consortium.

boats (*kattamarams*) and large meshed nets to avoid strangling the turtles. On average, a traditional fisher-folk can earn around 10 000-12 000 Indian Rupees per month from the fishing activities. In addition to the fisher-folks living in the *tandas*, the villages located along the mouth of the Devi River are dependent on fishing and agriculture for their livelihoods. The average household landholding in the area is about 1 acre. Floods in 2003 and 2009 in the Kadua and Devi Rivers have seriously affected several hundreds of acres of crop in Gundalba⁵ and other neighbouring villages. Fisher-folks and other farmers have not received any compensation for their losses and many of their lands still lie inundated with water. Those who do not practice fishing or agriculture work as migrant wage labourers, often outside the state⁶.

Exemplifying the type of conflict that arises between Government conservation priorities and community livelihoods in this area, during the six-month turtle breeding season from November 1-May 31, the Orissa State Government imposes a ban on fishing. Out of 240 fishing days in a year, the restriction of these 180 fishing days for turtle conservation greatly affects the traditional fisher-folks, who have no alternate sources of livelihoods during this period. The total amount of loss incurred by the marginalized communities in each year is around 403.7 million Rupees.

Apart from being a mass nesting site for Olive Ridley turtles, the area has a good mangrove forest cover. The many species of mangrove vegetation⁷ play a vital role in the coastal ecosystem, including in the mitigation of coastal erosion, as nurseries for variety of fish and prawns, and as natural barriers to tidal and storm surges associated with tropical cyclones, which cause considerable damage to the ecosystem and communities' livelihoods. Good mangrove cover thus increases the resilience of the surrounding and constituent social and ecological systems.

However, the situation was much different a mere ten years ago. In 1985, mangrove cover in the Devi estuary was 2.58 square kilometers (km²)⁸. In 1997, the mangrove forest cover was reduced to less than 2 km² by one cyclone⁹; a super cyclone in 1999 hardly left any trace of mangroves or coastal casuarinas in the area, leading to high soil salinity (up to 15 parts per million) and reduced agricultural productivity. Villagers who were previously not very conscious of the need to protect the surrounding forests were driven to do so in order to prevent high salinity, minimize the intensity of future natural disasters, and ensure the ability to meet their daily livelihood requirements. The female residents of seven villages¹⁰ in particular

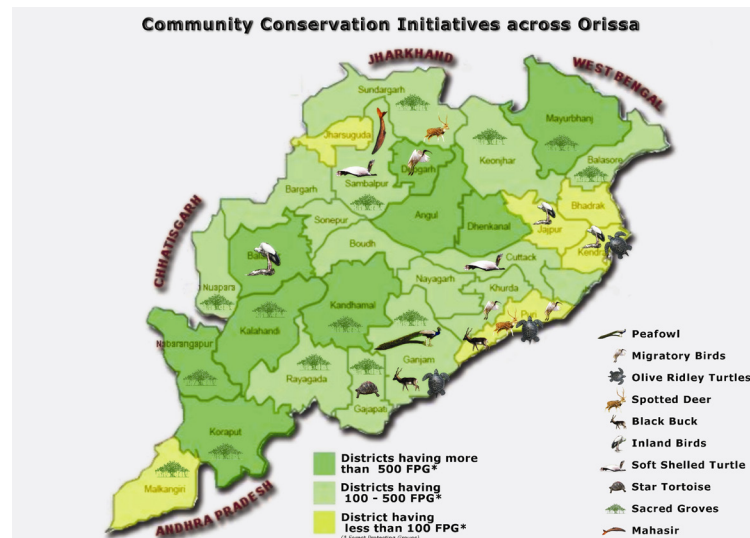


Figure 1. Map of community conservation initiatives throughout Orissa. © Vasundhara

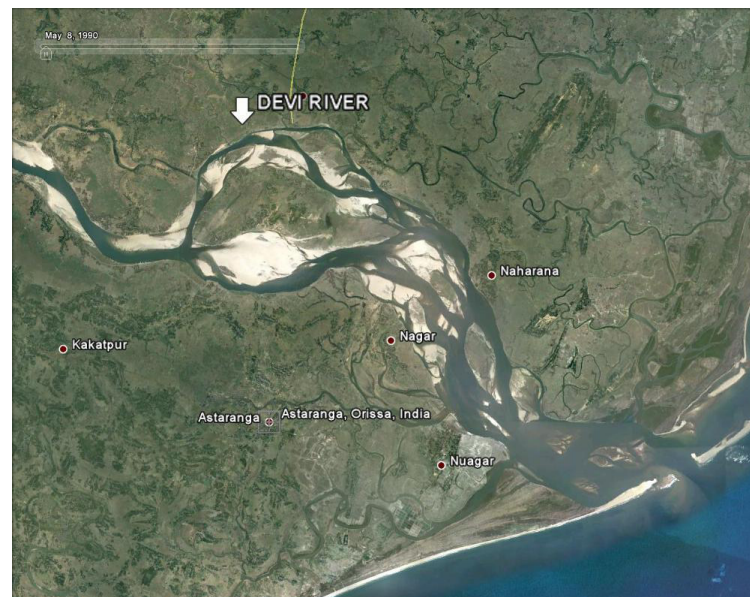


Figure 2. Map of the Devi River mouth. © Sweta Mishra/ Vasundhara (using Google Earth)

5 Gundalba is one of the villages located along the Devi river mouth. The community conservation of casuarinas forest was initiated by Gundalba.

6 Since NREGA (National Rural Employment Generation Act, 2005) is not being properly implemented in their areas, they have to go to far-away areas for labour work. Earlier NREGS programmes were only implemented in certain districts (mostly tribal) in Orissa, but have been extended to the entire state two years ago. However, the activities have yet to start in these areas.

7 Examples include *Avicennia officinalis*, *Avicennia alba*, *Aegiceras corniculatum*, *Ceriops decandra*, *Acanthus illicifolius*, *Bruguiera gymnorrhiza*, and *Excoecaria agallocha*.

8 Ravishankar, T., M. Navamuniyammal, L. Gnanappazham, S. Nayak, G. C. Mahabatra, and V. Selvam, 2004. *Atlas of Mangrove Wetlands of India, Part III: Orissa*. M. S. Swaminathan Research Foundation: Chennai, India.

9 Kar, C. S., and S. Chadda, 1999. *Bhitarkanika: Myth and Reality*. Natraj Publisher: Dehradun.

10 The villages include Daluakani, Anakana, Gundalba, Aisinia, Siddikeswar, Sohana, and Sribantapur.

have emerged resolutely from the destruction and have successfully managed to protect and conserve around 15 km² of casuarina forest and 5 km² of mangrove forest in and around the mouth of the Devi River.

THE DEVELOPMENT OF WOMEN'S COMMITTEES FOR ECOSYSTEM CONSERVATION

In the face of these multiple challenges, women's groups from these seven villages have driven successful initiatives to conserve the forest and coastal biodiversity. This social revolution started in 2000, with many of the women coming forward and resolving to conserve the adjoining forest areas and other natural resources, including casuarina forest¹¹. Today, the positive impacts of the CCIs on the protection and conservation of the rich biodiversity of the area are quite evident. For example, the women of each village have formed Community Forest Protection Groups or Committees and have adopted the practice of *thengapalli* or regular patrolling to protect the nearby Astarange Forest. They have successfully protected and regenerated around 15 km² of casuarina forest, which also help provide a barrier against the saline wind and sand particles that enter the village from the beach.



Figure 3. Green Warriors: standing tall against all odds. © Sweta Mishra/Vasundhara

The women of the village of Gundalba have pioneered CCIs in the area by forming the *Pir Jahania Jungle Surakhya* (Pir Jahania Forest Protection) Women's Committee in 2000. The village has 60 households and one woman from each household is part of the *Pir Jahania* Women's Committee. With this strong foundation of 60 members, the Committee adopted the practice of rotational patrolling of two to four women at a time to protect the forest within their traditionally identified boundary. The extent of the forest boundary has been demarcated mutually between the villages and the boundaries are identified by physical landmarks.

At their monthly meetings, the Committee formulated and passed resolutions for a set of regulations for the management of the forest. With the meetings presided over by the President or Secretary of the Women's Committee and attended by the local forest officers as special invitees, the resolutions were passed only when the decision was accepted by two-thirds of the Committee members. Once a resolution is passed, it is then shared with the rest of the villagers in a *palli sabha* (village meeting). For example, the Women's Committee has fixed one day each month during which all 60 households in the village are allowed to collect fuel wood from the forest. Similarly, a different day (usually after three or four days after the villagers of Gundalba have collected) has been fixed when the neighbouring villages dependent on the same patch of forest resources can collect fuel wood from the forest. There is no conflict between these villages over the shared resources, as the boundaries and forest protection rules and regulations have been defined by mutual agreement of all seven neighbouring villages, many of which also have women's committees. Those from outside Gundalba have been given this privilege on the premise that they refrain from cutting or chopping any trees, which they used to do prior to the women-initiated forest protection system. During the remaining days in the month, the Women's Committee patrols the forest and nobody is allowed to collect additional firewood. The regulations established by the Committee are strictly adhered to and respected by the villagers. The Committee has also fixed different levels of fines, as a sort of localized compliance mechanism. For example, if a member of the Committee does not fulfill her patrolling duty, then she must be a fine of 50 Rupees. If anyone is found to be chopping trees or collecting firewood on any day other than the fixed one, the guilty party faces a fine of 200 Rupees. For minor offences, the defaulters are given a strict warning to

The strong commitment of the community members has yielded rapid and positive results, both ecological and social.

11 These areas are classified as forestland and owned by the Forest Department. There are also some patches of privately owned land, where people have cultivated the casuarinas plantations.

not repeat the act.

The strong commitment of the community members has yielded rapid and positive ecological results. Since the widespread destruction in 1999 spurred their initiatives, newly regenerated mangrove vegetation and the forest cover (especially of mangroves) has gone up 63% from 2.58 km² in 1985 to 4.21 km² in 2004, even after the super cyclone decimated nearly all mangrove cover¹². This is due to natural regeneration within newly formed mudflats and the concerted efforts of the local communities to restore the forest. The mangrove vegetation has attracted a lot of residential and migratory birds, which are also a tourist attraction. Furthermore, the mangrove forest serves as a coastal buffer against natural disasters. Buoyed by these results, the Women's Committee plans to expand the mangrove cover in their area even further.



Figure 4. Mangrove forest regenerated by the conservation efforts of the local communities. © Sweta Mishra/Vasundhara

In addition to the effects of this well-organized social institution on the regeneration of the forest, the initiatives of the Women's Committee have also influenced the local youth and children of their village and adjoining villages. The local youth have formed groups to help protect the Olive Ridley turtles (a Scheduled I species under the 1972 Wildlife Protection Act¹³) during their breeding season¹⁴. The Women's Committee has constructed an interpretation and learning centre and aims to earn some income through regulated tourism during the breeding season. The youth are also engaged in maintaining an eco-friendly ambience for the tourists¹⁵ and suitable habitat for the local wildlife by collecting garbage and segregating the degradable and non-degradable waste. The degradable waste is converted into organic manure and used in the agricultural fields, but due lack of technical knowledge and support, the non-degradable waste is left as such. The

villagers not only protect the turtles during the breeding season, but also have special fishing norms during the mating and nesting times to avoid contributing to sea turtles' already high mortality rates.

Community conservation initiatives help mobilize villages towards collective aims.

The youth groups and Women's Committee, in addition to elders and others from the community, have recently started thinking beyond environmental protection and have plans for the sustainable development of their village and conservation of the whole coastal

ecosystem. They have come together to develop a People's Biodiversity Register¹⁶ of their area and have started devising their own community management plans. All of the abovementioned activities demonstrates the social resilience of the villagers around the mouth of the Devi River and the mobilizing effect that CCIs can have within and among villages towards collective aims of biodiversity conservation.

LACK OF LEGAL SECURITY THREATENS TO UNDERMINE COMMUNITY CONSERVATION INITIATIVES

Government initiatives for the regeneration and restoration of mangroves along the entire coastline of India tend to involve huge financial investments and are arguably not sufficiently adapted to unique local contexts¹⁷. In addition, the

12 Ravishankar *et al.*, 2004.

13 Taxa listed under the Schedule I category of the 1972 Wildlife Protection Act are highly endangered and are provided the highest level of legal protection.

14 The breeding season occurs from November to March, when the turtles are nesting and eggs are hatching.

15 During winter (December to March), around 200-300 tourists visit the local area per day. Sea Turtle Action Programme, 2005.

16 The 2002 Biological Diversity Act provides for the establishment of Biodiversity Management Committees in all local bodies, whether *Panchayats* or Municipalities, throughout the country. It stipulates that the main function of the Biodiversity Management Committee is "to prepare People's Biodiversity Registers in consultation with local people. The Registers shall contain comprehensive information on availability and knowledge of local biological resources, their medicinal or any other use or any other traditional knowledge associated with them."

17 For example, in May, 2010, World Bank-supported "Integrated Coastal Zone Management Project" has been approved for implementation in

existing conservation efforts of communities such as the ones described above are unrecognized and may be undermined by large-scale Government initiatives. The coastal communities around the mouth of the Devi River rightly claim that they had carried out the conservation activities on their own accord after surviving the 1999 super cyclone disaster, without any assistance from the government. After years of concerted efforts, the mangroves and casuarina have regenerated, but the communities now feel betrayed when the Forest Department claims it as Government property and restricts the communities' mobility and access to the resources.

The communities are demanding legal recognition of their self-driven conservation initiatives.

Since the land is legally classified as forestland, it is officially under the jurisdiction of the Forest Department, but it is the communities who are protecting it. After the super cyclone of 1999, the Forest Department had allocated a 15 km² stretch for a casuarina plantation. At that time, realizing the need of casuarinas forest in their area, the people had *suo motu* also contributed some portions of their private land to the plantation. As described above, after ten years of vigilant protection under the Women's Committees, the forests had regenerated significantly. However, Forest Department claims the area as their forest and does not recognize the conservation initiative of the communities.

In July, 2010, the Forest Department leased part of the area to the Orissa Forest Development Corporation to fell casuarinas trees. The women's groups who have been protecting the forest vehemently opposed this, snatching the axes away and embracing the trees to prevent the Forest Department from chopping the trees that they considered priceless for their livelihoods, as well as a strong protection barrier against natural hazards. The Forest Department tried to bribe the villagers by saying that they would get 50% of the share from the lease, as they were registered as a *Van Suraksha Samiti* (Forest Protection Committee) in 2007 under the Government's Joint Forest Management policy¹⁸. However, the villagers said that they had no knowledge of being registered as a *Van Suraksha Samiti* and to date have not received any records to prove otherwise. In spite of fierce opposition from the villagers, the tree-felling operation has gone ahead and the communities have not received 50% of their share, which is their legal right if the Forest Department's claim is correct. This is occurring at a time when the coast is most vulnerable to cyclones and other natural disasters (July-August) and only 8-10 lines of casuarinas plantation is left; the communities feel that this will no longer protect their villages from the saline ingress or cyclonic storms. The villagers also doubt that this plantation would survive strong winds or cyclonic storms, as they would be uprooted without a protective barrier in front of them.

Some provisions under Indian law and policy actually contravene communities' rights enshrined in other instruments.

Furthermore, the Forest Department has undertaken a plantation on around 20 acres of land within 50 metres of the coast of the village of Daluakani. This area is the mass nesting site of Olive Ridley turtles, which travel around 200 metres inland to lay their eggs. The overlap of these plantations with the nesting sites will undoubtedly cause destruction for the turtles, which, as a Schedule I species, are afforded the highest legal protection.

Frustrated with the latest actions (or lack thereof) of the Forest Department, these communities are now demanding legal recognition of their self-driven conservation initiatives. They have started applying for community rights under the recently enacted Scheduled Tribes and Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006 (commonly known as the Forest Rights Act) over the forestland and the forest resources over, which they have depended on for generations. They are also demanding recognition of their rights to "protect, conserve and manage their own community forest resources which they have been traditionally protecting and conserving for sustainable use", according to Section 3(1)(9)(i) of the Forest Rights Act. They firmly believe that such recognition would enable them to better manage and conserve the coastal resources and ecosystem¹⁹.

Orissa for two coastal stretches (from Gopalpur to Chilika and from Paradeep to Dhamra). The project budget is 2.2763 billion Rupees. The basic objective of the project is to promote sustainable management of coastal area on a long-term basis to balance environmental, economic, social, cultural, and livelihoods issues of local communities. However, similar to most Government programmes, the local people have not been involved in the planning and implementation process. Such huge investments are planned for the conservation and management of Orissa coast, but the Government does not recognize the locally adapted and effective initiatives of the communities, who are sidelined in the whole process.

18 The Joint Forest Management Policy was passed in 1990, which provides for participatory management of the Forest by communities and the Forest Department. However, in practice, it has been found that Joint Forest Management has turned out to be a failure as it has very limited space for the local people to exercise their rights and they have virtually no role to play in the decision-making process.

19 The Preamble of the 2006 Forest Rights Act clearly says that "whereas the recognized rights of the Scheduled Tribes and other traditional forest dwellers include the responsibility and authority for sustainable use, conservation of biodiversity and maintenance of ecological balance and thereby strengthening the conservation regime of the forests while ensuring livelihood and food security of the forest dwelling Schedule Tribes and other traditional forest dwellers."

In addition, there is no law or policy in India that recognizes the customary rights of traditional fisher-folks and other coastal communities that depend upon the coastal land and water for their livelihoods and well-being. The communities demand that the Coastal Regulation Zone Notification 1991²⁰ should be amended accordingly. To date, there are no guidelines indicated in the Coastal Regulation Zone notification for the preparation of Coastal Zone Management Plans. The communities demand that Coastal Zone Management Plans should be prepared by the government in consultation and repeated discussions with the local communities that depend upon the coastal waters. The management plans prepared thereafter by the Government should be passed by the *Gram Sabhas* (village councils) so the communities' plans are duly reflected in the national- or state-level management plans. Importantly, the communities also call for the enactment of a separate Act in line with the Forest Rights Act²¹, which arguably set a legal precedent for the recognition of the customary rights of tribal and other traditional forest dwellers over their forest resources²². There are other existing provisions in Indian law and policy that indicate a trend towards recognition of CCIs²³, but they arguably have limited scope in and of themselves²⁴. A separate (but mutually reinforcing) Act that explicitly recognizes the CCIs of traditional fisher-folks and coastal communities would grant them the right to continue their livelihoods that contribute to the conservation and sustainable use of biodiversity. This would also assist India in fulfilling its obligations under the United Nations Convention on Biological Diversity²⁵, particularly Articles 8(j) and 10(c), which call on Parties to protect and support Indigenous peoples' and local communities' traditional knowledge and customary ways of life. To implement such an Act, village councils (*Gram Sabhas*) should be given the authority to develop, implement, monitor, and evaluate their own coastal management plans, and the local authorities (*Panchayats*) should be given the power to take punitive action against activities deemed illegal by federal and state law and by the local management plan.

THE NEED FOR APPROPRIATE RECOGNITION AND SUPPORT

The conservation and sustainable use of biodiversity requires the full and effective participation of local communities whose livelihoods depend directly on these resources in decision-making and governance processes. The above example of

20 Keeping in view the importance of the coastal environment and the need to protect the coastal ecosystems from the pressures of developmental activities, the Ministry of Environment and Forests had issued the Coastal Regulation Zone (CRZ) Notification 1991 under the Environment (Protection) Act 1986. This notification, which is still in force, seeks to protect and regulate the use of the land within 500 metres of the coast and 100 metres along the tidal-influenced water bodies. All developmental activities proposed to be located in this zone are regulated under the Notification. It classifies the coastal stretch of the country into CRZ-I (ecologically sensitive areas), CRZ-II (built up municipal areas), CRZ-III (rural areas), and CRZ-IV (Islands of Lakshadweep, Andaman, and Nicobar).

21 The Scheduled Tribes and Traditional Forest Dwellers (Recognition of Forest Rights) Act was notified in 2006. This Act recognizes and vests the forest rights and occupation in forest land of forest-dwelling Scheduled Tribes and other traditional forest dwellers, who have been residing in such forests for generations, but whose rights could not be recorded; it also provides a framework for recording these forest rights and the nature of evidence required.

22 The Scheduled Tribes and Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006 is considered to be one of the most revolutionary acts in the legislative history of India. This Act is intended to redress historical injustice faced by forest dwellers. In addition to the right of communities over land and forest produces, under Section 3(1)(k), communities have the right to access biodiversity and the right over related traditional knowledge and intellectual property rights. For the first time in the legal history of India, the traditional rights of forest dwellers to conserve and nurture their forest resources are recognized.

23 Driven by thousands of self-initiated forest-protecting groups in Orissa, the State Government passed a resolution regarding the involvement of communities in forest protection in 1988. National guidelines followed under the National Forest Policy 1988 through Joint Forest Management resolutions, which came into practice in 1990. The National Forest Policy is the first national scheme wherein villagers are involved in the protection of protected forests and forest reserves. Now thousands of *Vana Samrakshan Samitis* (Village Forest Protection Committees) operating in Orissa enjoy recognition of their usufruct rights and share in the benefits of conservation, including through funds to support their efforts.

24 Under Section 36 of the Wildlife (Protection) Amendment Act 2002, Conservation Reserves – Government-owned, biodiversity-rich areas (particularly areas important as corridors) – are recognized as protected areas. However, this contains no recognition of community rights or conservation initiatives. The Government owns most of the common lands in which CCIs are found. If these lands are declared as Conservation Reserves, their control and management are handed to the Forest Department, which then has the jurisdiction to enforce strict protected area measures. Thus, the declaration of Conservation Reserves has the potential to infringe upon rather than support communities' rights. Section 36 also contains a provision to recognize private and community-owned areas imbued with conservation values or voluntarily conserved as Community Reserves. The Ministry of Environment and Forest has yet to draft guidelines for the implementation and recognition of Community Reserves, which would indicate the potential usefulness of the stated provisions. Although this provision calls for forms of participatory management, it provides limited (if any) explicit recognition of community rights. It is extremely difficult to accommodate diverse, situation-specific institutional arrangements in a uniform configuration such as Community Reserves, which is what the forthcoming guidelines will likely attempt to do.

25 United Nations Convention on Biological Diversity (CBD), opened for signature June 5, 1992, 1760 UNTS 79 (entered into force December 29, 1993). The objectives of this Convention, to be pursued in accordance with its relevant provisions, are the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including by appropriate access to genetic resources, appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and appropriate funding.

the initiatives of the Women's Committee near the Devi River mouth illustrates the need for appropriate legal recognition and support of CCIs. In order to do so, the following points need to be addressed:

- CCIs must be legally recognized through elaboration and further amendments of existing laws, including recognition and support of local governing institutions and rights of the local communities over the resources upon which their livelihoods depend;
- Local communities should devise clear guidelines for external agencies who want to support and engage with them to ensure that any interactions are according to locally defined values and priorities;
- Technical and financial support must be provided to local communities contributing to the conservation and sustainable use of biodiversity, including through promotion of sustainable livelihood options (such as value addition and marketing of non-timber forest products and community based ecotourism), scientific monitoring and research, and capacity building to help local communities understand and engage with relevant laws and policies; and
- A holistic approach to development is required in order to take into consideration communities' rights over resources that they have been conserving for generations. Transparent and participatory planning processes would also enable communities to prevent and mitigate activities that are detrimental to their livelihoods and surrounding biodiversity.

Community conservation initiatives at the mouth of the Devi River and elsewhere in Orissa illustrate clearly that traditional systems of resource management have conservation values and principles ingrained within them that officially recognized or managed areas often lack. Rather than imposing alternate models on the local communities and undermining their conservation efforts, it is critical to better understand the values of these initiatives and provide locally appropriate legal recognition and support at the national and international levels rather than.

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INDIGENOUS PEOPLES' RIGHTS IN INDONESIA: CUSTOMARY RIGHTS AND REDD

Naomi Johnstone

Abstract

The emerging global and national policy and legal framework for Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (REDD) has elicited concern from Indigenous peoples, particularly in relation to how their customary forest and land rights are affected and recognized. Tracing legislation and policy relating to customary land and forest rights in Indonesia shows a historical pattern of exclusion of Indigenous peoples. As current negotiations stand, the emerging REDD policy and legal framework promises to write yet another story in the overall narrative of exclusion of Indigenous peoples from Indonesia's forests.