India

The Social and Ecological Impacts of Conservation Policy: The Case of Biligiri Rangaswamy Temple Tiger Reserve, India

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Introduction

For a very long time, wildlife conservation policy and practice in India has been defined and articulated by elite state actors supported by members of the former ruling class¹ and urban conservationists.² Wildlife conservation efforts have consisted largely of efforts to establish protected areas—primarily wildlife sanctuaries and national parks—from which local people have been evicted and in which their use has been restricted. The establishment of protected areas was legislated by the Government of India in 1972 in the Wildlife Protection Act (WLPA), which continued the colonial legacy of targeting forest-dependent people for their allegedly environmentally degrading livelihood practices. Entire villages were relocated to the peripheries of protected areas, and people were banned from practicing swidden agriculture (shifting cultivation), hunting, livestock grazing, and often the collection of non-timber forest products (NTFPs) and small-sized timber. There have, however, been few systematic efforts to record these deprivations.³

Project Tiger

Although the state has been central to conservation policy and practice in India, the initial push for a wildlife conservation policy came from the International Union for Conservation of Nature (IUCN) and the World Wide Fund for Nature (WWF) in the late 1960s and early 1970s. The IUCN General Assembly was held in New Delhi in 1969, and the Indian Prime Minister, Indira Gandhi, used this platform to declare a ban on the hunting of tigers in the country. This heralded the onset of state wildlife conservation, which was cemented in place by the WLPA in 1972. In 1973, WWF supported the implementation of Project Tiger, a tiger management initiative implemented initially in nine protected areas. Project Tiger received global attention, and money was made available by a variety of international sources as well as by the Government of India. It has been a flagship program of the conservation administration and now encompasses 50 protected areas. The central government funds the management of these areas through allocations to the Ministry of Environment, Forest and Climate Change (MoEF). Tiger reserves—the main management category administered by the Project Tiger Office in Delhi—became a legal category in 2006 and are now administered by the National Tiger Conservation Authority.

Amendments to the Wildlife Protection Act

The WLPA has been amended over the years. One might expect that such amendments would work to ameliorate the WLPA's adverse impacts on local people but, to the contrary, they have acted to increase restrictions on people and the efforts to relocate them. In 2002, the collection of NTFPs was banned in wildlife sanctuaries; in 2006, amendments enabled the establishment of "critical tiger habitats," which are to be free of human habitation and use.

Therefore, in the 45 years since its enactment, the WLPA has become increasingly draconian, giving the forest administration more powers while criminalizing local communities for their customary practices.

The Forest Rights Act

In parallel, and shepherded by the Ministry of Tribal Affairs, the Recognition of Forest Rights Act (FRA) was passed in 2006. This gave adivasi⁵ and forest dwellers the possibility of claiming rights to land and to forest use and management. The MoEF, however, has systematically blocked the implementation of this progressive law. The WLPA does not mention the FRA, even though all provisions of the FRA are valid in protected areas. The most telling attempt to block the FRA was a government order issued on March 29, 2017 by the National Tiger Conservation Authority (an arm of the MoEF), which mandates that no claims under the FRA will be granted in tiger reserves. This order delivered a severe blow to the struggles of local people to claim rights they have been denied by the establishment of protected areas.

Biligiri Rangaswamy Temple Wildlife Sanctuary

The Biligiri Rangaswamy Temple Wildlife Sanctuary (referred to here as the BRT), in Karnataka state, was declared in 1974, and the local people living in the forest—mostly Soliga adivasi—were forcibly relocated to colonies along the main road or on the periphery of the reserve. They were banned from practicing shifting cultivation, setting fire to the forest (part of their traditional management practice), and hunting animals. They were permitted to gather tubers and woodfuel for domestic use and to sell NTFPs such as amla (*Phyllanthus emblica*), arale (*Terminalia belerica*), lichen, and honey. The sale of these products was regulated and managed by a cooperative that was set up and controlled by the Karnataka Forest Department. The collection of NTFPs was banned in the BRT in 2006 (in response to the 2002 amendment of the WLPA).

During the relocation drive in the 1970s, not all households were given land; those households given allocations received only small areas that they were allowed to cultivate but did not own, and they had no tenure security. The cultivated area was deemed "forest land," and people could be evicted from it whenever the Forest Department desired. This resulted in the periodic loss of land—Forest Department officials would build trenches around the land to demarcate farm land from the surrounding forest and, with each demarcation, increasingly less land would be enclosed. Such inhumane dispossession has been rampant throughout the history of the BRT. The result is that fewer than half the Soliga families now cultivate land inside the reserve.

These accounts of dispossession go hand in hand with tales of loss of access to forests and landscapes.

Cultural, social, and economic connections

The BRT landscape is a place of deep cultural, social, and economic connection for the Soligas. Oral histories obtained from elder members of the community show that the entire landscape consists of places and sites of cultural significance. Soliga society in the BRT is clan-based, and each of the six clans has sites in the landscape where they worship their god (*Devaru*), goddess (*Maramma*), shrine for the dead (*Kallu gudi*), cemetery (*Samadhi*), hero stone (*Veeru*), and sacred spring (*Habbi*). These sites are located in areas (called *yelles*) specific to each clan, with some clans having several *yelles*. Participatory mapping of these areas and sites showed that the BRT has more than 500 sites of cultural significance in 46 *yelles*. Thus, the landscape is alive with meaning and connection, none of which is recognized by conservation practice.

Negative impacts of changed ecosystem management

Historical ecological practice by the Soligas included the use of fire to maintain the forest as a woodland savanna, thereby providing fodder, tubers, and specific trees that the people could consume. The woodland was also good habitat for grazing wildlife. The Soligas burned the forest every year in the dry months just before the monsoon rains arrived, with burnt areas resprouting vegetation as soon as the rains fell. The repeated burns meant that the vegetation was kept in check and the fires stayed close to the ground, not affecting the tree canopies.

The ecology of the woodland savanna was closely linked, therefore, to human practice, but the system was disrupted by the arrival of conservation restrictions when the BRT was notified. The ban on fires has created a denser forest riddled with weeds. The dominant weed is *Lantana camara*, which has taken over the understory of large parts of the landscape and is continuing to spread; this has made it difficult to enter the forest, reduced visibility, and changed the composition of the vegetation. The ecological effects of the change in management practice have been studied in detail⁷ and are beyond the scope of this report; suffice to say that the restrictions on customary practice have had an adverse ecological impact and will have farreaching consequences that will not be reversible without immediate action.⁸ The local people no longer recognize the forest created by the protectionist conservation policy.

Current situation of the BRT landscape and the people

The FRA was enacted in 2006, but it took another year for the Ministry of Tribal Affairs to notify the rules. The delay was largely because the MoEF, which perceived the FRA as a threat to conservation, hurried to amend the WLPA to bring tiger reserves—which until then had only been a management category, as envisaged in Project Tiger—into the legal ambit of the WLPA. When the FRA was enacted, the WLPA identified national parks and sanctuaries as protected-area categories, but the amendment meant that, for the first time, tiger reserves were declared as conservation zones. By adding tiger reserves to the WLPA and creating the category of critical tiger habitats, the conservation administration hoped to bypass the FRA; indeed, this move has succeeded in slowing down the FRA's implementation in tiger reserves.

Under the FRA, Soligas began the process of filing claims in the BRT in 2008. They claimed rights to NTFPs, grazing, fishing, forest management, intellectual property, and worship at cultural sites (rights mentioned in the section of the FRA on community forest rights). The Soligas followed this with claims for cultivated land for individual households. Almost all households that claimed individual rights to cultivated land received these rights in 2009. Community rights were difficult to obtain, however, and it was only in October 2011 that such rights were granted to 32 Soliga settlements in the BRT, covering about half the area and settlements. This was the country's first case of rights being given to a community in a protected area under the FRA. An additional 10 settlements were granted community forest rights in the first part of 2018, leaving 20 settlements in the BRT that are yet to receive community forest rights.

Parallel to the rights-claiming process of the Soligas, in January 2011 the Karnataka Forest Department and the National Tiger Conservation Authority notified the BRT as a tiger reserve and declared 340 square kilometers of the sanctuary's core zone as critical tiger habitat. The implication of this declaration is that eight settlements in the core zone face relocation to outside the protected area.

Financing of conservation in India

There are 617 protected areas in India, of which 50 are tiger reserves. Budgetary allocations are skewed disproportionately toward tiger reserves, which receive about 70 percent of the national conservation budget; the remaining 567 protected areas get only 30 percent. The total national allocation for tiger reserves in 2013–14 was INR 1,700 million (USD 26 million), of which the BRT received INR 19 million (USD 290,000). In 2016, the national allocation for tiger conservation doubled to INR 3,850 million (USD 60 million), of which INR 313 million (USD 5 million) was slated for the five tiger reserves in Karnataka, including the BRT. The Karnataka state government matches these allocations, thus doubling the budget of these tiger reserves,

which stands at INR 642 million (USD 10 million).¹¹ The state government has projected a shortfall of INR 7 200 million (USD 111 million) for conservation activities in the state and has sought to make up the deficit from private corporations as part of their corporate social responsibility initiatives.

The contribution of non-governmental sources to conservation in India is not readily compiled because national and international conservation donors tend to make grants directly to research and action groups. Large organizations that fund conservation in India include the Wildlife Conservation Society (WCS), Conservation International (CI) and WWF. WCS and WWF work directly on the ground, while CI makes small grants to groups.

An alternate approach to conservation

The 42 Soliga settlements that received community forest rights have the right to access the forests of the BRT to collect NTFPs. The Soligas held a series of meetings to devise a community-based conservation plan, which, they hoped, would enable them to play a central role in managing the BRT landscape. The plan contained detailed proposals on, for example, weed control; fire; the prevention of hunting; and the harvesting of NTFPs. The Soligas proposed the adoption of a collaborative institutional and governance model between the Soligas, the state, and conservation groups. All 62 Soliga settlements in the BRT ratified the plan, but financial and state support has not been forthcoming. To the contrary, state conservation practices have been strengthened.

The Soligas' plan threatens the control of the Karnataka Forest Department over the BRT. Inaugurating the Global Tiger Summit in New Delhi in April 2016, the Prime Minister of India, Narendra Modi, said:

"Considering the ecosystem value of tiger conservation areas, we need to consider them as 'natural capital.' ... The natural capital denoting the stock of natural ecosystems should be treated at par with capital goods. Our economy needs to be viewed as a subset of a larger economy of natural resources and ecosystem services which sustain us ... a viable tiger population undoubtedly symbolizes a mitigation strategy for climate change.

This will create a huge carbon sink in the form of tiger-bearing forests." 12

This statement makes it clear that the state aims to maintain control over areas of great "natural capital" and that act as "carbon sinks." The use of the term "capital" invokes memories of the colonial exploitation and appropriation of forests for timber and the profound effects that such an extractive economy had on local people.

An alternative approach to conservation begins with the implementation of the FRA in all protected areas. A second step is the establishment of protected-area management

committees with local, state, and civil-society representation, as mandated in the WLPA. None of the 600 protected areas in the country has established such a committee—a strong indicator of the state's resistance to a collaborative conservation approach.

In conceiving alternative approaches to conservation, we should acknowledge different definitions of conservation. In the BRT, for example, Soligas would define a "good" forest as an open-canopy savanna woodland. The forest administration and conservationists, on the other hand, consider a closed forest as the ideal condition — which also resonates with the state goal of carbon sequestration.¹³ The challenge for collaborative conservation approaches is to reconcile these very different goals.

¹ Ranjitsingh, M.K. 2017. A Life with Wildlife: From princely India to the present. New Delhi: Harper Collins.

² Thapar, Valmik. 2013. Tiger Fire. New Delhi: Aleph.

³ Shahabuddin, Ghazala and Padmasai L. Bhamidipati. 2014. Conservation-induced displacement: recent perspectives from India. Environmental Justice 7(5): 122–129; Lasgorceix, Antoine and Ashish Kothari. 2009. Displacement and relocation of protected areas: A synthesis and analysis of case studies. Economic & Political Weekly 44(49): 37–47.

⁴ Rangarajan, Mahesh. 2001. India's Wildlife History: An introduction. Delhi: Permanent Black.

⁵ Adivasi is the term for indigenous communities officially listed in India as Scheduled Tribes. They constitute about 8 percent of the Indian population.

⁶ Rai, Nitin and Madegowda, C. 2017. Rethinking landscapes: history, culture and local knowledge in the Biligiri Rangaswamy Temple Tiger Reserve, India. In Bhagwat, S., ed., Conservation and Development in India: Reimagining wilderness, pp. 132–141. London: Routledge, UK.

⁷ Sundaram, B., S. Krishnan, AJ. Hiremath, and G. Joseph. 2012. Ecology and impacts of the invasive species, *Lantana camara*, in a social-ecological system in South India: perspectives from local knowledge. Human Ecology, 40(6): 931–942.

⁸ Hiremath, A.H., N.D. Rai, and C. Madegowda. 2017. One size needn't fit all: Conservation lessons from long-term research in the Biligiri Rangaswamy Temple Tiger Reserve, South India. *In* Hiremath, A.H., N.D. Rai, and A. Siddhartha, eds., Transcending Boundaries: Reflecting on twenty years of action and research at ATREE. Bengaluru, India: Ashoka Trust for Research in Ecology and the Environment.

⁹ Anonymous. 2013. The money spent saving tigers, beats other endangered species hollow. Firstpost, 28 July 2013. www.firstpost.com/india/the-money-spent-saving-tigers-beats-other-endangered-species-hollow-991661.html

¹⁰ Sebastian, Sunny. 2016. Out of the woods: Has Modi finally changed tack on tiger conservation? Catchnews, 18 April 2016. www.catchnews.com/environment-news/out-of-the-woods-has-modi-finally-changed-tack-on-tiger-conservation-1460919770.html

¹¹ Government of Karnataka. 2016. Annual Report 2016–17. Bangalore: Karnataka Forest Department.

¹² Modi, Narendra. 2016. India has a long standing and successful track record of protecting its tigers: PM. Online. www.narendramodi.in/pm-modi-inaugurates-3rd-asia-ministerial-conference-on-tiger-conservation-440277

¹³ Nevertheless, as pointed out earlier, the absence of customary management caused by the exclusion of Soligas has led to invasion of the reserve by weeds, especially *Lantana camara*. This has attracted some attention, and many state agencies and non-governmental organizations believe that weeds need to be controlled. A few influential conservationists, however, oppose allowing local people to enter the reserve to physically remove weeds because, in their view, the forests should be left alone and the presence of people in the protected area would adversely affect wildlife.