

# Rachel Carson Center

## Perspectives

How to cite:

Münster, Daniel, and Ursula Münster. "Human-Animal Conflicts in Kerala: Elephants and Ecological Modernity on the Agrarian Frontier in South India." In: "Fields and Forests: Ethnographic Perspectives on Environmental Globalization," edited by Daniel Münster, Ursula Münster, and Stefan Dorondel, *RCC Perspectives* 2012, no. 5, 41–49.

All issues of *RCC Perspectives* are available online. To view past issues, and to learn more about the Rachel Carson Center for Environment and Society, please visit [www.rachelcarsoncenter.de](http://www.rachelcarsoncenter.de).

Rachel Carson Center for Environment and Society  
Leopoldstrasse 11a, 80802 Munich, GERMANY

ISSN 2190-8087

© Copyright is held by the contributing authors.

SPONSORED BY THE



Federal Ministry  
of Education  
and Research

Deutsches Museum 



LUDWIG-  
MAXIMILIANS-  
UNIVERSITÄT  
MÜNCHEN

Daniel Münster and Ursula Münster

## **Human-Animal Conflicts in Kerala: Elephants and Ecological Modernity on the Agrarian Frontier in South India**

*“On the frontier, nature goes wild.” (Anna Tsing 2005)*

In the Wayanad District of Kerala in southern India, questions of ecological modernity focus on the boundary of fields and forest. In the last decade, so-called “human-animal conflicts” have emerged as one of the most contentious issues among farmers, forest department officials, and local politicians. The most severe cases of conflict with “forest animals” occur when wild elephants leave the wildlife sanctuary, raid the fields of farmers, and occasionally kill people. Wayanad’s ecological modernity is rooted in two historical trajectories that are mostly treated separately in studies of political ecology: the history of agrarian change (tenure systems, land reforms, agrarian crisis, and agrarian capitalism) and the study of state-led forest conservation (science and planning, enclosure and dispossession, wildlife protection, transnational environmental governance). Today, these agrarian and forest histories meet in a series of contestations and conflicts involving humans and animals, mainly with elephants. In this paper, we take violent elephant encounters as a very “material” ethnographic illustration of recent efforts—at the intersection of environmental history and agrarian political economy—to think the agrarian and the environmental together (see Agrawal and Sivaramakrishnan 2000).

Elephants transgress the legal and ontological boundary that separates forests and fields in Wayanad. They have patterns of long-distance seasonal movement in search of water and food that take them across landscapes inhabited by humans on their way to distant patches of forest land. Elephants are iconic animals of global wildlife conservation and of Indian nationalist conservation efforts in particular. At the same time they are “wild animals” (Greenough 2001) causing destruction, violent deaths, and the loss of livelihood for marginal farmers and many Adivasis. The case of Wayanad disrupts the standard political-ecology narrative of the “violence” of conservation. While we agree that forest and wildlife conservation in India remains largely a top-down process, we would like to caution against implicit assumption of economic timelessness among the agrarian neighbors of elephant reserves. These are not subaltern “peasants” suffering the externalities of conservation: they themselves have a history of violent appropriation

of the forest. In Wayanad, elephants not only raid the field of traditional landholders and Adivasis (indigenous people) but also intrude into a frontier region of capitalist and chemicalized agriculture in crisis (see D. Münster 2012). The large herbivores have lost thousands of hectares of territory necessary for their annual movement in the process of agrarian settlement over the last five decades.

In contemporary Wayanad, we thus argue, human-animal relations are embedded in a history of ecological modernity composed of three modes of encounter between agrarian change (capitalist settler agriculture) and forest conservation (state-led and globalizing). We suggest that the notions of “frontier,” “fortress,” and (precarious) “conviviality” best capture the historical and emerging environmental relations in this “environment of crisis” (Münster and Münster 2012). We use our historical ethnography of elephant encounters in a changing landscape to illustrate the notion of a regional ecological modernity, a notion that if fully elaborated ethnographically will need to include further discussions of tourism, neoliberal agriculture (and its crisis), the Adivasi struggle and forest rights (Münster and Vishnudas 2011), and the role of the state in conservation and development, as well as a consideration of environmental and anti-environmental movements.

### **The Forest Frontier**

Wayanad is a frontier in two interrelated senses. On the one hand, its landscape was constructed as “empty” (Ashcroft et al. 2000) and available to colonial powers, entrepreneurial individuals, and settler-migrants from the Kerala lowlands. On the other hand, Wayanad constitutes what has recently been called a “resource frontier” (Armstrong 1991; Tsing 2005). As Anna Tsing (2005, 28) puts it, “a frontier is an edge in space and time: a zone of [the] not yet mapped, not yet regulated.” The frontier is about fantasies of “savage accumulation” and “wildness.” Yet this wildness is “both material and imaginative” (Tsing 2005). Resource frontiers include mining and logging frontiers but also “salvage frontiers” of neoliberal conservation. The hills of Wayanad have been a frontier region for loggers, elephant catchers, and gold diggers for centuries. After independence the region became a frontier of expanding agrarian capitalism. Its forested landscape became the site of a “land-rush” of internal colonization by Syrian-Christian settlers from central Kerala.<sup>1</sup>

1 Kerala state was formed only in 1956. When the internal colonization of Wayanad started in the 1940s, the settlers came from the semi-independent state of Travancore.

In the context of food shortages after the Second World War, agrarian expansion was an immediate developmental imperative for the young Indian state. Although the colonization of Wayanad was not planned per se, the local state did little to stop the agrarian pioneers from encroaching on thousands of hectares of forested land. Wayanad was unique in southern India in that it had—besides the territory under the strict rule of the forest department—huge stretches of forest under private (*jenmi*-landlords or temple) ownership as well as (forested) land owned by the Department of Revenue. The ex-feudal owners of private forests had become increasingly uninterested in managing their vast forest holdings, and the Department of Revenue, as the department within the local state that has been arguably most interested in “developing” (forested) land for generation of revenue, made the land available for incoming settlers. On these (legal) spaces of private forests and revenue land, agrarian entrepreneurs successfully established cash crop agriculture and cleared the forest. “The frontier,” as Armstrong (1991) puts it, “is thus not simply a line or even zone but a dynamic process of spatial interaction in which unoccupied resource-rich regions are incorporated into national economic space.”

In the years 1940 to 1970 the agrarian frontier was a space characterized by violence against nature and indigenous people. The lowland settlers reacted to the hostile climate, disease (malaria), and wild animals with fires, logging, and guns. Elephants were part of this violent landscape, but were not perceived as the major source of discontent they have recently become. Elephant populations were relatively low until the 1990s, a fact partly to be explained by the legal and illegal capture of elephants for domestic and international markets. Additionally, until the late 1980s, Wayanad was a frontier for vicious entrepreneurs such as sandalwood smugglers and ivory poachers. In those years, hunting and poaching of elephants was regularly practiced. However, more space was available for elephants to avoid human contact on their seasonal migration. Historically Wayanad’s hills have changed from being a frontier region for largely Christian settlers and other fortune seekers—a permeable region of opportunity—to an intensively utilized agricultural landscape with highly juridified and policed forest boundaries. Under the watch of the forest department, today the forest is fenced and fortified with electric wire and deep trenches to keep animals “in” and humans “out.”

### Forest as Fortress

With the land reforms (initiated by the communist-led state government) and the distribution of land titles in the wake of 1970s land tribunals, the period of relative “lawlessness” at the frontier came to an end. At the same time, the remaining patches of unoccupied private forest were nationalized and brought under the custody of the forest department. The boundary between forest and fields had now become identical with the boundary between forest department land and private land. With the onset of the formation of national parks and protected wildlife areas during Indira Gandhi’s tenure as Prime Minister, the forest boundary increasingly developed into a strictly policed zone. In 1973 the Wayanad Wildlife Sanctuary was established. Its management plan designated “core areas” of total non-interference in wildlife populations, to be kept “human-free.” However, the biophysical qualities of the “forest” proved to be an inappropriate habitat for a growing wildlife population, as the forest department had converted most of the natural forest into monocultures of teak and eucalyptus.



Figure 1:  
Farmer with  
damaged coconut  
tree.

In December of 1982 the first killing of a person by an elephant was reported at the Thirunelly police station. In the 1990s, after the inclusion of Wayanad’s forests in the national “Project Elephant,” the forest department started to fortify the boundary through trenches and electric fences along the 93 km border of forest and fields in Wayanad. However, these protection measures have largely been unsatisfactory

and have not stopped the raids and killings. While deadly encounters make more headlines, in everyday life raids on the most “endangered crops”—paddy, banana, tapioca, jackfruit trees, and coconut palm—on fields adjacent to the forest cause the greatest threat to rural livelihoods.

Farming communities—Christian settlers as well as indigenous castes (Wayanad Chetties) and Adivasis (the Mullu, Kurumar, and Kurichiyar tribes)—living at the border of the forest have entered into a “cold war” with the forest (department). The “forest” is

not primarily perceived as a natural space with biophysical qualities but as a “state” space under the custody of a coercive armed force. To cross an elephant trench means not only a transgression into dangerous wilderness but also into illegality. Farmers talk about the forest (department) not only as authoritarian, but also as inefficient, bureaucratic, and corrupt: trenches are badly maintained; tenders with the department (to dig new trenches, for example) remain notoriously unpaid; and most importantly, according to settlers, compensation payments after wildlife raids are delayed, bureaucratic, and insufficient.

Farm raids and the perceived bureaucratic indifference of the forest department contribute to the general hostility of settler farmers and indigenous peasants toward wildlife protection and forest conservation. Recently, a new type of farmers’ activism has emerged in Wayanad: anti-wildlife activism. Organized direct-action groups, such as “Wildlife Resistance Action Forum” and “Wildlife Free Wayanad,” express their anger and despair at the treatment of wild animals through direct action protest against the forest department. Furthermore, there are incidences of violence against the “forest”: arson, poisoned elephant bait, electrocution with self-made high-voltage fences, and small-shot charges against elephants.



Figure 2:  
Elephant trench.

In early 2011 alone, three people lost their lives through elephant attacks. In April 2011, the rage against the forest (department) turned violent after the death of a sixteen-year-old girl who was killed by a tusker on her way to Sunday school. As the news of this incident spread, more than five hundred people gathered at the scene within a short period of time. Grief and anger led to spontaneous arson of the forest; in protest, the agitated bystanders did not allow for the corpse to be taken for autopsy until the Divisional Forest Officer (DFO) arrived in person.

Many of our informants argue that the “level of tolerance” among farmers has decreased. With the growing neoliberalization of agriculture (D. Münster 2011), the economic

stakes have increased for farmers. Agriculture has become more capital intensive and speculative. Farmers take higher loans and higher risks today. For capitalist smallholders a partial loss due to wildlife raids has come to represent a real threat to livelihood. Farmers respond to this situation by demanding a modernization of surveillance, defense, and fencing technologies. Fortification of the forest boundary is thus more than a state-led, top-down process; farmers at the forest edge don't demand democratization of the forest but an improved fortification.



**Figure 3:**  
Tusker in a eucalyptus plantation.

### **Resigned Coexistence: Towards Conviviality?**

Some farmers argue that agriculture has become impossible on fields adjacent to forest land. Recently, wildlife raids and other symptoms of agrarian crisis have made farmers sell their land to real estate investors. For various reasons, not least the strong demand from the domestic tourism sector, the price of land has increased substantially in Wayanad. This further encourages the sale of Wayanad's agricultural land. What constitutes a life-threatening danger to farmers—the proximity to the forest—becomes a valuable quality to the tourism-related real estate market: forest and wildlife sell. Critics in

Wayanad see this development as the end of agriculture and picture an environmental modernity where high-end resorts displace farmers in a commodified tourist landscape (Münster and Münster 2012).

Other farmers have entered what may be called, with Raman Sukumar (2003), a “re-signed coexistence” with the raiding elephants. Many farmers we met during fieldwork have grown to be passionate observers of wildlife behavior. They have adopted their cropping patterns to the likes and dislikes of elephants: they avoid the planting of elephants’ delicacies such as jackfruit, mangos, or banana near their houses. Some have learned to “gently” drive elephants off their properties without enraging them. Other farmers send their children to boarding schools in order to circumvent dangerous walks along the forest line. Engaged foresters collaborate in these efforts at conviviality (Laurimer 2010) by handing out their personal phone numbers for emergency cases. Spraying chili has proven to be relatively effective as an elephant deterrent. The former wildlife sanctuary’s warden has personally invented an electronic “elephant-scaring device,” which imitates a tiger roar.

Despite this conviviality “on the ground,” environmentalists and foresters in Wayanad see little scope for attempts at democratizing the governance of this ecological borderland. The only solution they propose is a move back to “fortress conservation,” which operates by fencing in wildlife and excluding humans. Thus, provisions in the recently passed Forest Rights Act (2006) or in the Participatory Forest Program of the 1990s to make wildlife and forest conservation more inclusive have largely been ignored. Furthermore, what is largely absent in debates about the political ecology of forest and wildlife conservation in Wayanad are concerns about the effects of capitalized agriculture and the history of (ecological) violence at the forest frontier.

## Conclusion

Those in Wayanad who debate the political ecology of the district usually focus either on agrarian crises—debating pesticides (see the recent stir about endosulphan in Kerala), organic futures, farmers’ suicides, and food safety—or on concerns for forests, conservation, biodiversity, and wildlife. Little dialogue exists between these two pillars of Wayanad’s ecological modernity. In this paper we have proposed a vocabulary for the interrelatedness of the agrarian and the forest by describing it as frontier, fortress, and



conviviality. The elephants of Wayanad, bearers of histories of agrarian enclosure and chemicalization, of decades of state-planned environmental management, as well as of centuries of direct human violence against them (poachers, captors, electric fences), literally embody the opportunity to rethink the ontological boundary in Indian political ecology between forests and fields.

### Bibliography

- Agrawal, Arun and K. Sivaramakrishnan. 2000. "Introduction: Agrarian Environments." In *Agrarian Environments: Resources, Representations, and Rule in India*, edited by Arun Agrawal and K. Sivaramakrishnan, 1–22. Durham, NC: Duke University Press.
- Armstrong, Allen. 1991. "Resource Frontiers and Regional Development: the Role of Refugee Settlement in Tanzania." *Habitat International* 15 (1–2): 69–85.
- Ashcroft, Bill, Gareth Griffiths, and Helen Tiffin. 2000. "Frontier." In *Post-Colonial Studies: The Key Concepts*. London: Routledge.
- Greenough, Paul. 2001. "Naturae Ferae: Wild Animals in South Asia and the Standard Environmental Narrative." In *Agrarian Studies: Synthetic Work at the Cutting Edge*, edited by James C. Scott, 141–85. New Haven: Yale University Press.
- Laurimer, Jamie. 2010. "Elephants as Companion Species: The Lively Biogeographies of Asian Elephant Conservation in Sri Lanka." *Transactions of the British Geographers* 35: 491–506.
- Münster, Daniel. 2011. "Internal Migration and Agrarian Change in Kerala: Embourgeoisement, Land Reforms and the Neoliberalization of Agriculture." Paper presented at the Workshop "Agrarian Transformation in India: Its Significance for Left Politics." Wolfson College, University of Oxford, July 2011.
- . 2012. "Farmers' Suicides and the State in India: Conceptual and Ethnographic Notes from Wayanad, Kerala." *Contributions to Indian Sociology* 46 (1&2, special issue on suicide in South Asia): 181–208.
- Münster, Daniel, and Ursula Münster. 2012. "Consuming the Forest in an Environment of Crisis: Nature Tourism, Forest Conservation and Neoliberal Agriculture in South India." *Development and Change* 43 (1): 205–27.

Münster, Ursula, and Suma Vishnudas. 2011. "In the Jungle of the Law: The Implementation of the Forest Rights Act in Kerala." Paper presented at European Society of Environmental History Conference, Turku, Finland, 28 June–2 July 2011.

Sukumar, Raman. 2003. *The Living Elephants: Evolutionary Ecology, Behavior, and Conservation*. New York: Oxford University Press.

Tsing, Anna Lowenhaupt. 2005. *Friction: An Ethnography of Global Connection*. Princeton: Princeton University Press.