Can a Tiger Change Its Stripes? The Politics of Conservation as Translated in Mudumalai

DANIEL TAGHIOFF, AJIT MENON

The notification of Mudumalai Sanctuary in Tamil Nadu as a tiger reserve in 2007 has resulted in a contested politics between activists, non-governmental organisations and conservationists with regard to the future of protected area management. This paper presents an account of how these actors positioned themselves around not only the creation of the tiger reserve, but also the proposed elephant corridor and the Forest Rights Act of 2006. It suggests that due process of law has not been followed adequately and that sufficient scientific evidence has not been presented in the public domain as required. The Forest Rights Act is seen to offer an opportunity to democratise the management of natural resources with all its social and ecological complexities and provide the necessary checks and balances to bring about conservation based strongly on scientific evidence.

A number of people with conflicting viewpoints, who wish to remain anonymous, gave feedback on an earlier version of this paper.

Daniel Taghioff (*sustainablelearning@gmail.com*) is a researcher in environment issues currently based in Tamil Nadu and Ajit Menon (*ajit@mids.ac.in*) is with the Madras Institute of Development Studies.

ligers have long been a symbol of passion, indeed even for the virility of a nation (Banerjee 2003). It seems also that their conservation increasingly raises pulses. On 30 December 2008, a rally took place in Gudalur town, part of the Nilgiris district of Tamil Nadu. Protesters were voicing their opposition to the notification of Mudumalai as a tiger reserve.¹ In the weeks that followed, claims and counterclaims were levelled about exactly how large the rally was and who the local participants were. Estimates of the size of the rally ranged from 20,000 to 1,00,000. Participants were deemed by activists involved in organising the protest as a coalition of political parties, farmers' associations and adivasis united in a broad front against the manner of the declaration of the reserve. However, local conservationists and the forest department portrayed them as people ferried in and paid to attend by vested interests, most significantly tourist operators around Mudumalai.

How did the declaration of a tiger reserve become so contentious as to trigger a large protest? And why such powerful claims and counterclaims about its composition and genesis? These claims and counterclaims are implicated in the politics of conservation in the region, a politics with a controversial recent history in national policy debates. The Tiger Task Force Report, 2005, states that the protection of the tiger is unequivocally linked to the protection of the forest and the fortunes of local people (Tiger Task Force 2005: vi). However, the developments around the tiger reserve highlight how far policy implementation is from making people-centred conservation a reality. More importantly, it makes clear that even amongst those who have advocated people-centred conservation there are significant differences as to what that means and how it should be operationalised.²

This paper analyses the politics behind the creation of the tiger reserve in Mudumalai and the contested positions taken by three groupings of actors: activists speaking the language of forests rights and comprising mostly grass roots organisations and local leaders, NGOS working on tribal welfare and conservationists (including the forest department) concerned with wildlife preservation.³ While these three categories of actors are neither water-tight nor always mutually exclusive, we believe they broadly represent "distinct" positions in terms of their responses to the creation of the tiger reserve. At the very least they sketch out zones on a continuum of opinion between local control of natural resources (activists) and centralised control of natural resources most often accompanied by the exclusion of people (conservationists), which we see as an important axis of distinction within the area.

The paper details the positions taken by these three sets of actors vis-à-vis two significant issues, namely the "legality" of declaring Mudumalai a tiger reserve (including the elephant corridor) and the process of implementing The Scheduled Tribes and Other Forest Dwellers (Recognition of Forest Rights) Act, 2006 (hereafter FRA) (GOI 2006a) and then goes on to discuss how these positions are implicated with local power relations in order to throw light on the nature and extent that decentralised protected area management should take, given the problems that arise in practice. The paper is based on extensive discussions with various actors in the region and a detailed analysis of the legal procedures required to create a tiger reserve and how these are put into practice.

Political Ecology of Tiger Conservation

The bitterness of the politics of conservation and protected area management in Mudumalai is not entirely surprising. It is sobering to realise that clashes between conservationists and "locals" take the form of an ongoing worldwide struggle (Dowie 2009). Within India, unlike in other sectors, most notably forests (outside of protected areas) where co-management has become part and parcel of official discourse, no consensus has emerged about how best to manage national parks and wildlife sanctuaries despite calls by some for joint protected area management. Even the Tiger Task Force (2005) report, Joining the Dots, widely seen as one of the more progressive initiatives in this area, had a dissenting voice by the conservationist Valmik Thapar, cautioning against people's involvement in protected area management. Thapar's concern, and those of other conservationists, was that large mammals require inviolate spaces, or land free of human beings, and that human-wildlife coexistence would only lead to a tragedy of immense scale for wildlife in general and tigers especially.

When considering wildlife conservation versus people's economic and political rights (rather than "tigers vs locals", as this often becomes reduced to), it is worth taking a step back to examine how tiger conservation fits into landscape management within a crowded democracy like India. One way to do this is to parse through the claims for tiger conservation made by one of its more thoughtful proponents, Ullas Karanth, in relation to this wider question of "how should land use be decided?" This attempt at perspective is especially required since both tigers and locals are powerfully mediated symbols that tend to obscure (by burning so brightly) the complex relations around them. Otherwise one is prone to fall into a thought process that takes tigers as a primary goal without seriously questioning the wider implications of this. Thapar (2002) wrote a book entitled, without irony, The Cult of the Tiger. Identity politics, both in relation to adivasis and also more generally, also contains similar traps (Steur 2009).

In the case of tigers, Karanth frames the problem well: "Why should we try to save tigers when so many other urgent human problems demand our attention?" (Karanth 2003: 1) His first answer is that biodiversity underpins the bio-geochemical cycles that, in turn, underpin human life via ecosystem services, and that biodiversity *may* provide stability to our ecosystems. The cornucopia of weaknesses in this argument, and the slippage between this and the implied assertion "humans need tigers" are very illustrative of the problems in this area, as emerges when examining his next answers. He points out Ehrlich's metaphor: that each species that you remove is like removing a rivet from a plane, and it is not clear which species being removed will cause the plane (the ecosystem) to crash (ibid: 1). This is actually a clue towards the ecological reality that however big and impressive (to humans) tigers, and other "charismatic megafauna", are it may be other less impressive species, such as termites or soil bacteria, that hold the key to ecosystem stability (Wilson 1992). So this is actually an argument for an ecological rather than a tigercentric approach.

Karanth then moves on to more immediate concerns, such as the ways in which the "forests that clothe the tiger's habitat are also watersheds of major Asian river systems...These forests regulate the flow of water after the seasonal rains and protect the soil underneath from erosion" (Karanth 2003: 1-2). However, whilst Karanth's generally excellent synthesis of the tiger conservation literature makes it very clear that tigers need forests, he does not at all clarify that forests need tigers. Whilst tigers may indicate a healthy forest, there is no evidence that a lack of tigers indicate a forest so unhealthy as to destroy ecosystem services such as freshwater. There is some evidence, in a study by Beschta and Ripple (2009), to suggest that when there is ecosystem degradation due to grazing by ungulates then large predators can ameliorate the situation. However, this study is predicated on a situation of over-grazing. Other studies indicate situations where moderate grazing actually increases biodiversity (West 1993).

In other words, the tiger's role in mediating ecosystem services is likely to be very dependent on the particularities of local ecological circumstances. This calls into question Karanth's next idea, which is that tigers are a key "warning lamp that indicate how healthy natural landscapes continue to remain in the face of our onslaught" (Karanth 2003: 3). Focusing on one species, such as the tiger, and particularly one that requires climax forest cover, is actually much more consistent with the need to maintain a highly forested monoculture for commercial timber extraction, as is the requirement of the forest department, than it is with the need for the diverse landscape mosaic required for the support of biodiversity in general (Lindenmayer and Franklin 2002: 42).

Indeed, this calls into question the overwhelming emphasis on forests in biodiversity discourses in India for the maintenance of eco-system services and in neo-traditionalist environmental discourses more generally (Sinha 2000). This is something dating back to dessicationist discourses in forests management, which emphasise the linkages between forest cover, rainfall and drought (Grove 1995). Ecological realities, however, are far more complex than this. Whilst forests may lead to increased rainfall, increased runoff, and increased retention of water in the forested parts of the hydrological cycle, it is not the only determinant, as patterns of forest-hydrology linkages are complex, as almost all ecological processes tend to be (Meher-Homji 1991). In addition, it is not at all clear that more forest automatically is of benefit to communities. A recent study in the Western Ghats showed that increased forest cover actually leads to decreased water availability for irrigation tanks downstream and hence for tank-dependent farmers (Lele et al 2008). In other words, "policymakers must move away from simplistic notions of forests being good for everything and everybody under all circumstances, and facilitate context-specific, ecologically and economically informed forest governance" (ibid: 1).

None of this is to suggest that tigers are not intrinsically important nor that inviolate zones might not be necessary, but rather to highlight that arguments in favour of possible inviolate areas must be watertight given that tiger conservation is being debated in the context of poverty and human ill-being. With regard to this, Karanth points out that protected areas that harbour tigers only comprise 5% of the land area of "most" tiger-range countries (Karanth 2003: 3), and so will make little difference to the social issues faced by these countries. However, India is one of the most population dense regions on earth, with around 1/10th the land area of Africa as a whole, and over 200 million more people within that area.

Moreover, by the spring of 2003 almost 500 villages within India, occupied by a total of 3,00,000 people had experienced forced relocation to protect the habitats of wildlife by exclusionary measures (Dowie 2009). Also, when people actually choose to move rehabilitation policies fall short. For example, in the Mudumalai region there is the Moundaden Chetti relocation case in the core area. The Moundaden Chettis actively want to move out of the protected area because they say no development activities are allowed inside, and yet after more than 10 years of legal struggle, they have still not been awarded their relocation package. A recent comprehensive review of evidence on relocation from protected areas by Kothari and Lasgorceux (2009) highlights "not even a single study shows the ecological costs and benefits of relocation, comparing what happens at the old site to what happens at the rehabilitation site. This is a somewhat jaw-dropping conclusion, one that should give even the most ardent conservationist pause for thought. All the more so when you consider the evidence that wildlife conservationist research contains a bias towards attributing human harm to ecosystems even where the research design is not adequate to support such a hypothesis, for instance in the consideration of evidence in relation to the Great Himalayan National Park (Chhatre and Saberwal 2006: 179-210). This is alongside a tendency to ignore evidence that indicates benefits to the ecosystem derived from human disturbance (ibid: 239).

This bias is part of an overall bias amongst conservationists against processes that bring humans and wildlife together, deriving to quite a large extent from an American wilderness approach to conservation (Guha 1989). Yet in a crowded democracy and one in which rehabilitation has a poor track record is there not a better option? Both the Wildlife Protection Amendment Act, 2006 (hereafter WLPA) (GOI 2006b) and the FRA (GOI 2006a) recognise this and make provisions for consulting with people and obtaining their consent in the process of declaring tiger reserves and critical wildlife habitats (CWHS). The FRA is a legislation aimed at bringing about a landscape mosaic with differing levels of human disturbance with near-inviolate zones in core areas and coexistence in buffer areas, with the possibility of using buffer areas to create corridors between core areas, and to go about this via a democratic process that acknowledges local people's at least partial sovereignty over natural resources.

Creation of Mudumalai Tiger Reserve and Critical Tiger Habitat

With this in mind, let us turn to how this national political struggle was translated within the mediating political relationships in Mudumalai (Latour 2005).4 These politics assumed a new dimension with the notification to constitute the Mudumalai Sanctuary and National Park, comprising 321 sq km, as a tiger reserve⁵ as per G O Ms 50 dated 2 April 2007 and even more so with the declaration of the full tiger reserve as a critical tiger habitat (CTH) on 28 December 2007 as per G o Ms No 145. While the first notification was under Project Tiger, the latter was made possible under Section 38v of the wLPA. Section 38v(1) allowed state governments to notify a tiger reserve on the recommendation of the National Tiger Conservation Authority. Section 38v(4) stated that a tiger reserve included a CTH that should remain inviolate and a buffer zone where a "lesser degree of habitat protection is required".⁶ Almost 500 families comprising Moundaden Chettis and mostly Paniyan and Kattunayakan adivasis lived in what was now the CTH. A 2 km buffer zone would be constituted in the western and southwestern parts of Mudumalai (i e, the Gudalur region) and a larger area of 248 sq km in the Sigur and Singara ranges around Masinagudi. The intended buffer area officially included 56 hamlets in Gudalur and 11 hamlets in the Masinagudi area.

Conservationists consider the combined area of Nagarhole, Bandipur and Mudumalai as one of the largest concentrations of tigers in India and its connectivity to other areas containing breeding tiger populations as critical to maintaining tiger numbers and genetic diversity, hence the need for buffer zones, such as in the Sigur Plateau. However, activists were quick to point out that the declaration of Mudumalai as a CTH did not follow due process of law. They argued that under Sections 38v(4) and (5) of the WLPA, the notification of a CTH required public consultations, the consent of scheduled tribes and other forest dwellers in the region and "scientific evidence" that activities of local people would cause irreversible damage to wildlife. None of this, according to them, was adequately done. Furthermore, not having obtained consent from local communities was a move that undermined the central purpose of the FRA, namely that of increasing local democratic control over natural resources.

NGOS, broadly speaking, have sat on the fence somewhat, and at times have argued that the declaration of a CTH is not illegal. NGOS justify the legality of the declaration of the CTH by saying that activists have not adequately distinguished between Sections 38v(4) (i) and 38v(4)(ii) and 38v(4) and 38v(5). Under Section 38(v)4(i) only two criteria need to be fulfilled to declare a CTH: scientific evidence presented to show that the area needs to be inviolate and a declaration by the state government in consultation with an expert committee constituted for this purpose. Under Section 38(v)4(ii), the gathering of scientific evidence needs to be done in consultation with the concerned gram sabhas in the case of the constitution of buffer zones. Moreover, it is true, as some NGOS have pointed out, that a letter of the law reading of the WLPA places in separate sections the process needed to declare a core and buffer zone (Section 38v(4) and the process of voluntary relocation (Section 38v(5)). The requirement of local consultation, including the informed consent of gram sabhas, pertains to the process of relocation.

There are numerous problems with this position. First, even if for argument's sake one accepts a separation between the clauses in the wLPA, have even the two criteria under Section 38(v)4(i)been fulfilled? If an expert committee was indeed formed as seems to be the case, where are the findings of the expert committee? Many conservationists argue that there is ample evidence from existing research about the importance of Mudumalai to wildlife. However, there is a difference between specific research on wildlife in Mudumalai undertaken for different research purposes and an expert committee's findings specifically aimed at answering the question as to whether Mudumalai needs to be inviolate, and this being made available for public consultation.

Second, there are also problems with the separation of clauses argument. How is it possible to have an "inviolate" CTH without relocating people? One could argue, as some NGOS have, that inviolate does not mean totally free of human beings. While there is some evidence today to suggest that the forest department might allow adivasis to remain in Mudumalai, this appears to be a compromise not based on definitions of inviolate. Inviolate is a term which has been used in the past in Indian law to indicate no human settlement and usage (Bhatt and Kothari 1997). What also needs to be pointed out is that in practice the position taken by conservationists that there is a need for inviolate zones is also misleading as inviolate does not seem to apply for tourists. In fact, the promotion of tourism is very much part of the department's agenda. Inviolate thus seems to imply the replacement of some people by others. NGOS have at times skirted these issues by saying that the notification of a CTH is one of intent and that after intent has been put forth, due process under Section 38(v)5 will be followed including the process of recognition and determination of rights. However, no notification has been issued suggesting that the forest department now plans to document existing rights, de jure or de facto.

Third, even if there is ambiguity in the wLPA pertaining to CTHS, the FRA clearly states under Section 4(2) that to "modify" any rights in a CWH, a detailed process of recognition of rights, consultations with experts and local people and consent from gram sabhas must be obtained. Indeed, due to the way that the FRA and the 2006 Tiger amendment overlap one another without cross-referencing each other, this would imply the need to fulfil the process both for declaring a CTH as well as a CWH. This would mean that the declaration of the reserve is in breach of the FRA, since the CWH process has clearly not been carried out.

While conservationists, including the forest department, have tried to distinguish between the process of setting up a CTH under the wLPA and a CWH under the FRA in order to justify the CTH in Mudumalai, this too seems to be a post-facto justification or last ditch attempt to legitimise the creation of CTHS. Indeed, the original guidelines from the MOEF on declaring critical habitats treat tiger and wildlife as tiger/wildlife (MOEF 2006). Also, a circular from the NCTA dated 8 September 2008 addressed to all Chief Wildlife Wardens in tiger range states clarifies that the clauses in the Tiger Amendment should be read as a whole with the clauses in the FRA.

This accords with the legal principle of coherence in interpretation where the law needs to be read as a coherent whole, otherwise it cannot be the expression of a democratic mandate (Dworkin 1993). To reiterate what we said earlier, the wLPA was aimed at building a more democratic, consultative and scientific process of deciding on tiger reserves as the Tiger Task Force recommended. However one reads the legalities of it, the process of constituting Mudumalai Tiger Reserve has not been particularly transparent and democratic at all.

Defining the Elephant Corridor

The question of how to demarcate the elephant migration paths through Masinagudi has been ongoing, according to local wildlife activists, for some 20 years. As mentioned earlier, this area is seen by conservationists as linking gene pools for both elephants and tigers from the Eastern to the Western Ghats, as well as being part of yearly migratory cycles for elephants. Conservationists have been alarmed by the increasing population in the area, as well as the proliferation of resorts and unregulated tourism. More on these concerns can be found in the expert committee report on the elephant corridors (PCCF 2009). The original proposal was to convert revenue land in the Masinagudi area into elephant corridors, by turning them over to control of the wildlife wing of the forest department. This process came to a head with Writ Petition 10098 of 2008 filed by Elephant G Rajendran against the local forest administration in Ooty, pushing for the elephant corridors to be implemented immediately by cutting off electricity to encroachers and taking all necessary steps to evict them.

This case was merged with the cases pressing for the implementation of FRA in the area, notably W P 2762 & 2839 of 2009, filed by local adivasi and farmers' associations, in response to the declaration of the tiger reserve. As the issue of scientific evidence had already entered the debate in the context of the tiger reserve declaration, local activists filed a Right to Information (RTI) petition to determine which research the forest department had to support its demarcation of elephant corridors. This RTI yielded six scientific reports that the forest department had in its possession. Forest rights petitioners, in a petition filed in the Chennai High Court on the 17 September 2009, asked to see these reports since the department had, up to that point, not presented these reports in court.

The judge decided that the corridors produced by the government needed to be reviewed in the light of this evidence and be based on one of these reports. Furthermore, the forest department also had to consult local people about the routes of the elephant corridors. What this case reveals is that the difference between evidence existing and expert committees being formed and consultation taking place is of enough legal substance to warrant a specific judgment. The form of the process for declaring an elephant corridor, which itself lacks a legal definition, seems to have been drawn implicitly from the provisions for CWHS and CTHS, namely for an expert committee to consult with local representatives. This makes it all the more remarkable that these procedures were not followed in the declaration of the CTH in Mudumalai.

The report produced by the expert committee under instructions from the high court illustrates further why a democratic process with checks and balances is required in order to push the government to follow the scientific evidence rather than other political agendas. The report only features interviews with conservation scientists, former forest department officials, local conservationists (who are described as NGOS) and representatives of local adivasi groups. Local non-adivasi people, who have potentially the most ecologically damaging livelihoods, and NGOS working with livelihoods in the area to mitigate those damaging livelihoods are completely left out of the picture, strange in a report that calls for eco-development alongside a strong regulatory framework for eco-friendly tourism. Both of these activities, by international standards, would imply politically inclusive forms of local governance directed precisely at sustainable livelihoods (Centre for Ecotourism and Sustainable Development 2006: Mitlin 1992).

One local conservationist, part of an NGO, interviewed, pointed out that the land controlled by local resorts had mostly been bought from Badaga communities, who left the area due to crop depredation by wildlife. He cited the illegal land status of these resorts (which are often registered as private dwellings rather than on a commercial basis) and urged that they be evicted to allow a large area for elephant movements. The legality of land use in the area is indeed an area of dispute and concern locally, with charges of corruption within the local panchayat. However, here again, the main political emphasis is on large acquisitions of land for wildlife conservation, even in the buffer zone, despite it being legally defined in the CWH provisions of the FRA as a "zone of coexistence" (Tiger Task Force 2005). The latter concept fits with the idea of a landscape mosaic of varied levels of human disturbance (something required for high levels of general biodiversity), rather than with a single-species oriented exclusionary concept, which is only appropriate at best for the core zone. Unfortunately, there is a lack of research within India on human impacts on the biodiversity of protected areas and other ecosystems (Chhatre and Saberwal (2006) (exceptions include Barve et al 2005; Mishra and Silori 2001; Vijayan and Pati 2002)), meaning that there is also little evidence to base the governance of landscape mosaics upon.

Scientific Evidence

Returning to the question of scientific evidence, it is important to highlight that few sources were used to document direct human impact from the Masinagudi side (in the proposed elephant corridor) on the reserve. Even more worrying than this was that the most contemporary paper cited in relation to human impacts on Mudumalai and Masinagudi (Mishra and Silori 2001) was cited in a way that excluded points that ran against the main thrust of a large-scale land acquisition. Mishra and Silori's (2001) paper highlighted the following:

According to our field monitoring and official records from the Animal Husbandry Department during 1992, about 4,000 livestock immigrated into the sanctuary forest for grazing. In addition to these, a sizeable population of livestock also enters the sanctuary forest from the neighbouring state of Karnataka by crossing the Moyar River, which remained unrecorded by the Animal Husbandry Department. Thus, we estimated that almost 12,000-15,000 livestock graze in the sanctuary forest every year, putting tremendous pressure on the vegetation of the corridor forests (Mishra and Silori 2001: 2089).

What this highlights is that 8,000-11,000 cattle come into the reserve from the outside and that the problem is not that of the local cattle only. One local conservation worker disputed this figure, on the grounds that the cattle are not migrating in and out on a short frequency. However the figures he was citing were not

available for publishing hence the need to take existing papers at face value. At the least, therefore, local and non-local responsibility must be analysed separately. If indeed the local is only partly responsible for the pressure on the park, this is hardly an overwhelming argument for evicting large numbers of local residents in order to save the forest, but much more an argument for exactly the sort of ameliorative eco-development projects, to improve cattle varieties and reduce numbers, which the report ignores. It is also an argument for preventing cattle from entering the area over the Moyar River, a conclusion that means more tiresome enforcement work, rather than more land and resources for the department. Finally it suggests that regulating the trade in dung, and providing alternative cheap sources of organic manure might be a much more effective strategy than large-scale land acquisition.

The other area of human impact raised is that of firewood collection. However, this is also a matter of enforcement and of provision of alternatives (in this case gas cylinders) rather than an issue primarily to be dealt with via eviction and land acquisition (Chhatre and Saberwal 2006). Clearly, the expert committee has not considered other ways to protect biodiversity, other than land acquisition despite the fact that a low-cost methodology for a comprehensive threat assessment to protected areas is available in the literature, developed for a nearby protected area just across the border in Karnataka (Barve et al 2005).

Even if we accept the contention that people may need to get out of the way of the animals, the question raised by this is "was the evidence considered on elephant corridors actually used to determine which land needed to be acquired?" The report states "field observations in southern India indicate that both elephant herds and solitary bulls use passage that are 0.5 km to 1 km wide and less than about five km long" (PCCF 2009: 9). The notion of a wildlife corridor is defined correctly from the literature in terms of it being a narrowing point in the migration routes of animals, most often brought about by human activities. It follows that the critical points in the migrations are the narrowest gaps between human settlements. The corridors outlined in the report pass between a series of these gaps namely between (1) Masinagudi and Singara - 1.85 km, (2) Masinagudi and Bokkapuram - 1.36 km, (3) Bokkapuram and Mavinhalla - 0.76 km, (4) Mavinhalla and Chemmanatham - 0.64 km, (5) Chemmanatham and Moyar -2.44 km, (6) Moyar and Masinagudi - 3.84 km, and (7) Mavinhalla and Vazaithotam - 1.16 km. The distance figures given are measured from Google Earth. The amount of land claimed by the expert committee adds up to 1,450.95 acres (that is with each survey number area rounded down to the nearest cent). This seems like an extremely large area of land, given that only two out of the seven choke points between human settlements are less than a kilometre wide. It is claimed by conservationists that all of this land is needed in order to prevent encroachment on existing elephant corridors, which may be the case, although the question "can elephant movements be maintained without displacing people" does not seem to have been addressed head on in the report. It is claimed, again by local conservationists, that only 126 people will be displaced by the corridor, and that this will overwhelmingly consist of people who can afford to move. However, this is not made clear in the report released to the

public, suggesting that even if the process has reigned in displacement to some extent, it could go further in terms of being transparent and accountable.

Another factor to take into account is the danger posed to elephants by being forced to walk on a steep hill slope. This motivates placing a limit on elephant corridors at the 1,000m contour on the edge of the hills, which runs very close to one of the main settlements facing relocation, Bokkapuram, where most of the large resorts are to be found. It is claimed that this is because of a pipeline on the slope towards the Eastern end of the corridors, which prevents elephants crossing above the 1,000m contour. Why this limits movements along the entire slope was not made clear, either in the report, or by the conservation worker consulted. It was pointed out that there is a concentration of water sources in the Bokkapuram area that attracts both animals and resorts, a point brought up in the expert committee report (PCCF 2009) but the possibility of alternative water sources for animals was not raised. It was also suggested that a RTI request might be the best way to find out why the contour was placed this way. This seems more like another argument for further checks and balances than an endorsement of the democratic accountability of the process.

For the corridors that can conceivably involve walking on high slopes (Masinigudi Singara – c2, Singara Bokkapuram Mavinalla c3 and Glencarin c4) the total deaths of elephants for the last 10 years for causes other than poaching and electrocution amount to 10. It is unlikely that all of these are from walking on steep slopes (one would estimate at most half of them), so most likely less than one elephant every two years is killed this way. Given that the report states that some 375 elephants use these three corridors, this is a yearly death-rate of something like 0.2%, hardly a critical threat to elephant populations that would exclude any possibility of human-animal coexistence. Given these shortcomings with the export committee report, one wonders whether the land claim is as at least if not more important to the government as elephant conservation itself.

The Forest Rights Act and Decentralised NRM

Perhaps it is worth asking what sort of political/legal process would lead to a more thorough treatment of the evidence and a stricter adherence to the findings. It is important to note that it was the checks and balances afforded by India's RTI Act which brought to light that the forest department had in its possession research reports on the elephant corridor, which it had not produced in court, this being the event which triggered the formation of the expert committee in the first place. It would appear that it is precisely these kinds of democratic checks and balances that are most likely to lead to a careful consideration of the evidence, and a rigorous implementation of the findings.

It is also important to remember that the tiger reserve was notified after the passing of the FRA which seems on paper to provide such checks and balances by requiring consent from the gram sabha before a CWH is declared. This act was oriented towards recognising and vesting scheduled tribes and other forest dwellers with 13 different rights within forests, including that of cultivation for livelihood, based on historical claims. Under Section 2(d) of the Act, forest land is defined to include sanctuaries and national parks. Moreover, under Section 4(2)(a) of the Act, if sanctuaries and national parks are declared as CWHS, rights can only be modified after the process of recognising and vesting rights is complete.

The process of recognising forest rights is revealing in terms of showing which groupings are likely to support checks and balances, and the sorts of power dynamics involved. Although some NGOS openly admit that due process was not followed in the declaration of the tiger reserve, they have been silent about it. There are two reasons they give for this: (1) they are worried that activists will capture "democratic" institutions empowered by the WLPA, and (2) as a result protected areas will be further destroyed. The latter concern in particular stems from their reading of history and their vision of natural resource management in the future. Most NGOS in the region distinguish between adivasis and non-adivasis and work with adivasis and/or support adivasi organisations. Activists, they claim, are disproportionately supported by non-adivasis, or are outsiders. More importantly, adivasis are possible overseers of the forest whereas non-adivasis (especially recent immigrants) are bound to be destroyers of the forest. This view fits with the position taken on the legality of the reserve, in that the priority, politically, is on conservation, with the settlement of rights effectively a secondary issue. It also fits with the current priorities of recognising adivasi rights first and excluding the potentially exploitative "outside elements" from claiming similar rights. This is defended by saying that non-adivasis have not been there for three generations as is required under the FRA instead of going through the process of admitting rights as the FRA allows for and then weeding out false claims.

Given that NGOS are, generally speaking (and on a naive reading), supposed to support both "livelihoods" and "participation", why do they end up backing the position taken by the forest department and conservationists that seems to mitigate against both? Apart from the reasons given openly, as stated above, there are reasons that are more hinted at than spelt out. Simply put NGOS, both development- and conservation-oriented, need good working relations with the forest department in order to operate. This is an open secret in the area, and it means that NGOS need to be very careful not to appear to criticise the district administration, i e, the collector's office or the forest department. In other words, NGO-led participation is unlikely to constitute a set of checks and balances.

Activists have a markedly different representation of the past, present and future. They argue that the forest department was singularly responsible historically for clear felling much of Mudumalai and that it continues to be mainly responsible for forest degradation. Activists' vision of the future is one of local communities, adivasis and non-adivasis, having legally enshrined rights to manage natural resources, a form of natural resource democracy. While activists are not blind to the fact that local people might over-exploit resources, their reasoning is that local people's dependence on these resources will ensure that they are used sustainably. Moreover, even if local processes are not sustainable, the WLPA and FRA have provisions in-built into them legally to prevent unsustainable practices. The main provisions for this in the FRA are the three levels of committees (village, subdivisional and district) which are supposed to guard against false claims and bribery aimed at the diversion of land. The problem then arises of these committees not being well enough established in order to oversee claims, a problem that relates to issues of available time, resources and political will.

Are the necessary investments in time and resources likely to happen in Mudumalai? At this stage it is hard to say, as the process, both nationally and in Mudumalai/Masinagudi, seems, by nearly all accounts, to have been narrowed down considerably from what is suggested by the FRA itself. Forest rights committees were initially declared in Masinagudi by the local activists, but these were brushed aside as making false claims, partly since they included the small non-adivasi farmers in the area. Many of these farmers had been excluded by the narrowing of the Act, both in its drafting stage and then in its implementation. Many of the small farmers and petty traders in Masinagudi would qualify under the earlier version of the Act as recommended in the 2005 Joint Parliamentary Committee Report. Local activists are still pushing for this interpretation of the Act, as part of what they see as a political struggle for rights, this being a large part of the reason why these committees were rejected.

In practice, however, adivasi only committees were formed by NGOS across the Nilgiris after a meeting with the collector. Adivasi only settlements have been the focus of implementation of the Act within the government – NGO framework, whereas all settlements were included in the activist effort. This is perhaps an understandable difference, given that the main political opposition to the tiger reserve in the Sigur part of the buffer zone is from the mixed settlements. However, it makes the reinterpretation of the law that is going on, towards an "adivasi only" approach, seem far from innocent. Indeed the mobilisation of adivasi identity here seems to cut across the complex requirements of a working local democracy.

Moreover, the time frames for implementing the act seem unrealistically short (Kothari 2009) given that most complex pieces of legislation take decades rather than years to materialise. Pushing for rapid implementation was perhaps sensible in terms of keeping up the momentum in the face of administrative resistance to the changes, but it is an exhortation that does not seem to have been backed with sufficient resources in order for it to be realised. So this lack of time, capacity and resources available to implement the Act fully is another factor leading to political closure.

This may in itself reflect a lack of political will to do so from those allocating such budgets, but it is also in line with a picture of longer-term neglect of the forest department within the state, as laid out by NGOS and conservationists who have worked with the Nilgiris forest bureaucracy for a long time, as well as by Valmik Thapar at the national level (Thapar 2006). This is consistent with recent liberalisation policies of a minimal "nightwatchman state" (Leftwich 1994; Mosse and Lewis 2005) accompanied by forms of decentralisation that are cost-saving approaches implemented through economic incentives for local communities, for instance in the case of JFM (Arora 1994), rather than the seemingly more costly project of building up genuinely democratic local institutions. This is an unfortunate turn for Indian democracy, as these type of liberalisation approaches have already been witnessed in sub-Saharan Africa, and it is clear that genuine democratic empowerment cannot be achieved via this approach (Abrahamsen 2000).

Discussion and Conclusion

Given the difficulties encountered in the Mudumalai case, is it really worth committing what seem to be the considerable time and resources required to build up local natural resource democracy? Before responding, it seems wise to attempt some foresight, in terms of how pressures on land in India will look over the next few decades. It is very likely that the already growing pressures on land-use in India are only set to accelerate. Population growth, economic growth (for example more than twice as many diversions of forest for mining were granted from 1997-2007 than for the previous 10 years (Nayak 2008)), the longer-term trend of increasing use of land for export crops rather then growing food for local consumption (Patnaik 2007), newer pressure on land from energy markets for instance for growing biofuels like jatropha are examples of such pressures (Francis et al 2005).

Currently, the MOEF is also budgeting to create state-level compulsory afforestation committees to implement the huge afforestation programme that it put on the table at Copenhagen (MOEF 2009). It plans to do so via the much less democratic channels of joint forest management (ibid, Section 3.1.11), which lacks the checks and balances that this case study highlights as crucial for evidence-based land use. This adds up to a scenario where land use is under great stress, even without factoring in climate change (Gosain et al 2006; Ravindranath et al 2006; Unnikrishnan et al 2006) and groundwater depletion issues (Gupta and Deshpande 2004). It seems clear, that strategically speaking land use is going to become an increasing source of political tension, even as India currently faces a problem with naxalism. Surely, strategically speaking, now is the time to work out democratic procedures for conflict resolution in land use.

Approaches to wildlife conservation sit within this strategic question of land use. Given the reports of 1,411 tigers or less being left in India that are getting huge media and corporate attention, it is easy to argue that immediate practical fixes are required to save the tiger in India. But a fix is only practical if it works. So is the answer to exclude communities, or to try for a more democratic model? The Tiger Task Force Report (2005) indicates that where there is a large existing population in an area, the loss of political support from the population is very likely to lead to massive loss of wildlife.

The buffer zone of Mudumalai wildlife sanctuary has a very large population, including large settlements such as Masinagudi, and various surrounding settlements. Due to the elephant corridor case and what is perceived locally as an illegal tiger reserve declaration as local panchayats were not consulted as required by law, local political will is firmly against the tiger reserve. Moreover, given that the Moundaden Chettis, in the core area, who actually want to move, have taken 10 years of struggle to get the forest department to move them, still without success, it seems highly likely that the local population will remain hostile to the idea of tiger reserves. Tiger reserves, in this climate seem unviable, never mind in the future with increasing pressures on land.

Both locally and nationally an opportunity to implement a more democratic, evidence and rights-based approach to landuse is being missed with the narrowing of the implementation of the FRA. The wildlife conservation lobby seems to be assisting in this mistake. This undercuts the possibility of a truly scientific approach to conservation, and endangers the very species it is supposed to protect, by ignoring the dynamics of a democratic polity. One would hope that conservationists, unlike tigers, are able to change their stripes. One would also hope that the MOEF would see the importance of implementing democratic checks and balances in land use, in order to avoid emerging sources of conflict via the mismanagement of protected area declarations.

NOTES

- Mudumalai was first notified a tiger reserve under Project Tiger and subsequently the full tiger reserve was constituted as a critical tiger habitat under the Wildlife Protection Amendment Act, 2006 (WLPA). A more elaborate discussion about the two notifications follows later in the text.
- 2 Baviskar (2003) analyses the politics behind protected area management in the context of the Great Himalayan National Park.
- 3 Who is an activist, what are NGOs and what is the relationship between NGOs and activists is often contested amongst NGOs and activists. The distinction that we make between activists and NGOs is that activists have primarily a political agenda whereas NGOs tend to be more issue based. Moreover, NGOs are most often funded. There are of course movements that are funded by NGOs which stand in between activists and NGOs but often their agenda is influenced by that of the supporting NGO. The forest department and conservationist groups have been clubbed together because in the case of Mudumalai they have taken broadly similar positions.
- 4 The theoretical approach here is to understand social relays, *pace* Latour, as they are mediated by social expectations, appropriate since this case hinges on scenarios of future land use.
- Mudumalai was first declared a wildlife sanctuary in 1940 comprising an area of 62 sq km. In 1956, it was extended to 295 sq km and then to 318 sq km in 1958. To the north is the Bandipur National Park and Nagarhole National Park. To the west is the Wayanad Wildlife Sanctuary and in the south are Mukurthi National Park and Silent Valley National Park. To the east is the Sigur plateau which connects to the Sathyamangalam Reserve Forest and Biligirirangan Hills Wildlife Sanctuary. These parks and the adjoining Reserve Forests cover over 3,300 square kilometres (1,300 sq miles) of forest. Regimes of exclusion are therefore not new nor therefore politics around protected areas. The tiger reserve encompassed the full area of Mudumalai Wildlife Sanctuary as notified in G O Development Department No 38 dated 11 January 1940 and Mudumalai National Park as notified in G O Ms No 2 Environment and Forest Department dated 2 January 1990. Activists say the proposed buffer zone is 500 sq km.
- 6 As stated in footnote 1, in the case of Mudumalai the whole tiger reserve is a CTH which suggests any future notified buffer zone (not only the proposals put forth) will result in the expansion of the tiger reserve. One could also argue, however, that since no buffer zone has been notified, the declaration of a tiger reserve under the WLPA is incomplete. Put differently, is the tiger reserve under the 29 December 2007 notification not legally valid?

REFERENCES

- Abrahamsen, R (2000): Disciplining Democracy: Development Discourse and Good Governance (London: Zed Books).
- Arora, D (1994): "From State Regulation to People's Participation: Case of Forest Management in India", *Economic & Political Weekly*, 29(12), pp 691-98.
- Banerjee, S (2003): "Gender and Nationalism: The Masculinisation of Hinduism and Female Political Participation in India", Women's Studies International Forum, 26(2), pp 167-79.

- Barve, N, M C Kiran, G Vanaraj, N A Aravind, D Rao and R U Shaanker (2005): "Measuring and Mapping Threats to a Wildlife Sanctuary in Southern India", Conservation Biology, 19(1), pp 122-30.
- Beschta, R L and W J Ripple (2009): "Large Predators and Trophic Cascades in Terrestrial Ecosystems of the Western United States", *Biological Conservation*, 142(11), pp 2401-14.
- Bhatt, S and A Kothari (1997): "Protected Areas in India: Proposal for an Expanded System of Categories", *Building Bridges for Conservation*, Indian Institute of Public Administration, New Delhi, pp 271-94.
- Centre for Ecotourism and Sustainable Development (2006): "A Simple User's Guide to Certification for Sustainable Tourism and Ecotourism", Retrieved, 31 January 2010 from http://www. ecotourism. org/site/c.or LQKXPCLmF/b. 4835379/k. 55C1/ TIES Publications The International Ecotourism Society.htm
- Chhatre, A and V K Saberwal (2006): Democratising Nature: Politics, Conservation and Development in India (New Delhi: Oxford University Press).
- CIA (2010): The World Factbook, Retrieved 8 March 2010 from https://www.cia.gov/ library/publications/the-world-factbook/
- Dowie, M (2009): Conservation Refugees: The Hundred-Year Conflict between Global Conservation and Native Peoples (Cambrige, MA: MIT Press).
- Dworkin, R (1993): *Law's Empire*, 9 edition (Cambridge, MA: Harvard University Press).
- Francis, G, R Edinger, K Becker and others (2005): "A Concept for Simultaneous Wasteland Reclamation, Fuel Production, and Socio-economic Development in Degraded Areas in India: Need, Potential and Perspectives of Jatropha Plantations", Natural Resources Forum, 29(1), pp 12-22.
- GoI (2006a): "The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006" (New Delhi: The Gazette of India).
 – (2006b): "The Wildlife (Protection) Amendment
- Act, 2006", The Gazette of India, New Delhi. Gosain, A K, S Rao and D Basuray (2006): "Climate
- Change Impact Assessment on Hydrology of Indian River Basins", Current Science, 90(3), pp 346-53. Grove, R (1995): Green Imperialism: Colonial Expan-
- Grove, R (1995): Green Imperialism: Colonial Expansion, Tropical Island Edens and The Origins of Environmentalism, 1600-1860 (Cambridge, UK: Cambridge University Press, Cambridge).
- Guha, R (1989): "Radical American Environmentalism and Wilderness Preservation", *Environmental Ethics*, 11(1), p 231.
- Gupta, S K and R D Deshpande (2004): "Water for India in 2050: First-Order Assessment of Available Options", *Current Science*, 86(9), pp 1216-24.
- Karanth, K U (2003): The Way of the Tiger: Natural History and Conservation of the Endangered Big Cat (New Delhi: Voyageur Press).
- Kothari A and A Lagorceux A (2009): "Displacement and Relocation of Protected Areas: A Synthesis and Analysis of Case Studies", *Economic & Political Weekly*, 5 December.
- Kothari, A (2009): "India: Forest Rights Act Lost in the Wilderness", South Asia Citizens Web, Retrieved, 12 March 2010 from http://www.sacw. net/article1224.html
- Latour, B (2005): Reassembling the Social: An Introduction to Actor-Network-Theory (Oxford: Oxford University Press).
- Leftwich, A (1994): "Governance, the State and the Politics of Development", *Development and Change*, 25(2), pp 363-86.
- Lele, S, I Patil, S Badiger, A Menon and R Kumar (2008): "The Economic Impact of Forest

Hydrological Services on Local Communities: A Case Study from the Western Ghats of India", South Asian Network for Development and Environmental Economics, Working Paper 36-08.

- Lindenmayer, D and J F Franklin (2002): Conserving Forest Biodiversity: A Comprehensive Multiscaled Approach (Washington: Island Press).
- Meher-Homji, V M (1991): "Probable Impact of Deforestation on Hydrological Processes", *Climatic Change*, 19(19), pp 163-73.
- Mishra, B K and C S Silori (2001): "Assessment of Livestock Grazing Pressure in and Around the Elephant Corridors in Mudumalai Wildlife Sanctuary, South India", *Biodiversity and Conservation*, 10(10), pp 2181-95.
- Mishra, T K (1999): "Forestry Research in India", Economic & Political Weekly, 34(16/17), pp 942-44.
- Mitlin, D (1992): "Sustainable Development: A Guide to the Literature", *Environment and Urbanisation*, 4(1), 111-24.
- MoEF (2006): "Guidelines to Notify Critical Wildlife Habitat Including Constitution and Functions of Expert Committee, Scientific Information Required and Resettlement and Matters Incidental Thereto", viewed on 10 February 2010 (http:// www.envfor.nic.in/divisions/wildlife/Guidelines_ wildlife.pdf)_
- (2009): "2009-10 Outcome Budget or Ministry of Environment and Forests 2009-10", viewed on 14 March 2010, (http://www.moef.gov.in/ Outcome-Budget/outcome_budget_o910.htm).
- Mosse, D and D J Lewis (2005): The Aid Effect: Giving and Governing in International Development (London: Pluto).
- Nayak, S K (2008): "Economic Growth and Deforestation" in M Wani (ed.), Nought Without Cause (Pune: Kalpavriksh).
- Patnaik, U (2007): *The Republic of Hunger and Other Essays*, Three Essays Collective, Gurgaon.
- Ravindranath, N H, N V Joshi, R Sukumar and A Saxena (2006): "Impact of Climate Change on Forests in India", *Current Science*, 90(3), pp 354-61.
- Principle Chief Conservator of Forests (2009): "Report of the Expert Committee Formed in Pursuance of the Direction of the Hon'ble HIgh Court in W P No 10098/2008, 2762 & 2839 of 2009" Retrieved on 14 march 2010, (http://www.forests.tn.nic.in/ graphics/Expert Committee Report.pdf).
- Sinha, S (2000): "New Traditionalist Discourse of Indian Environmentalism", Journal of Peasant Studies, 24(3), pp 169-204.
- Steur, L (2009): "Adivasi Mobilisation: 'Identity' versus 'Class' after the Kerala Model of Development?", Journal of South Asian Development, 4(1): pp 25-44.
- Tiger Task Force (2005): "Joining the Dots: The Report of the Tiger Task Force", Project Tiger, Union Ministry of Environment and Forests, New Delhi.
- Thapar, V (2002): *The Cult of the Tiger* (New Delhi: Oxford University Press).
- (2006): The Last Tiger: Struggling for Survival (New Delhi: Oxford University Press).
- Unnikrishnan, AS, KR Kumar, SE Fernandes, G S Michael and S K Patwardhan (2006): "Sea Level Changes Along the Indian Coast: Observations and Projections", *Current Science*, 90(3), pp 362-68.
- Vijayan, S and B P Pati (2002): "Impact of Changing Cropping Patterns on Man-Animal Conflicts Around Gir Protected Area with Specific Reference to Talala Sub-District, Gujarat, India", Population and Environment, 23(6), pp 541-59.
- West, N E (1993): "Biodiversity of Rangelands", Journal of Range Management, 46(1), pp 2-13.
- Wilson, E (1992): *The Diversity of Life* (Cambridge MA: Harvard University Press).