



WWF

BRIEF

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LEGAL SPACES FOR WILDLIFE CORRIDORS

Exploring legal spaces for corridor protection as ESZs, Community Reserves, Conservation Reserves, Community Forest Resources, and Biodiversity Heritage Sites





UNDERSTANDING THE THREAT TO WILDLIFE CORRIDORS

Wildlife corridors in India are under severe threat from social and economic demands. Growing pressure from linear infrastructure, irrigation, mining, and human habitats, have pushed most natural spaces into islands and fragmented corridor spaces between source areas. A primary concern for corridor management is the growing **linear infrastructure** network in the country, particularly in light of the recent push to ease the environmental clearance process¹.

Some of the prominent examples of linear infrastructure cutting across PAs and critical corridors are NH 72 and 74 crossing Rajaji National Park, NH 6 and 7 crossing through the biodiversity rich central India landscape intersecting 6 tiger corridors in the Vidarbha region of Maharashtra,² NH 37 through Kaziranga National Park, and NH 54 through Borail Wildlife Sanctuary in Assam, among many others. National and state highways intersect and traverse through almost 26 of the 42 PAs declared as tiger reserves in the country.³ **Mining and irrigation** projects pose another major threat to corridors. Tadoba Tiger reserve is connected to other habitats in Andhra Pradesh in South, Gadchiroli in east and Nagpur in North through three major corridors. Irrigation and mining projects in the area have led to widespread fragmentation and discontinuous migratory routes for tigers. An irrigation canal cutting across Brahmapuri forest division adjoining the tiger reserve and recent clearances⁴ to mining projects in Chandrapur on the fringes of Tadoba have already

WHAT IS A CORRIDOR?

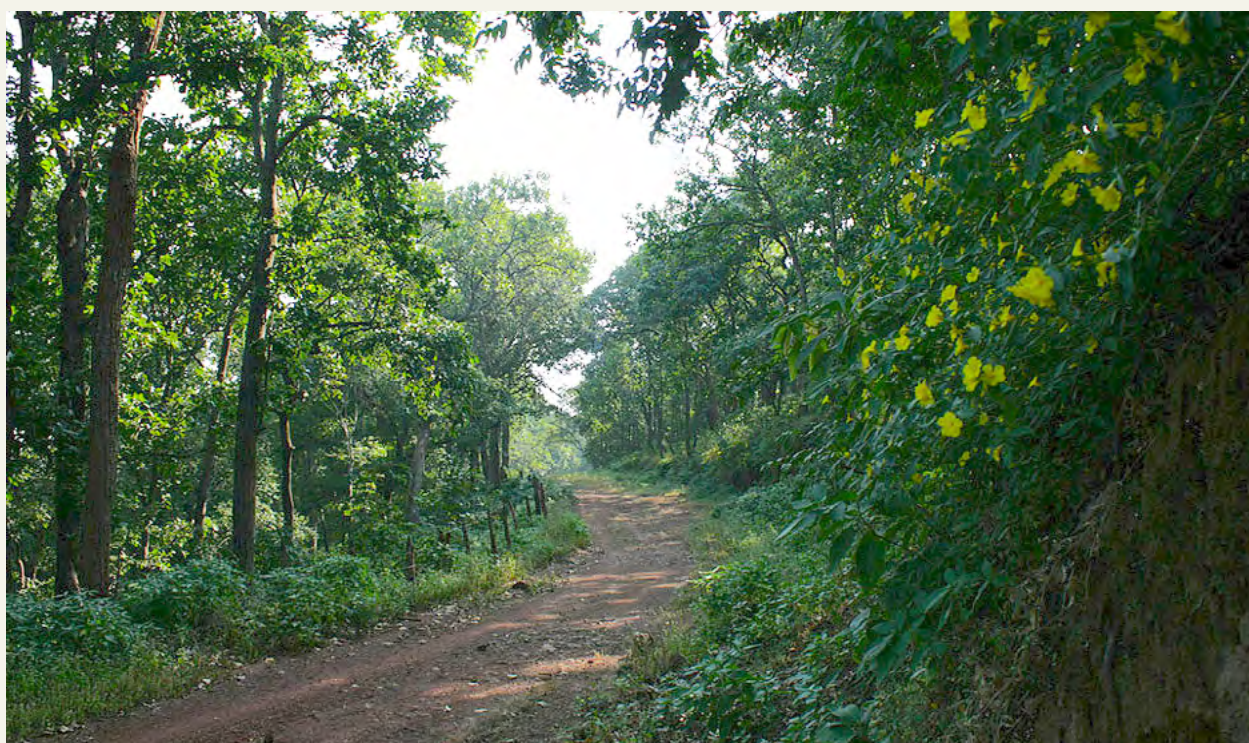
Corridors, in the larger space of ecological conservation, occupy a unique space. Their role and vitality in species conservation is well documented, but their definition is a source of constant confusion. The National Tiger

Conservation Authority (NTCA), constituted under the Wildlife (Protection) Act, 1972 (amendment 2006), defines wildlife corridors as inherent geographical linkages (through forests, river courses or other habitat attributes) which facilitate movement of tigers and other wild animals from one source area to another. Generally speaking, a corridor can be defined as 'linear landscape elements, meant to establish/facilitate connectivity across habitats and increase survivorship by increasing the diversity of specific gene pools.' (Varma, 2008) In more technical parlance, ecological literature defines corridors as a fundamental landscape element (the other two are patch and matrix), being narrow strips of land which differ from the matrices on either side. While the Wildlife Protection Act, 1972, under section 38V mandates that the state government shall prepare a Tiger Conservation Plan, when notifying an area as a tiger reserve, so as to ensure "ecologically compatible land uses in the tiger reserves and areas linking one protected area to another for addressing the livelihood concerns of local people, so as to provide dispersal habitats and corridor for spill over population of wild animals from the designated core areas of tiger reserves or from tiger breeding habitats within other protected area.", the term corridor has not been defined in the act.

led to cutting off of critical corridors in the area. Further development in the area will only lead to isolation of the reserve. Apart from linear infrastructure and mining and irrigation projects, **increased migration and urbanization** continues to increase pressure on protected areas and connecting corridors. Kaziranga National Park, in the north eastern part of India, for instance, has been dealing with various anthropogenic pressures from tea gardens, human habitation and agriculture on the periphery of the southern boundary of the national park⁵. The Numaligarh Refinery case in Kaziranga⁶ where four elephants have died trying to cross an illegal wall construction in the No-development zone depicts the state of corridor management in the country. Other issues like river linking projects and development around PAs continues to threaten shrinking habitats and corridors. In light of the rampant issues, it is imperative to discuss and identify legal spaces which can be used to protect corridors.

TIGER CONSERVATION PLAN'S ROLE IN PROTECTING CORRIDORS AND THE NEED FOR IMPLEMENTATION

As per the Wildlife Protection Act, 1972, Chapter (IVB) mandates the constitution of the 'National Tiger Conservation Authority'. Accordingly, Section 38V enables the preparation of a 'Tiger Conservation Plan'(TCP) for the proper management of a tiger reserve. The National Tiger Conservation Authority (NTCA) has provided comprehensive guidelines⁷ for the preparation of a TCP which also include an 'Indicative plan for adjoining areas providing connectivity/corridors'. While, the guidelines clearly indicate that there is pressure on corridors from 'habitations and human activities', and provides indicative management practices to be included in the TCP, the implementation of the TCPs has not been satisfactory. The 2015 TCP of Dudhwa Tiger Reserve⁸, for example, identifies the major corridors and also provides the Corridor Zone Plan (CZP) for corridor management. However, despite futuristic measures in the CZP, little has converted into action on ground. Legal protection under the provisions given hereunder may be of use to provide additional protection to corridors.



EXISTING LEGAL SPACES UNDER THE PROVISIONS OF ENVIRONMENT (PROTECTION) ACT, 1986, WILDLIFE (PROTECTION) ACT, 1972, THE NATIONAL BIODIVERSITY ACT, 2002 AND THE FOREST RIGHTS ACT, 2006

Examples of Tadoba, Kaziranga and Rajaji National Parks make it amply clear that existing mechanisms for corridor protection have not been able to translate into action on the ground and unless a stronger legal regime is envisaged, it will become increasingly difficult to prevent these socio-economic factors from destroying corridor connectivity. While the law does not recognise corridors as a category for protection, wildlife corridors have found mention in certain environment and wildlife laws and guidelines, as noted above. Most of these legal measures have hardly been used by the government to protect wildlife corridors and have remained largely dormant spaces in law. Some of these legal measures – Eco Sensitive Zones, Conservation Reserves, Community Reserves, Community forest rights and Biodiversity Heritage Sites, and their legal capacity to protect corridors, are explained hereunder:

1. Notification of Eco-sensitive Zones



An Eco-sensitive zone is the area surrounding a protected area and acts as a 'shock absorber', with restricted commercial activity, to reduce pressure on the PAs. Considering most Wildlife corridors are threatened by increased industrial activity and human habitation, it can be advantageous to use this provision for the declaration of a corridor as an ESZ.

The Ministry of Environment and Forests (MoEF) issued Eco-sensitive zone guidelines in 2011, in accordance with the 'Wildlife Conservation Strategy, 2002', the National Wildlife Action Plan (2002), National Board for Wildlife's letter dated 27.05.2005, and Supreme Court's directions to states, to declare ESZs around protected areas. Accordingly the states are required to notify an ESZ, under the provisions of the Environment Protection Act 1986 and the Environment (Protection) Rules, 1986.

According to the MoEF Guidelines, a corridor can be included in the Eco-sensitive zone. Section 4.2 of the guidelines states, *“In case where sensitive corridors, connectivity, and ecologically important patches, crucial for landscape linkages, are even beyond 10 KM width, these should be included in the Eco-sensitive Zone.”* As per the guidelines, a primary step towards the notification of ESZs is to make an inventory of the different land use patterns and the different types of activities, types and number of industries operating around each of the PAs as well as important corridors. The inventory could be done by the concerned Range officers, who can take stock of activities within 10 Km of their range. Further, the process provides for the formation of a small committee comprising the concerned Wildlife Warden, an Ecologist, an official from the local self government and an official of the Revenue department of concerned area, which can suggest the extent, requirement and management of the Eco-sensitive zone.

It is pertinent to note that approximately 107 ESZ notifications have been announced by the MoEF, on its website, and the ministry is in the process of finalizing the proposals⁹. While the Guidelines clearly specify an area of up to 10KM to be demarcated as an eco-sensitive zone, the draft notifications indicates a trend contrary to the intention of creating an ESZ to conserve the forests, wildlife and environment. Just a bare reading of the draft notifications shows that most states have notified an average area of 100 meters to 4 Km as an ESZ. There are certain critical areas like Khangchendzonga National Park with a proposed ESZ of 200 meters, raising concerns for the other ecologically critical protected areas and corridors. Therefore, since most areas have still not been demarcated, it becomes imperative to engage with the forest departments to include critical corridor areas within eco sensitive zones.

2. Conservation Reserves



Section 36A of the Wildlife Protection Act, 1972 states that *“The State Government may, after having consultations with the local communities, declare any area owned by the Government, particularly the areas adjacent to National Parks and sanctuaries and those areas which link one protected area with another, as a conservation reserve for protecting landscapes, seascapes, flora and fauna and their habitat.”*

As of September 2015, there are 66 conservation reserves in the country¹⁰. Most seem to be areas in the buffer zones of PAs (like Darlaghat CR on the edge of the Darlaghat WS; Saraswati CR on the edge of the Saraswati WS), and even villages on the fringes of forest areas (such as Borgad in Maharashtra) have been declared as CRs. From the list, it can be seen that areas as small as 0.67 sq. km have been notified as CRs. But certain CRs - like Sudhmahadev in J&K (142 sq. km) and Afghanashini in Karnataka (299 sq. km) are appreciably large areas. The average size of a conservation reserve in India is about 36 sq. km - which is by no means a negligible area.

Using this legal space as an instrument to protect corridors and ecologically sensitive areas, therefore, seems like a strategy worth pursuing - especially since many CRs (Borgad and Chharidhandh, to name two) have been notified following pressure and lobbying from conservation groups. While development and infrastructure needs make it difficult to notify more protected areas with strict restrictions, the option of a CR

gives more freedom to the government to regulate activities in ecologically sensitive areas. The 2010 report (*Gajah – Securing the future of elephants in India*)¹¹ of the Elephant Task force, established under the MoEF, which recognises priority elephant corridors in the country, also emphasized on innovative methods to secure habitats beyond the Protected Areas, including Community or Conservation Reserves.

3. Community Reserves



Section 36C of the Wildlife Protection Act, 1972 states that “*The State Government may, where the community or an individual has volunteered to conserve wild life and its habitat, declare any private or community land not comprised within a National Park, sanctuary or a conservation reserve, as a community reserve, for protecting fauna, flora and traditional or cultural conservation values and practices.*” Unlike the Conservation Reserves which can be created only on Government lands the Community Reserves can be created on community and private lands.

The WLPA also mandates that after the notification of the community reserve, ‘*no change in the land use pattern shall be made within the community reserve, except in accordance with a resolution passed by the Management Committee and approval of the same by the State Government.*’

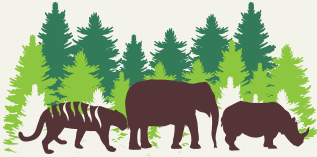
As most corridors are threatened with changing land use patterns which promote commercial development, notification of community reserves contains safeguards against changes in land use and can be used as an important legal instrument to protect wildlife corridors. As of October 2015, there are only 26 community reserves in India.¹² 22 of these are in Meghalaya, 2 in Punjab, and 1 each in Kerala and Karnataka.

4. Community Forest Rights



The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, popularly known as the Forest Rights Act 2006, provides individual and community rights to forest dependent communities. The Act allows for various community forest rights, such as nistar; uses or entitlements such as fish and other aquatic products, grazing (both settled or transhumant) and traditional seasonal resource access of nomadic or pastoralist communities etc. It also includes the right to protect, regenerate, conserve or manage any Community Forest Resource (CFR)¹³ that has been traditionally protected and conserved for sustainable use. The CFR right effectively democratizes forest governance in India¹⁴, by providing a certain degree of power to the Gram sabhas to govern and manage forests. The CFR right can therefore be used as a potential tool for the local communities to protect corridors. In areas where human wildlife conflict has grown in the past¹⁵, it might prove beneficial for communities to protect the corridor areas for easier movement of wildlife and minimize conflict.

5. Biodiversity Heritage Sites



Section 37 of the Biodiversity Act 2002, states that the state government may notify areas of biodiversity importance as Biodiversity Heritage Sites (BHS) under the act. The state government may then frame rules for the management and conservation of all heritage sites. The National Biodiversity Authority’s ‘guidelines for selection and management of BHS’ provide for restrictions to be imposed on development activities in the demarcated areas, however, the same seems to be option for the communities, and the act does not provide for any concrete restrictions on development. This means that the community, by declaration of a BHS, may at best get a legal recognition for conservation efforts in the area but might not be able to prohibit a development threat completely.

At present there are only 7 Biodiversity heritage sites notified in the country and most of the state notifications have not provided for any stringent restrictions on development activities in the notified area. The only state to put considerable restrictions within a BHS is Maharashtra and even that is restricted to the collection of species and plants from the area in ‘Glory of Allapalli’ – clearly not commensurate with the legal protection intended in the act.

TABLE 1: COMPARATIVE TABLE OF EXISTING LEGAL PROVISIONS FOR CORRIDOR PROTECTION

	Eco Sensitive Zone	Community Reserve	Conservation Reserve	Biodiversity Heritage Site	Community Forest Resource
Legal provision	Environment Protection Act, 1986 and allied rules	Section 36C of the Wildlife Protection Act, 1972	Section 36A of the Wildlife Protection Act, 1972	Section 37 of the Biodiversity Act 2002	Section 3(1)(i) of The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006
Restriction on development activities	Partial restriction on development. Agriculture and small scale development allowed	Restriction on change in land use pattern after notification, except by a resolution passed by the management committee. Certain restrictions similar to those in a sanctuary will be implemented.	Partial restriction on development. Only government land can be converted into a conservation reserve. Certain restrictions similar to those in a sanctuary will be implemented.	No compulsory restriction placed on the area declared as a BHS, but the management committee can regulate development in the area in consultation with the community.	The community has the right to protect, regenerate, conserve or manage any Community Forest Resource. The Gram Sabha has the legal right to regulate activities within the area to restrict certain activities.
Number of declared/notified sites	30	26	66	7	—

IDENTIFYING COMPATIBLE LAND USES IN CORRIDORS: ESZ GUIDELINES AS A POINTER

While demarcation of existing corridors in terms of legal categories such as an ESZ, Community reserve or Conservation reserve is an essential starting point, the focus has to ultimately be on the land uses that are compatible with the ecological functions of the corridor. Identifying compatible land uses that can be sustained within the wildlife corridors thus becomes crucial. However, it is important to recognize that changing land use patterns around protected areas have made it increasingly more difficult to impose restrictions through favourable legal instruments.

When it comes to identifying the compatible land uses that can be sustained within the wildlife corridor the ESZ guidelines clearly point to a four-fold classification of activities that are *allowed, promoted, regulated* or *prohibited* within the notified area and the same has been adapted by the states in the notifications. As a way forward, the same four-fold classification may be adapted in conservation reserves and community reserves as well. It is important to list out the compatible land uses in conservation reserves and community reserves because a general survey of the notified community and conservation reserves does not provide any guidance whatsoever on compatible land uses that can be sustained within the notified area.

The broad list of activities which could be *allowed, promoted, regulated* or *prohibited* within an ESZ is enshrined within the guidelines. An excerpt below depicts the classification for reference:

TABLE 2: EXCERPT FROM ESZ GUIDELINES FOR CLASSIFICATION OF ACTIVITIES

S. No.	Activity	Prohibited	Regulated	Permitted	Remarks
1	Commercial Mining	Y			Regulation will not prohibit the digging of earth for construction or repair of houses and for manufacture of country tiles or bricks for housing for personal consumption.
2.	Felling of Trees		Y		With the approval of the concerned authority
3.	Setting up of industries causing pollution (Air, Water and Land pollution)	Y			
4.	Establishment of hotels and resorts		Y		As per approved master plan
5.	Organic farming			Y	Should be actively promoted

..AND FINALLY, THE 'WINDOW' OF THE NATIONAL WILDLIFE ACTION PLAN, 2017-2020

While there are existing legal spaces under the provisions of Environment (Protection) Act, 1986, Wildlife (Protection) Act, 1972, the National Biodiversity Act, 2002 and the Forest Rights Act, 2006, that can help build in regulations for corridors it is also clear that the law as it stands today - and as implemented on the ground - does not provide adequate protection for corridors. The National Wildlife Action Plan 2017-2020, released in February 2016, foresees corridor protection as an important aspect of wildlife conservation. The Plan suggests on ground demarcation of identified corridors, and restricted land use change in important corridor areas, in addition to proposing guidelines for making state corridor management plans. The Plan also recognizes the need for a long term plan for corridor management in the country and seeks to make provision in the Wildlife Act for identifying the areas of extended habitats and migratory routes (buffers and corridors) of species – a huge step in providing legal protection to corridors. The Plan does provide the right direction for corridor protection in India though it remains to be seen if the Plan manifests itself in stronger legislative and policy reforms in near future.



INFERENCES AND RECOMMENDATIONS

- The expansion of linear infrastructure, mining and irrigation, and increasing population, are amongst the most pressing concerns for corridor protection.
- Existing legal spaces under the Environment (Protection) Act, 1986, Wildlife (Protection) Act, 1972, The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 (FRA) and the National Biodiversity Act, 2002, which are ESZs, Community Reserves, Conservation Reserves, Community Forest Resource Rights, and Biodiversity Heritage Sites respectively, have remained largely dormant and can be used as legal measures for protection of corridors.
- Majority of the state submissions for ESZ notifications do not utilise the legal provision to the extent intended. A number of notifications provide for an area up to 100 metres as ESZs, even though the MoEF guidelines clearly provide for an area up to 10KMs or more as per the area requirement, defining a set precedential usage of the law in the future.
- Tiger Conservation Plan'(TCP) under the Wildlife Protection Act, 1972 as per Government of India guidelines has to include an 'Indicative plan for adjoining areas providing connectivity/corridors'. As an example the 2015 TCP of Dudhwa Tiger Reserve, for example, identifies the major corridors and also provides the Corridor Zone Plan (CZP) for corridor management. However, despite futuristic measures in the CZP, little has converted into action on ground.
- Conservation reserves like Borgad (Nashik, Maharashtra) were notified following successful lobbying from individuals and conservation groups setting precedent for use of the legal provision under the Wildlife (Protection) Act, 1972, for protection of corridors.
- The CFR rights, under the Forest Rights Act,2006 effectively democratizes forest governance in India, by providing adequate legal powers to the Gram Sabhas to govern and manage forests, and can be an important tool in areas with increased human- wildlife conflicts.
- Post demarcation of a wildlife corridor as an ESZ, conservation or community reserve, or biodiversity heritage site, it is imperative to identify compatible land uses that can be sustained within the wildlife corridor.
- The National Wildlife Action Plan 2017-2020, envisages protection of wildlife corridors under the Wildlife Protection Act, 1972 and recognises the need for corridor management plans by states in the future, finally recognizing the importance of wildlife corridors.

ENDNOTES

- 1 D.K. Dash “Javadekar eases green norms for linear projects” *The Times of India* January 1, 2015
- 2 A. Saxena, B. Habib et al., “Proposed mitigation measures for habitat contiguity and reducing wild animal mortality on NH 6 & 7 in the central India landscape” *Technical Report* (WII and NTCA, New Delhi, 2015).
- 3 See A. Rajvanshi et al., “Roads, Sensitive Habitats and Wildlife Environmental Guidelines for India and South Asia” (WII and CEC Ltd., New Delhi, 2001).
- 4 N.M. Ghanekar, “Maharashtra: Tadoba Tiger Reserve faces coal mine threat” *DNA India*, August 30, 2015.
- 5 A Brief Note on Kaziranga National Park – Environment and Forest Department, Kaziranga National Park. Available at <http://assamforest.in/knp-osc/pdfreport/brief-note-knp-n7w.pdf>
- 6 *Rohit Choudhury v. Union of India*: M.A. No. 787 of 2015 in Application No. 38 of 2011 before the National Green Tribunal.
- 7 Guidelines for preparation of Tiger Conservation Plan – National Tiger Conservation Authority. Available at http://www.indiaenvironmentportal.org.in/files/tc_plan.pdf
- 8 Available at: <http://upforest.gov.in/StaticPages/DudhwaConservationPlan.aspx>
- 9 <http://www.moef.gov.in/content/esz-notifications>
- 10 http://wiienviis.nic.in/Database/cr_8229.aspx
- 11 ‘Gajah – Securing the future of elephants in India’, available at http://www.moef.nic.in/downloads/public-information/ETF_REPORT_FINAL.pdf
- 12 http://www.wiienviis.nic.in/Database/Community%20Reserves_8228.aspx
- 13 Forest Rights Act, 2006; Section 3(1)(i)
- 14 ‘Potential for recognition of Community Forest resource rights under India’s Forest Rights Act’ a report by Vasundhara, available at http://www.rightsandresources.org/wp-content/uploads/CommunityForest_July-20.pdf
- 15 A good example is the North Khairbari Forests in North Bengal which form part of a crucial wild life corridor traditionally. CFR rights have been in dispute in the area and the Gram Sabhas have been asserting their legal CFR rights to the forest in order to protect the forest and reduce human-animal conflict in the area. *Press release* - http://fra.org.in/document/Press%20Release%20oby%20Uttar%20Banga%20Ban-Jan%20Shromojivi%20Manch%20_1_.pdf

ABOUT CEL

Centre for Environmental Law (CEL) at the WWF – India was established in 1993. Since then, CEL has undergone changes in its strategy and vision to keep itself relevant with the changing conservation landscape in India. Centre for Environmental Law envisages contributing effectively to conservation outcomes by facilitating a dialogue through its ***Legal Brief Series***. They will provide an overview and a non – partisan legal analysis on issues of environmental law and policy in India.



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