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International Outlook for Privately Protected Areas

Country Profile: INDIA

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Introduction:

This country profile is part of a study by the International Land Conservation Network (ILCN) and United Nations Development Program (UNDP) summarizing the legal, policy, and institutional mechanisms used to establish and incentivize privately protected areas (PPAs) in 30 understudied countries.

PPAs contribute to the achievement of global conservation goals and biodiversity targets by contributing to landscape-scale conservation, connectivity and ecological-representativeness of protected areas.

For the purposes of this profile, an area is considered a PPA if it conforms to the definition agreed upon by the International Union for the Conservation of Nature (IUCN). Generally speaking, a PPA's protection must be recognized and durable (with long term conservation intent); it must be governed by a private or non-governmental entity; and it must be governed and managed to meet the general conservation standards of a protected area (PA) as laid out by the IUCN.^{1,2} Note: Alongside currently existing mechanisms in these countries, this study also references mechanisms that represent potential opportunities for the creation of PPAs.

The data in this profile is based on a 2018 desk review of law and policy documents, government reports, publications by multi-lateral organizations, scholarly literature, and other sources. For 28 of the 30 country profiles, data was reviewed by a volunteer in-country expert. We are grateful to these experts, whose names and the profiles they reviewed are listed in the appendix to the International Outlook for Privately Protected Areas summary report.

Finally, this profile is intended to be a living document, which will be updated periodically as more information is submitted and time and resources allow. If you have a contribution, please contact the authors at landconservation@lincolninst.edu.

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¹ Mitchell, B.A., Stolton, S., Bezaury-Creel, J., Bingham, H.C., Cumming, T.L., Dudley, N., Fitzsimons, J.A., Malleret-King, D., Redford, K.H. and Solano, P. (2018). *Guidelines for privately protected areas*. Best Practice Protected Area Guidelines Series No. 29. Gland, Switzerland: IUCN. xii + 100pp.

² Dudley, N. (ed.) (2008). Guidelines for Applying Protected Area Management Categories. Gland, Switzerland: IUCN. x + 86pp. WITH Stolton, S., Shadie, P. and Dudley, N. (2013). IUCN WCPA Best Practice Guidance on Recognising Protected Area and Assigning Management Categories and Governance Types, Best Practice Protected Area Guidelines Series No. 21. Gland, Switzerland: IUCN

INDIA (Republic of India or Bhārat Gaṇarājya)

Outlook for Privately Protected Areas

The ILCN and UNDP would like to thank the following volunteers for reviewing this document for accuracy to the best of their ability.

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I. Country Overview

Land Area

Out of India's total land area, 70,827,300 ha (21.54 per cent) is covered under forests.³ Due to varied climatic, soil and topographic conditions, India has a wide range of ecosystems and habitats such as forests, grasslands, wetlands, deserts, and coastal and marine ecosystems. Sixteen forest types have been identified in India on the basis of Champion and Seth's (1968) classification. Of the total 16 types of forests, 38.2 per cent constitute tropical dry deciduous forests and 30.3 per cent constitute tropical moist deciduous forests of India's total forest area.⁴

India is one of the 17 megadiverse countries in the world, harboring nearly eight per cent of all recorded species, including over 48,655 species of plants⁵ and 1,00,693 species of animals⁶. It is also among the few countries which has developed a biogeographic classification for conservation planning and has mapped its biodiversity-rich areas.⁷ Of the 35 global biodiversity hotspots, four are present in India, represented by the Himalayas, the Western Ghats, the North-east, and the Nicobar Islands.⁸

Land ownership and tenure

According to the Constitution of India, ⁹ land falls under the jurisdiction of the state governments, hence property laws in India may differ from state to state. Besides the state laws, several laws enacted by the central government also govern acquisition and ownership of property (including an interest in property) through purchase/sale, transfer, mortgage, inheritance or gift throughout the country. Transfer of property other than agricultural land, as well as registration of deeds and documents, may be governed by the legislation of both the central and state governments. ¹⁰

³ Forest Survey of India, Ministry of Environment, Forests & Climate Change, Government of India. 2017. State of Forest Report. Accessed online in January 2019 at http://fsi.nic.in/forest-report-2017.

⁴ J S Singh and R K Chaturvedi. Diversity of Ecosystem Types in India: A Review. 2017. Accessed online in February 2019 at https://insa.nic.in/writereaddata/UpLoadedFiles/PINSA/2017 Art02.pdf

⁵ Floral Statistics of India 2017. ENVIS Centre on Floral Diversity. Botanical Survey of India. Government of India. Accessed online in February 2019 at http://www.bsienvis.nic.in/Database/Floral Statistics of India 2017 26352.aspx

⁶ Animal Discoveries 2016. New Species and New Records. Zoological Survey of India. Government of India. 2017. Accessed online in February 2019 at http://envfor.nic.in/sites/default/files/press-releases/Animal%20Discoveries%202016-ilovepdf-compressed.pdf

⁷ India's Fifth National Report to the Convention on Biological Diversity. Ministry of Environment, Forests & Climate Change, Government of India. 2014. Accessed online in January 2019 at: https://www.cbd.int/doc/world/in/in-nr-05-en.pdf

⁹ The Constitution of India, Seventh Schedule, List II, Entry 18 and Article 246 (3).

¹⁰ The Constitution of India, Seventh Schedule, List III, Entry 6.

The Indian Constitution does not recognize right to property as a fundamental right. In the year 1977, the 44th Amendment to the Constitution eliminated the right to acquire, hold and dispose property as a fundamental right. However, Art. 300(A) was inserted in 1978 to affirm that no person should be deprived of his property save by authority of law i.e. Right to property is now a constitutional right and not a fundamental right.¹¹

In most major cities, property rights tend to be well-enforced (with the exception of illegal settlements); however, in other parts of India, land titling remains unclear. The Indian government has launched the Digital India Land Records Modernization Programme (http://dilrmp.nic.in) with an objective to move towards modern, comprehensive and transparent land records management systems, with the ultimate goal to implement a conclusive land-titling system which guarantees land titles.

Both central and state governments can acquire private land holdings for public purpose in India. Land acquisition in India is governed by the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013. The current law has repealed the Britishera Land Acquisition Act of 1894. The new legislation has brought stricter norms and increased landowners' compensation in the event of government acquisition.¹²

Forests in India

The Government of India almost entirely owns all forest resources in the country while only a negligible forest area is in private hands. According to official estimates, 93 per cent of forests are controlled by the Forest Department and four per cent by the Revenue Department. In contrast, corporate bodies and communities together own 1.5 per cent of forests, while private forests constitute another 1.5 per cent of all forests (ICFRE 1996). ¹³ Private ownership of forests is rare in India.

"Recorded Forest Area" or "Forest Area" are areas which are legally notified as forest areas and are entered as such in government records (in forest and/or revenue records). A Recorded forest area mainly consist of Reserved Forest under the Indian Forest Act, 1927 (where human activities are prohibited unless expressly permitted), Protected Forests under the Indian Forest Act, 1927 (where human activities are permitted unless expressly prohibited), and Unclassed Forests (an area recorded as forest but not included in reserved or protected forest category under the Indian Forest Act, 1927) 15. Tenurial status of unclassified forest varies widely (including community, common, and private).

Protection is accorded to forests under different legislations in India. These include the Indian Forest Act, 1927 which consolidates the law relating to forests, the transit of forest-produce and the duty leviable on timber and other forest-produce. ¹⁶ The Act facilitates three categories of forests, namely Reserved forests, Protected forests, and Village forests. The Wildlife (Protection) Act of 1972 provides

¹¹ The Constitution of India, Forty-fourth Amendment. 1978. Accessed online in January 2019 at: https://www.india.gov.in/my-government/constitution-india/amendments/constitution-india-forty-fourth-amendment-act-1978

¹² The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013. Accessed online in January 2019 at http://www.legislative.gov.in/sites/default/files/A2013-30.pdf.

¹³ Policies affecting private sector participation in sustainable forest management. Sub-study of the India country study of the international collaborative research project: Instruments for sustainable private sector forestry. Ecotech Services (India) Private Ltd., 2002. Accessed online in January 2019 at http://pubs.iied.org/pdfs/9186IIED.pdf

¹⁴ Ibid

¹⁵ State of Forest Report 2001. Forest Survey of India. Accessed online in January 2019 at http://www.fsi.nic.in/sfr2001/introduction.pdf

¹⁶ Forest conservation. Ministry of Environment, Forests and Climate Change. Government of India. Accessed online in February 2019 at http://envfor.nic.in/division/forest-conservation

a strong legal framework for several categories of Protected Areas/Reserves. These include National Parks, Wildlife Sanctuaries, Conservation Reserves, Community Reserves and Tiger Reserves.

Other conservation areas under key legislations include Biodiversity Heritage Sites (BHS) under the Biological Diversity Act, 2002; Designated eco-sensitive zone areas abutting PAs as no-go areas for certain activities; Wetlands including wetlands covered under the Ramsar Convention; and Other Effective Area Based Conservation Measures including: biosphere reserves, community conserved areas under Village Council Acts in north-eastern states and similar conservation areas declared under respective State Acts, traditional communities conserved areas such as sacred groves and private conservation areas, corporate and industries conserved areas. Tiger/ elephant/ crocodile reserves and tiger/elephant corridors are also provided protection under the Government of India's wildlife protection programs such as Project Tiger and Project Elephant.

Other key legislations protecting forests in India include the Forest (Conservation) Act, 1980, Environment (Protection) Act, 1986, and the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006.

For access to a complete list of all laws, policies and guidelines on forest conservation, please click here http://www.moef.nic.in/division/forest-conservation. 17

Judicial interpretation of 'Forest' in India

The Supreme Court of India, in the landmark Godavarman Case ¹⁸ reinterpreted the Forest (Conservation) Act, 1980. In its order dated 12 December 1996, the Supreme Court expanded the scope of the term "forest" to include not only forests as mentioned in government records but all areas that are forests in the dictionary meaning of the term irrespective of the nature of ownership and classification. This implies that forests could be designated as reserved and protected whether they are privately owned or otherwise under the Forest (Conservation) Act, section 2(1).¹⁹

Prior to this order, the word 'forest' was limited only to government declared forests irrespective of whether it had tree cover or not. Likewise, areas with significant tree cover were not regarded as 'forest' simply because in government records it was not considered as 'forest'. As a result, large areas under good forest cover were outside the purview of the Forest (Conservation) Act, 1980.²⁰

Protected Areas

The four categories of Protected Areas in India include *National Parks*, ²¹ *Wildlife Sanctuaries*, ²² *Conservation Reserves*²³, *and Community Reserves*²⁴ *vis* Wildlife (Protection) Act of 1972. Definitions for these forms of protected area align with those definitions put forward by the International Union for Conservation of Nature (IUCN) - the global authority on natural world and its protection. ²⁵

¹⁷ Forest conservation. Ministry of Environment, Forests and Climate Change. Government of India. Accessed online in February 2019 at http://envfor.nic.in/division/forest-conservation

¹⁸ T. N. Godavarman Thirumulkpad vs. Union of India and ors (WP No 202 of 1995)

¹⁹ Session 9. Legal and Policy Frameworks related to Forest Conservation. WWF India. Accessed online in February 2019 at http://awsassets.wwfindia.org/downloads/session 9 2.pdf

 $^{^{21}}$ Section 35, The Wildlife (Protection) Act, 1972

²² Section 18, 25A, The Wildlife (Protection) Act, 1972

 $^{^{\}rm 23}$ Section 36A, The Wildlife (Protection) Act, 1972

²⁴ Section 36C, The Wildlife (Protection) Act, 1972

²⁵ ENVIS Centre on Wildlife & Protected Areas. 2018. Protected Areas of India. (Hosted by Wildlife Institute of India and sponsored by the Ministry of Environment, Forests & Climate Change, Government of India). Accessed online in January 2019 at: http://www.wiienvis.nic.in/Database/Protected_Area_854.aspx

As of January 2019, the ENVIS Centre on Wildlife & Protected Areas reported 868 protected areas in India covering 16,508,810 ha (official figure given as 165088.10 sq.km)²⁶ This varies from the 672 reported protected areas in the World Database of Protected Area covering 18,264,700 ha. ²⁷ Differences between statistics may be due to differences in methodologies or out of date reporting.

To the knowledge of this study, privately protected areas (PPAs) are not a recognized category of PAs in India.

Sacred Groves

Many communities in India provide protection to patches of forests dedicated to deities and/or their ancestral spirits. Present since very ancient times across the world, these patches of forests are known as sacred groves. Sacred groves are protected by local communities, usually through customary taboos and sanctions' with cultural and ecological implications. These biodiversity rich self-sustaining ecosystems play an important role in the religious and sociocultural life of the local people.²⁸

Limited available literature on Sacred Groves suggest a diverse range of legal status and management in India. It appears that in terms of the legal tenurial rights, Sacred Groves fall under three categories i.e. Sacred Groves under the control of State forest departments; Sacred Groves under the control of revenue and other government departments; and Privately-owned Sacred Groves.²⁹

In India, several Sacred Groves are privately owned by a family, a group of families, a clan, or a trust body. Examples from privately-owned Sacred Groves in Kerala include: Ollur kavu which is owned by a single family; the S.N. Puram grove which is owned and managed by several families; and the Iringole kavu which is owned and managed by a temple Trust (Chandrashekara and Sankar (1998)).³⁰ This country profile only briefly highlights the concept of Sacred Groves, however, it will be interesting to further explore in detail the implications of ownership and management of Sacred Groves by private individuals and trusts, and how it may be relevant to privately protected areas.

A 2001 study suggests that there are atleast 13,720 Sacred Grove reported in India³¹. Although the number of Sacred Groves in India may be much higher, but in several states there are no reports or studies available regarding the presence or absence of the tradition.

Joint Forest Management (JFM)

The Joint Forest Management (JFM) model, provides monetary incentives and non-monetary positive incentives for communities to maintain their forests.

²⁶ ENVIS Centre on Wildlife & Protected Areas. 2019. Protected Areas of India. (Hosted by Wildlife Institute of India and sponsored by the Ministry of Environment, Forests & Climate Change, Government of India). Accessed online in February 2019 at http://www.wiienvis.nic.in/Database/Protected_Area_854.aspx

²⁷ UNEP-WCMC (2018). Protected Area Profile for India from the World Database of Protected Areas. Accessed online in January 2019 at: https://www.protectedplanet.net/country/IND

²⁸ Cultural and ecological dimensions of Sacred Groves in India. Indian National Science Academy, New Delhi & Indira Gandhi Rashtriya Manav Sangrahalaya, Bhopal. 2001. Accessed in February 2019 at

 $http://wgbis.ces. iisc.ernet. in/biodiversity/sahyadri_enews/newsletter/issue4/Yogesh_CE dimensions.pdf^{29}\ lbid.$

³⁰ Ibid.

³¹ Cultural and ecological dimensions of Sacred Groves in India. Indian National Science Academy & Indira Gandhi Rashtriya Manav Sangrahalaya. 2001. Accessed online in February 2019 at http://wgbis.ces.iisc.ernet.in/biodiversity/sahyadri_enews/newsletter/issue4/Yogesh_CEdimensions.pdf

Initiated through the National Forest Policy of 1988, and guided by 1990 guidelines, this program allows communities to organize into JFM Committees to protect and manage their forests (jointly with the government), in exchange for non-timber forest products (with the exception of some nationalized minor forest produce) and a share of income from the area.³² As the Forest Departments legally own the land, this arrangement allows communities to take an active role in forest management, as well as to derive economic and livelihood benefits. The contract between the JFM Committee and the Forest Department stipulates how the benefits are split between the two entities, which can vary substantially between states (especially in terms of share of income from the sale of timber).³³ This program has been broadly adopted across the country; however, the success of this program in promoting reforestation varies widely.

Although JFMs don't fall in the category of PPAs, it is relevant to discuss the model, as it is unique to India and provides important lessons. As of 2018, the total number of JFMCs in India are 118,213, involving around 20 million people managing over 25 million ha of forest area. Currently, JFM covers approximately 29.8 per cent of the total forest area of India.³⁴

II. Law and Policy for Private Land Conservation

The Indian legal system does not formally recognize privately protected areas (PPAs) in any of the national or state legislations.

Although PPAs are not formally defined in Indian law, numerous individuals and organizations across India have acquired land to manage for conservation purposes (such as, protecting wildlife and natural landscapes and supporting non-extractive rural economies). For a sampling of these initiatives, see the case studies at the end of this profile.

The closest thing in India to PPAs is **Private Forests.** Private forests account for three per cent of the total forest lands in India, with half of it owned by corporate bodies and communities, and the other half owned by individuals (ICFRA 1996)

The Indian Forest Act, 1927 from Section 35 to Section 38 gives power to the State Governments to control forests and lands which are not government property such as private forests. These include the power to the State governments to protect forests for special purposes; Power to assume management of forests; Power to expropriate forests in certain cases; and the Power to protect forests at the request of the owners.

Post-independence, State Private Forest Acts were enacted in several Indian states, to control excessive tree felling and to conserve private forests in the interest of future generations. Most of the states govern the use and management of private forests, either under State Private Forest Acts, or State Forest Acts or Rules. To the knowledge of this study, laws regulating private forests exist in 10

³² India's Fifth National Report to the Convention on Biological Diversity. Ministry of Environment and Forests, Government of India. 2014. Accessed online in January 2019 at: https://www.cbd.int/doc/world/in/in-nr-05-en.pdf

³³ Nair, CTS. Joint Forest Management in India. 2017. PowerPoint created for the Tenth Executive Forest Policy Course in Colombo, Sri Lanka, May 15-27, 2017 on Revisiting the poverty reduction agenda in the context of SDGs: opportunities and challenges for Asia-Pacific Forestry. Accessed online in January 2019 at: http://www.fao.org/fileadmin/templates/rap/files/meetings/2017/49 Day9.pdf

³⁴ Sixth National Report to the Convention on Biological Diversity. Ministry of Environment, Forests and Climate Change. 2018. Accessed online in February 2019.

Indian states, namely, Andhra Pradesh³⁵, Bihar³⁶, Goa Daman and Diu³⁷, Himachal Pradesh³⁸, Karnataka³⁹, Kerala⁴⁰, Orissa⁴¹, Tamil Nadu⁴², Uttar Pradesh⁴³, and West Bengal.⁴⁴ Such forest is variously termed 'private protected forest' (in Bihar), 'controlled forest' (in Himachal Pradesh) and 'vested forest' (in Uttar Pradesh and West Bengal).⁴⁵

Under the aforementioned State laws, the owner of Private Forests can develop and manage such forest according to a working plan approved by a Forest Officer. In case the owner fails or refuses to manage the forest in accordance with the working plan, the management of forest would be done by the Forest Officer, through a process of notification.

Under laws dealing with private forests, owners are required to obtain permission in order to cut or girdle trees, or do any act likely to denude a forest or diminish its utility as a forest.⁴⁶

In some states, transfer of land under private forests, whether by sale or lease, is restricted, i.e. Andhra Pradesh ⁴⁷, Kerala ⁴⁸, Tamil Nadu ⁴⁹ and Orissa ⁵⁰. In such a scenario, a land owner must obtain permission from an authorized government official, to sell, mortgage, lease or otherwise alienate the whole or any portion of forest land (or forest produce). These restrictions ensure that forests on private land are not cleared or degraded.⁵¹

In a landmark judgement, the High Court of Maharashtra (2018) declared that "mangrove areas" on government owned lands in Maharashtra will automatically be declared/notified as "protected forests". Likewise, mangrove areas on privately owned lands, identified during the court ruling, will be declared/notified as "forests" ⁵².

Government policy supporting private land conservation

There are also several instances where government policy *does* address ownership of forest land by private entities or lands under private ownership.

The National Mission for a Green India (GIM) is one of the eight Missions outlined under the National Action Plan on Climate Change which aims at protecting, restoring and enhancing India's forest cover

³⁵ Andhra Pradesh Forest Act, 1967

³⁶ Bihar Private Forest Act, 1947

³⁷ Goa, Daman and Diu Forest Rules, 1954

³⁸ Himachal Pradesh Private Forest Act, 1954

³⁹ Karnataka Forest Act, 1963

⁴⁰ Kerala Preservation of Private Forest Act, 1972

⁴¹ Orissa Preservation of Private Forest Act, 1947

⁴² Tamil Nadu Preservation of Forest Act, 1949; Tamil Nadu Hill areas (Preservation of Trees) Act, 1955

⁴³ Uttar Pradesh Private Forests Act, 1948

⁴⁴ West Bengal Private Forests Act, 1948

⁴⁵ Policies affecting private sector participation in sustainable forest management. Sub-study of the India country study of the international collaborative research project: Instruments for sustainable private sector forestry. Ecotech Services (India) Private Ltd., 2002. Accessed online in January 2019 at http://pubs.iied.org/pdfs/9186IIED.pdf

⁴⁶ Permission is not required for using forest produce for customary or domestic needs.

⁴⁷ Andhra Pradesh Forest Act, 1967, Section 28B

⁴⁸ Kerala Preservation of Private Forest Act, 1972, Section 3

⁴⁹ Tamil Nadu Preservation of Private Forest Act, 1949, Section 3

⁵⁰ Orissa Preservation of Private Forest Act, 1947, Section 3

⁵¹ Policies affecting private sector participation in sustainable forest management. Sub-study of the India country study of the international collaborative research project: Instruments for sustainable private sector forestry. Ecotech Services (India) Private Ltd., 2002. Accessed online in January 2019 at http://pubs.iied.org/pdfs/9186IIED.pdf

⁵² Bombay Environmental Action Group and another vs. The State Of Maharashtra and others. Public Interest Litigation 87 of 2006. Accessed online in February 2019 at http://cat.org.in/wp-content/uploads/2018/09/PIL-87-of-2006-Judgement-17.09.2018.pdf

and responding to Climate Change through afforestation on forest, non-forest, public and private lands.

India's National Wildlife Action Plan 2017-2031, Theme 11 entitled, "People's Participation in Wildlife Conservation", Action 1 (iv) calls to formally recognize as wildlife managers, the owners / managers of wetlands and wildlife corridors, that are under the control of the Autonomous Councils, tribal communities, private entities and government agencies other than the State Forest Departments.⁵³

India's National Forest Policy 1988, encourages planting of trees on unutilized lands, including on land under private ownership.⁵⁴

The draft National Forest Policy of India 2018, as one of its objectives aims to incentivize sustainability in community managed, community owned private forests. The draft Policy calls for regulating private forests/ forest plantations/ tree lots per management plans as approved by the Central Government. 55

For a full range of government national policies related to biodiversity, refer to the ENVIS Centre on Wildlife & Protected Areas, Ministry of Environment, Forest and Climate Change webpage here http://wiienvis.nic.in/Database/gpd-8437.aspx.

National Biodiversity Strategy and Action Plan (NBSAP)

India's most recent Addendum to the National Biodiversity Action Plan 2008, submitted to the Convention on Biological Diversity in 2014, reiterates the key action points from the 2008 NBAP. Action 17 of the Addendum explicitly relates to conservation on private lands i.e. to "Promote conservation of biodiversity outside the protected area network, on private property, on common lands, water bodies and urban areas." ⁵⁶

Several other actions revolve around increasing community and private/civic sector participation in conservation such as Actions 1 and 16. Action 1 calls to "Expand the Protected Area network of the country including Conservation and Community Reserves, to give fair representation to all biogeographic zones of the Country. In doing so, develop norms for delineation of protected areas in terms of the objectives and principles of the National Environment Policy, in particular, participation of local communities, concerned public agencies, and other stakeholders, who have direct and tangible stake in protection and conservation of wildlife, to harmonize ecological and physical features with needs of socio-economic development".

Action 16 emphasizes on, "Formulating and implementing partnerships for enhancement of wildlife habitat in Conservation Reserves and Community Reserves, on the lines of multi-stakeholder partnerships for afforestation, to derive both environmental and eco-tourism benefits".

⁵³ India's National Wildlife Action Plan 2017-2030. Accessed online in January 2019 at http://wiienvis.nic.in/ViewGeneralLatestNews.aspx?ld=8666&Year=2017

⁵⁴ India's National Forest Policy 1988. 4.2.2 "It is necessary to encourage the planting of trees alongside of roads, railway lines, rivers and streams and canals, and on other unutilized lands under State/corporate, institutional or private ownership." Accessed online at http://envfor.nic.in/legis/forest/forest1.html

⁵⁵ The draft National Forest Policy of India 2018. 4.1.1 (g) Management of forests to be as per the approved Working Plan Management of forests & forest plantations will be done as per the Central Government approved Working/Management plans, and also in accordance with the guidelines issued by the Government of India, Ministry of Environment, Forests and Climate Change from time to time. Private forests/ forest plantations/ tree lots will be regulated as per the management plans. Accessed online at http://www.moef.nic.in/sites/default/files/Draft%20National%20Forest%20Policy%2C%202018.pdf

⁵⁶ Ministry of Environment, Forests & Climate Change, Government of India. 2014. National Biodiversity Strategy and Action Plan (NBSAP): Addendum 2014 to NBAP 2008. Accessed online in January 2019 at: https://www.cbd.int/doc/world/in/in-nbsap-v3-en.pdf

Despite these references, the NBAP does not recommend specific mechanisms or policies that would facilitate formal private sector engagement.

III. Financial Incentives for Privately Protected Areas

India's Ministry of Environment, Forests and Climate Change provides some financial assistance to the State/Union Territory Governments for protection and management of the Protected Areas under three main Centrally Sponsored Schemes viz., Integrated Development of Wildlife Habitats, Project Tiger, and Project Elephant.

As known to this study, there are no direct financial incentives in place for privately protected areas in India.

UN REDD+

As a signatory of the United Nations Framework Convention on Climate Change (UNFCCC), and in accordance with the UNFCCC decisions on 'Reducing emissions from deforestation and forest degradation, conservation of forest carbon stocks, sustainable management of forests, and enhancement of forest carbon stocks' in developing countries (collectively known as REDD+), India prepared its National REDD+ Strategy⁵⁷ in 2018.

The national REDD+ Strategy for India defines Forest Cover as "all lands, more than one hectare in area, with a tree canopy density of more than 10 percent irrespective of ownership, land use and legal status. Such lands may not necessarily be a recorded forest area. It also includes orchards, bamboo and palm." ⁵⁸

Therefore, the National REDD+ Strategy aims to cover all types of forest areas irrespective of ownership or control. Thus, performance based incentives will be paid to stakeholders particularly local communities in tune with their contribution to enhance carbon stocks.

Although, the National REDD + Strategy does not expressly state private forests or privately protected areas as a land category for REDD+ activities, according to this study, it does not in any way deny incentives accruing from any conservation activities on such lands.

Ecotourism

India's Ministry of Tourism recognizes that ecotourism takes place in fragile, pristine areas - usually protected areas, and therefore lays emphasis on the importance of developing tourism in an ecologically sustainable manner.

India's latest Addendum to the National Biodiversity Action Plan 2008 aims to promote ecologically and socially sensitive tourism by adopting best practices in sustainability (Action 15); and encourage the creation and implementation of multi-stakeholder partnerships for afforestation to derive environmental and eco-tourism benefits (Action 16).

⁵⁷ National REDD+ Strategy India. Ministry of Environment, Forest and Climate Change, Government of India.2018. Accessed online in February 2019 at http://www.moef.nic.in/sites/default/files/India National REDD%2B Strategy released on 30.08.2018.pdf

⁵⁸ India's National REDD + Strategy 2018. Ministry of Environment, Forest's and Climate Change. Government of India. 2018. Accessed online in January 2019 at

In 2011, the Ministry of Environment, Forests & Climate Change introduced <u>guidelines for ecotourism in and around protected areas</u> ⁵⁹, which commit to financial assistance/incentives for communities/individuals who own revenue lands outside protected areas, encouraging them to convert such lands to forest status. It is argued that the value of such lands for wildlife will be enhanced, while at the same time improving the income of the landowner from ecotourism.

Recently, the government of Maharashtra passed the <u>Community Nature Conservancy Government</u> <u>Resolution 2015</u>⁶⁰, which aims to provide commercial incentives to private landowners if they convert their lands into wildlife habitats. As a result, private lands can act as extension of neighboring forests or protected areas, attracting rich wildlife and practicing ecotourism in the process. ⁶¹

V. Organizations for Private Land Conservation

Governmental

Broadly, three tiers of governance are identified in India – Central Government at the national level, State Governments and Union Territory administration at the sub-state level, and Institutions of Local Governance in the states at the grassroot level.

At the Centre

- National Board for Wildlife (NBWL): A multidisciplinary body, NBWL was created under the Wildlife (Protection) Act, 1972. The Board is made up of government functionaries, NGOs, conservationists and ecologists. The Board advises the government on the management of protected areas, wildlife conservation, illegal trade and poaching, impact assessment of projects, and other related issues. NBWL is chaired by the Prime Minister of India.⁶²
- The Ministry of Environment, Forest and Climate Change, Wildlife Division is responsible for formulating broad policies on wildlife conservation, providing financial and technical assistance to conservation programmes through various centrally sponsored schemes ⁶³, declaring Tiger Reserves and Elephant Reserves, enacting wildlife laws, negotiating international conventions and treaties, setting standards for zoos, regulating international trade in wildlife, promoting policy, research and capacity building. ⁶⁴

At the State level

⁵⁹ Guidelines for Ecotourism in and around Protected Areas. Ministry of Environment, Forests and Climate Change. Government of India. 2011. Accessed online in February 2019 at http://www.moef.nic.in/downloads/public-information/Draft%20Ecotourism%20Guidelines%202%20June.pdf

⁶⁰ Guidelines regarding establishing Community Nature Conservancy. Government Circular No.: WLP 0315/ CR 56/F-1. Government of Maharashtra Revenue and Forest Department. 2015, Accessed online in February 2019 at http://www.mahaforest.nic.in/fckimagefile/Community%20Nature%20Conservancy%20English.pdf

⁶¹ **Zoravar Gill, First appeared in:** *Sanctuary Asia*, **Vol. XXXVI No. 12, December 2016.** Accessed online in January 2019 at http://www.sanctuaryasia.com/magazines/conservation/10480-shared-goals-public-private-partnerships-ppp--the-future-of-conservation.html

⁶² Krishnan, P., Ramakrishnan, R., Saigal, S., Nagar, S., Faizi, S., Panwar, H.S., Singh, S. and Ved, N. (2012). Conservation Across Landscapes: India's Approaches to Biodiversity Governance. United Nations Development Programme, New Delhi, India. Accessed online in January 2019 at http://fes.org.in/studies/conservation-across-landscapes-india-approaches-to-biodiversity-governance.pdf

⁶³ Centrally sponsored schemes are programmes that are funded directly by central Ministries or Departments, and are implemented by state governments or their agencies.

⁶⁴ Krishnan, P., Ramakrishnan, R., Saigal, S., Nagar, S., Faizi, S., Panwar, H.S., Singh, S. and Ved, N. (2012). Conservation Across Landscapes: India's Approaches to Biodiversity Governance. United Nations Development Programme, New Delhi, India. Accessed online in January 2019 at http://fes.org.in/studies/conservation-across-landscapes-india-approaches-to-biodiversity-governance.pdf

- State Wildlife Boards and Wildlife Division in the State Forest Department: At the State level, the State Board for Wildlife advises the state government on the selection and management of protected areas and other matters related to wildlife conservation. The Board is chaired by the state's Chief Minister. The state's Forest Department administers and manages forests and wildlife reserves. The state's Wildlife Department is the most important agency involved in the management of protected areas. Headed by the Chief Wildlife Warden, the Wildlife Department deals with wildlife offence, undertakes habitat enrichment activities, and conducts research, outreach and ecodevelopment programmes. To oversee day-to-day management, each protected area is also staffed by field formations (technical and administrative).⁶⁵

Non-governmental

There are a number of conservation efforts and initiatives which are being carried out in India by individuals and NGOs on private and community lands. Some of these are mentioned below:

- The Inheritance India Land Conservation Company⁶⁶ invests in areas that have the potential to become eco-tourism friendly, often in buffer zones of regions with natural or cultural value.
- The Nature Conservation Foundation⁶⁷ contributes to the knowledge and conservation of India's wildlife heritage, in collaboration with local communities. While promoting wildlife conservation, their programs also strive to safeguard livelihood and development options for local communities.
- The Tiger Research and Conservation Trust (TRACT)⁶⁸ is a registered non-profit organization with the aim of conserving the wild tiger and its habitat. The organization is supported by a wide range of international and national organizations.
- The Save Animals Initiative (SAI)⁶⁹ is a registered nonprofit organization that was originally formed to operate the SAI Sanctuary Trust (SST). Located in the biodiversity hotspot in the Western Ghats of southern India, SST's mission is to protect and preserve the last remaining wild places on earth.
- The World Land Trust⁷⁰ is an internationally-operating NGO that has partnered with Indian non-profits to acquire land with the express purpose of conservation (see case study).
- The Wildlife Trust of India⁷¹ is a domestic non-profit organization with the express purpose of stewarding wildlife and habitat on the sub-continent. They have been involved in the purchasing of land for conservation purposes (see case study).

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⁶⁶ Inheritance India Land Conservation Company. Accessed online in January 2019 at http://www.inheritanceindia.co.in/index.htm

⁶⁷ Nature Conservation Foundation. Accessed online in January 2019 at http://ncf-india.org/

⁶⁸ Tiger Research and Conservation Trust. Accessed online in January 2019 at http://www.tractindia.org/

⁶⁹ SAI (Save Animals Initiative) Sanctuary Trust. Accessed online in January 2019 at http://www.saisanctuary.com/

⁷⁰ World Land Trust. Accessed online in 2019 at https://www.worldlandtrust.org/

⁷¹ Wildlife Trust of India. Accessed online in 2019 at https://www.wti.org.in/

V. Case Studies

Potential privately protected areas in India include the following examples:

The Inheritance India Land Conservation Company sites in Western Ghats⁷²

Established in 2005, the Inheritance India Land Conservation Company promotes investment in the conservation of natural resources and ecotourism. The Company has purchased around 69 ha (actual figure given as 170 acres) at two sites along the Western Ghats in Kerala, one of the 25 biodiversity "hotspots" of the world. This area has over 1700 species of plants, 22 species of mammals, 95 species of reptiles, and 90 species of amphibians.

In partnership with the local government and communities, Inheritance India has restored parts of the property. The Company also undertakes scientific research studies, implements a management plan for the area, and promotes ecotourism. It also encourages organic, shade-grown agriculture. The Company believes that this model could be replicated in other parts of India, and is in negotiations for further purchase of land in the area for further ecotourism development.

SAI (Save Animals Initiative) Sanctuary Trust^{73,74}

SAI Sanctuary Trust (SST) is a non-profit organization located in the Western Ghats, a biodiversity hotspot in southern India. The Trust is involved in the acquisition and protection of forested lands, as well as the reclamation of degraded lands through reforestation projects, wildlife rehabilitation, and awareness raising.

The Trust purchased around 22 ha (actual figure given as 55 acres) of private forestland in 1991, which has since expanded to more than 121 ha (actual figure given as 300 acres). Once unused land, the Sanctuary is home to hundreds of indigenous trees and plants, as well as numerous rare and threatened birds and animals. The expanded and protected habitat has had positive effects on nearby National Parks and Wildlife Sanctuaries including Brahmagiri, Nagarhole and Bandipur.

The Trust also practices in organic farming and hosts ecotourists at the Sanctuary. Proceeds from ecotourism help to support the Trust's mission across the Western Ghats.

Jabarkhet Nature Reserve

The 121 ha (actual figure given as 300 acres) Jabarkhet Nature Reserve is an important wildlife corridor with connections to the Sivalik Hills and the middle Himalayas. The Reserve also sustains a crucial source of water supply which supports a large section of Mussoorie residents.

Established by a private landowner, Jabarkhet nature reserve is dedicated to the conservation and management of its land and forests. Between the 1950s and 1980s, over 100 local community members worked on the estate throughout the year to plant deodar, pine, and other valuable species. As a result, although trees were harvested, the forest cover improved and wildlife became abundant in the area.

⁷² Inheritance India Land Conservation Company. Accessed online in January 2019 at http://www.inheritanceindia.co.in/index.htm

⁷³ Shared Goals. Public-private partnerships (PPP) – The Future of Conservation. Sanctuary Asia. Vol. CCCVI No. 12, December 2016. Pf 54. Accessed online in January 2019 at http://ebook-dl.com/magazine/sanctuary-asia-december-20162432.pdf

⁷⁴ SAI (Save Animals Initiative) Sanctuary Trust. Accessed online in January 2019 at http://www.saisanctuary.com/index.htm

Following a government ban on the felling of trees in the State on slopes above 1000 meters, all major economic activities in the estate ended and there were no longer any staff available for forest management. During this time, the Reserve faced several challenges in its conservation efforts including increased forest fires, logging, poaching and overgrazing.

Since 2013, renewed efforts have been underway to revitalize around 40 ha (actual figure given as 100-acreas) of the Reserve, with several hundred indigenous trees being planted. Three waterholes have been developed to augment water supply for wildlife in the area. Based on agreements with the villagers, grazing has been controlled along with hunting, tree cutting, lopping and collection of other forest products. The forest are being maintained to be "weed free" and "trash free" to allow native vegetation to recover.

The Reserve's aim is to encourage other public and private land owners to opt for conservation of the areas under their control, thus contributing to the overall ecological protection of the area while also generating income.⁷⁶

Swapngnadha

Captain Nitin Dhond from the Merchant Navy, found a parcel of land that was a vital wildlife corridor in the area surrounding Chorla Ghats on Panji - Belgaum Highway in Maharashtra, India. The Chorla Ghats forests are part of the Mhadei Bio region. This area is home to tigers, leopards, gaur, chital, sloth bear, critically-endangered bats and scores of other species, and serves as a crucial corridor between the Bhimgad Wildlife Sanctuary and its reserve forests and the Mhadei Wildlife sanctuary of Goa.⁷⁷

However, it was in disarray – degraded due to pressures of timber and mining lobbies and cash crop monoculture planters. His vision brought together a team of nature lovers and wildlife professionals to create a dream project that initiated and paved the way for environmentally-responsible tourism in the region.

Captain Dhond was joined by Nirmal Kulkarni, a trained ecologist who had worked in and near forests to foster awareness about natural ecology. It took five long years (1997 – 2002) to acquire the land that became Swapnagandha, where all deforestation and other activities inimical to forest restoration were stopped.

Eight years after Swapnagandha became operational, and its 182 ha (actual figure given as 450 acres) of forest now a private sanctuary, Swapnagandha has managed to work with locals to dramatically curb wildlife poaching. In the process, the catchment area of two important tributaries of the Mhadei river – the Halatarnullah and the Valvanti river have received a second lease of life.⁷⁸

Molaikathoni

Famously known as the Forest Man of India, Jadev Molai Payeng, a resident of the Aruna Chapori village, has single-handedly created a forest. The Molai forest, situated in the Jorhat district of Assam

⁷⁵ Jabarkhet Nature Reserve. About. Accessed online in January 2019 at http://jabarkhetnature.com/conservation.php

⁷⁶ Jabarkhet Nature Reserve. Vision. Accessed online in January 2019 at http://www.jabarkhetnature.com/vision.php

⁷⁷ Swapnagandha. The Region. Accessed online in February 2019 at http://swapnagandha.com/the-region

⁷⁸ The Resurrection. Sanctuary Asia, Vol XXXII No. 6, December 2012. Accessed online in January 2019 at http://www.sanctuaryasia.com/magazines/conservation/9125-the-resurrection.html

spreads across an area of 1,200 ha. By planting different species of trees over a period of 30 years, Payeng has turned a barren land into a dense forest which harbors a range of wildlife.⁷⁹

The Molai forest today is home to five Royal Bengal tigers, over a hundred deer, wild boars, more than a hundred vultures, several species of birds including pelicans, three or four greater one-horned rhinoceroses, and snakes who were at the genesis of this extraordinary story.⁸⁰

Gadoli Khal & Manda Khal

The Gadoli Khal and Manda Khal Fee Simple Estates are located in the Pauri Garhwal District. Of special ecological significance, these private forests are located in the Western Himalayas - the Himalayas are biogeographically a transition between the Palaearctic and the Indo-Malayan Realms and one of the three biodiversity hotspots in India. These estates consist of about 450 ha of forest with substantial portions of oak, pine and mixed temperate forests. These Estates were originally tea estates. The scientific management and working of the forest areas of the Estates was initiated in 1953-1954 through the First Working Plan for 322 ha (actual figure given as 795 acres) followed by a revised Working plan in 1974 for 309.5 ha (actual figure given as 765 acres).

To save the Estate forests from destruction, a Public Interest Litigation was filed in India's National Green Tribunal in 2012 (Application No. 19/2012). In 2014, the Order of the National Green Tribunal ⁸¹ deemed that 292.177 ha of the Gadoli Fee Simple Estate and 158.689 ha of the Manda Khal Fee Simple Estate totaling ~450 ha falls under the category of a forest. ⁸²

Wild Lands Corridor

The World Land Trust, a non-profit organization, in partnership with the Wildlife Trust of India has funded two significant privately owned protected land holdings in India. The purpose of the holdings is to provide migration corridors to herds of Indian elephants. The project under which the two protected lands are being managed is called the *Wild Lands Corridor*.

The two corridors are:

- The Siju-Rewak corridor is 825 ha (actual figure given as 8.25 sq.km) situated in the Garo Hills in the state of Meghalaya, connects the Siju Wildlife Sanctuary and the Rewak Reserved Forest.⁸³
- Covering approximately 220,000 ha (actual figure given as 2,200 acres), the Tirunelli-Kudrakote corridor in the state of Kerala between the Tirunelli Reserved Forest and the Kudrakote Reserved Forest acts as a migration corridor for India's largest elephant population. The Trusts are in the process of reallocation of villages in the corridor, and are

⁷⁹ Travel to the Molai Sanctuary in Assam to see how one man can make a huge difference to the environment. Samonway Duttagupta. February 15, 2016. India Today. 2016. Accessed online in January 2019 at http://indiatoday.intoday.in/story/molai-sanctuary-a-forest-that-was-made-by-one-man-jadev-molai-payeng-assam-jorhat/1/596140.html

⁸⁰ Partho Burmanl. April 27, 2016 Volume 16 Issue 17. An Assamese who created a woodland in a river island is the Forest Man of India. Accessed online in January 2019 at http://www.theweekendleader.com/Heroism/2155/forest-maker.html

⁸¹ Subir Mario Chowfin v. Union of India & Ors. National Green Tribunal of India. Accessed online in February 2019 at http://www.greentribunal.gov.in/Writereaddata/Downloads/19-2012(OA) 12Mar2013.pdf

⁸² Order of the National Green Tribunal on whether the area in question in Village-Manda Khal and Gadoli Khal, District Pauri is a deemed forest, 09/10/2014. India Environmental Portal. Accessed online in January 2019 at http://admin.indiaenvironmentportal.org.in/content/order-national-green-tribunal-whether-area-question-village-manda-khal-and-gadoli-khal-0; Green warrior wins war to save forest land. Akash Vashishtha. October 14, 2014. India Today. 2014. Accessed online in January 2019 at http://indiatoday.in/story/green-warrior-wins-war-to-save-forest-land/1/395675.html

⁸³ Christy Williams & A.J.T. Johnsingh. Threated Elephant Corridors in Garo Hills, North East India. Wildlife Institute of India. 2016. GAJAH 16 (July 1996) 61-68. Accessed online in January 2019 at http://www.asesg.org/PDFfiles/Gajah/16-61-Williams.pdf

planning to register the corridor as a reserved forest once reallocation is complete, so that standard government protection is obtained.⁸⁴

Coromandal International Limited, Kakinada

Coromandel International Limited (CIL) is part of one of India's leading business conglomerates Murugappa Group. CIL is in the business of fertilizers, specialty nutrients, crop protection and rural retail.

The Company has been proactive in preserving the biodiversity at its Kakinada site, and its efforts has caught national attention. Out of a total of 700 acres of land at its Kakinada factory site, the Company has committed to develop and maintain 50 per cent of the land as a green belt. The Company is being supported by the EGREE Foundation, which has helped in training the Company's staff in developing management plans, monitoring as well as in documenting the floral and faunal species of the area. With support from the EGREE Foundation and several other partners, Coromandel has become the largest breeding site in the East Godavari district for a number of local and migratory bird species, including the Grey Heron and Painted Storks.

During 2018, Coromandel received a rare recognition from UNDP India for its efforts in developing a bird sanctuary ecosystem at its Kakinada manufacturing site, which currently homes around 264 bird species.

Click here https://www.youtube.com/watch?v=Q0FDLaQUQ18 to view the video entitled 'Turning a Factory into a Bird Sanctuary' which has been developed in collaboration with the Discovery Channel. The video covers CIL's efforts in preserving the biodiversity on its Kakinada site.

⁸⁴ Wildlife Corridors Become More Urgent in Indian Drought. World Land Trust. 2016. Accessed online in January 2019 at http://www.worldlandtrust.org/projects/india/wildlife-corridors