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Reconciling Conservation of Forests with the Forest Rights Act 2006[1]

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ABSTRACT

Avoiding both extremes in the current debate, one holding that any human presence in the forests is detrimental to conservation, and the other that it is not, this paper makes a balanced argument, emphasising that in settling the claims on forest land under the Forest Rights Act 2006, the number of people and extent of land involved should be well under control so as to be within sustainable limits, – a point which is missed in the current debate. In the long term, the paper suggests, forest policy should reduce human pressure on forests by encouraging forest dwellers to settle outside, through appropriate incentives and development initiatives.

Keywords: Forests, Conservation, environment biodiversity

JEL: O13, Q2, Q23

I

THREE USES OF FORESTS

Forests have over the millennia have served three uses especially in India – conservation of environment, serving the market economy, and supporting local livelihoods. These uses can be mutually conflicting involving a trade off, and the problem of choice may be tried to be resolved not just in terms of environmental concern, but through a political power struggle between contending stakeholders (Nadkarni *et al* 1989; Nadkarni 1996). This struggle may not satisfy environmental concern, because environment neither provides a vote bank nor a direct visible cash income. Yet, the environment not only indirectly supports our economy in a large measure, but even our very existence. Prudence demands that instead of succumbing either to commercial or political (populist?) compulsions, a far sighted, environment-friendly and yet humanitarian view is taken in resolving the problem of choice.

The first and main role of forests which is of global, national and local relevance is in the function of carbon uptake and sequestration, and conservation of biodiversity. This role is so important that not only the health of our economy, but our very existence and survival would depend on it. Climate change threatens the survival of bulk of humanity, and deforestation can worsen it, but forest growth can reverse it. Many species – both plant and animal - are facing the risk of extinction. If biodiversity is not conserved today, it may foreclose future gains in welfare,

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including economic gain. There may be many plants with potential for cancer cure, waiting to be identified and used. India is lucky to be blessed with mega diversity, a rich heritage that needs protection. The environmental role of forests, due to all these reasons, deserves to be accorded the highest priority, with other roles subordinated to this. This role does not figure in national income accounting. It tends, therefore, to be ignored or marginalised.

In their second use, forests have also contributed to the development of the larger economy of their respective countries through production of timber, pulpwood, and minor forest produce. It is valued in conventional economic accounting. Replacing natural forests by commercial species may affect both biodiversity and local livelihoods of forest people. The larger economy also makes use of forest land for exploitation of mineral ore often found in hilly forests, causing deforestation and depletion – even extinction - of wild life in the affected areas; or, for the purpose of construction of dams involving submergence of forest land; or even for settlement of refugees requiring conversion of forest lands into agricultural lands and townships. Unregulated tourism, especially if it involves transport network and construction of resorts, is another threat to forests from the larger economy. Plastic waste generated by tourists is a menace to forest animals as they tend to ingest it. On the whole, this role seriously conflicts with the first role of forests. Since the colonial times, there was a pressure on the Forest Department (FD) in India to increase revenues from forests, and that is how large areas of natural forests were replaced by commercial species. However, this policy was changed, and the National Forest Policy of 1988 has given priority to conservation of biodiversity, wild life, soils and water balance. Environmental benefits were priced over direct economic benefits. This change in policy has been by and large implemented by the FD. As a result, the direct contribution of forestry and logging to National Income (at constant prices) has come down from 14.34 per cent in 1950-51 to a mere 1.43 per cent in 2010-11, and further down to 1.23 per cent in 2016-17. Thus the forests are now mainly dedicated to conservation and achieving ecological balance, and reversing climate change. Though the use of forest land for mining and other purposes of larger economy has not stopped, conversion of forest land for non-forest purposes is made more difficult now by the Forest Conservation Act of 1980 as amended in 1988. The FD has managed to almost continuously increase area under forests in spite of pressures on it, from 21.8 per cent in 1950 to 23.4 per cent in 2017 according to legal status, and from 19.5 per cent in 1981-83 to 21.54 per cent in 2017 according to actual forest cover (see Appendix Table1).[1]

The third use of forests in India has been to support the livelihoods of people living in and near them. They are firewood gatherers, hunters, graziers, collectors of minor forest produce, and farmers who cultivate lands in and near forests and look upon them as their source of inputs needed in agriculture like small timber for implements, fencing material, green manure and dry leaves for composting, and fodder for their livestock. Their use of forests is not as harmful to forests as the

second use in which the larger economy exploits them. Nevertheless, we cannot take it for granted that the people in and near forests are absolutely harmless to them. They can and do cause conflicts with environmental concerns like conservation of biodiversity and protection of wildlife. Much depends on whether these people look upon forests as only a state property in which they have no rights, or as resources on which they have both the right and duty to protect. People living in and near the forests tend to make unsustainable use of forests when there are no properly motivated and strong community institutions to regulate the use of forests to make it sustainable. Even where sustainable use is made of forest resources, there can take place situations of conflict between humans and animals, which can be a source of danger to the survival of wildlife. But there is also another important factor which aggravates these situations, and that is the number of people in relation to land involved. If there are too many of them in relation to land which is beyond the carrying or sustaining capacity forests, forests may be harmed sometimes irreversibly. Encroachments into village common lands and forests by elite local farmers have been widespread, as a result of which common lands have declined greatly both in quality and quantity. Cycles of shifting cultivation shortened due to population pressure have also harmed forests and led to deforestation. Just as there is evidence of forest people using forests sustainably taking care of conservation under proper positive incentives (Gadgil and Rao, 1994), there is also opposite evidence of such a thing not happening. Shyam Sunder, an eminent forester, has shown that in the six Western Ghat districts of Karnataka, the Reserve Forests with restricted access became much less degraded than other forests where local people had much more access; 22 per cent of the former and 73 per cent of the latter had degraded between 1960 and 1980 (quoted in Sunder and Parameswarappa, 2014). There was too much pressure of forest dependent people on the non-Reserved Forests, with no proper institutional presence to ensure sustainability.

The Forest Department (FD) tried to meet this problem of meeting the needs of forest dependent people by setting apart 'Protected Forests and 'Village forests' or 'Unclassed forests'for their use, so that human pressure on the Reserved Forests is reduced. However, due to lack of proper management of the non-Reserved Forests, they deteriorated in quality becoming denuded and open to encroachment by people nearby. Moreover, the human presence even in Reserved Forests also continued. The extent of forest area under these classes and changes in them over time can be seen from Appendix Table 2. Joint Forest Management was introduced towards the end of 1980s following the National Forest Policy 1988, mainly to provide a stake for local people in forest management and get their help in improving the forests. This was mainly for the non-Reserved Forests where people had a greater access. It may be noted here that the Reserved Forests where the FD has greater control increased from 48.0per cent of total forest area (as per legal status) in 1950 to 56.7 per cent in 2017 (Appendix Table 2). The larger portion of forest area under this category reflects the

high priority given to the first role of forests. However, the non-reserved forest area is also significant, constituting 43.3 per cent in 2017, which can meet people's livelihood needs. The JFM experiment had a mixed success. The 73rd Constitutional Amendment in 1993 formally empowered Panchayat Raj institutions at the local level to be not only in charge of rural development but also of care of natural resources in their jurisdiction including village forests. Tribal areas in forests needed special attention. Therefore, the Panchayats Extension to Scheduled Areas (PESA) Act was passed in 1996, giving special powers to Gram Sabhas in tribal (Scheduled) areas to protect and manage community forest resources under them. The Act requires the Gram Sabhas to be consulted in matters of land acquisition and resettlement. They are given the powers to grant prospecting license for mining lease for minor minerals. The ownership of minor forest produce is vested in them under the Act. Briefly, the Act recognised the right of tribal communities over community forest resources. The Act, however, did not go so far as to confer rights on land for cultivation either to individuals or communities of forest dwellers. This was done a decade later by the Forest Rights Act (FRA) 2006, which was a revolutionary step, since the earlier forest policy allowed – rather, tolerated - cultivation only informally, though access of local communities to the use of forest resources was formally provided for.

Rights to Forest Land – For How Many and on How Much Land?

Officially called as 'The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006', (in short, Forest Rights Act or FRA) came into force from 2008 after the FRA Rule was framed in 2008. The latter imparted greater clarity to the Act and gave more scope to people for greater control over Forest Rights resources. The Preamble to the Act states that it aims to undo the historical injustice to forest dwelling communities who were cultivating land for generations but were deemed encroachers as their rights were not recorded. The Act envisages recognition and vesting of forest rights in forest dwelling Scheduled Tribes and Other Traditional Forest Dwellers in all forest lands, including National Parks and Wild Life Sanctuaries. Individual rights to land are subject to a ceiling of 4 hectares. The right conferred is heritable but not alienable or transferable, and would be jointly in the name of both husband and wife. The Act grants recognition and acceptance of rights both to individuals and communities.[2] It may be noted that the cultivation rights are additional to access given to forest people to use forest resources. While the earlier Acts and Policies gave access to forest dependent people as a matter of privilege, FRA 2006 made it a matter of right.

No firm estimates are available about the number of people in and around India's forests. Action Aid India, quoting Khare *et al.* (2000), puts this estimate at 200 million people, who depend wholly or partly on forests for their life, livelihood and cultural identity (Action Aid, 2013). Two hundred million is a huge number, nearly

one-sixth of India's population in 2011. In 2011, we had 7718 hundred sq. kms of area under forests, which declined by 44 hundred sq.kms to 7674 hundred sq.kms in 2017. If the estimate by Action Aid is correct, there were 259 people dependent on forests per sq. km. of forests in 2011, which is clearly an unsustainable pressure of population on forests. The density of population in rural India in 2011 was only slightly higher at 269 per sq. km. If the Government of India were to hand over say 1.5 hectares (which may be the minimum necessary for a viable living above the poverty line) to each forest dependent family of 4 persons, we need 7500 hundred sq. kms. That is, nearly all forests including Reserved Forests, Wildlife Sanctuaries and National Parks would have to be converted to cultivated land, forgetting about the conservation of biodiversity. If at all, less than 200 hundred sq. kms would then be left for conservation, and that too if the forest dependent population remains stable and does not increase beyond 200 million. The same Action Aid Report refers to the number of forest dwellers, obviously excluding those on the forest peripheries, at 100 million (or about 25 million families), as given by the Indian Forest Survey Report 2005. The number of tribal people among them was reported to be 54 million. Even so, if land rights are given to all of these families, tribal and non-tribal, living in the forests, we would still need about 48 per cent of the total forest area at an average of 1.5 hectare per family. The total forest area as per legal status was only 23 per cent in 2017 (Appendix Table 2), while there is a consensus that we require 33 per cent of the geographical area under forests to meet environmental protection. In these circumstances, we cannot afford to lose nearly half of our forest area for land distribution for cultivation. Those who want the forests to be freely accessible to forest dependent people or even to forest dwellers only should have some sense of implications of the numbers involved, and an awareness of the need to control this number, and concern for the future faced with climate change and large number of species of both flora and fauna under the risk of extinction.

Fortunately, however, only the people living *within* the forests are eligible to claim their right to land under FRA 2006, and not those living on the periphery of forests. As of now, it is once-ever step, as it should be. and no periodic steps subsequently to meet the land aspirations of future settlers in forests are envisaged. In a populist democracy, however, this is not certain. In principle at least, land rights are recognised and recorded only in the case of those families who were in occupation of land and cultivating it prior to December 13, 2005, and not in the case of any family that was just living in the forests. In the case of families other than Scheduled Tribes to be eligible for land rights under FRA, they should have been living in forests and in occupation of the claimed land for at least three generations prior to December 13, 2005.Since most families may not be able to produce documentary proof to their claims, much depends on their political connections and ability to gather support to their claims in the Forest Rights Committees of the Gram Sabhas who decide such cases. Most of the forest dwellers have been in the occupation of some land at least for residence and keeping their animals and if possible for growing vegetables etc.

Even if their claims are rejected in the first instance, they are bound to exert pressure for settlement of claims in their favour eventually, since evictions are difficult to carry out after the claims are initially rejected. Therefore, the number of forest dwellers is a very important factor for conservation of forests. If the number is restricted and small, it may not do much harm and their activities may even support conservation. But if the number is huge and land deemed to be under their occupation is huge, it will certainly be detrimental to conservation. What is more, even if a given human population is sustainable now, it may not be so in future if it grows over time.

According to the Union Ministry of Tribal Affairs, there were only 4526 forest villages as per 2011 Census, and 2.21 million people lived in them including 1.33 Scheduled Tribe population.[3] This could well be a gross underestimate, considering the fact that as the Table 1 below shows, over four million claims have been made for individual rights on forest land by 31.3.2018. The underestimate may have been quite possible because small settlements of forest dwellers of say a hundred or less people may have been skipped inadvertently by Census takers. But if the estimate is correct, it appears to be within sustainable limits, provided it is stabilised at this level and not allowed to increase. However, even the people living on the periphery do encroach on forests to extend cultivation, especially into the protected and unclassed/village forests, and wait for a few years to claim regularisation. It is not clear if this process of regularisation of encroachments would be strictly stopped in view of the FRA coming into operation.Even after getting their claims on land are recognised, they continue to use other forests for collection of small wood, fodder and other minor forest produce. That is, the conferment of cultivation rights does not end the use of forests; it rather enlarges it.

TABLE1. STATUS OF LAND CLAIM SETTLEMENT IN INDIA UNDER FRA 2006, AS ON 31.3.2018

Number of claims (1)	No. of claims accepted (2)	Per cent of claims accepted (3)	Forest area for which titles have been distributed (hectares) (4)	Average size of holdings (hect. / titles distributed) (5)
		Individual Forest Rights		
40,52,702	18,17,541	44.8	17,00,704	0.95
		Community Forest Rights		
1,44,178	79,051	54.8	41,25,834	59.00

Sources: Based on Government of India (2018), *Monthly Updates on Status of on of FRA 2006 for the period ending 31 March, 2018*, Ministry of Tribal Affairs; and, Agricultural Statistics at Glance, 2017, Ministry of Agriculture and Farmers' Welfare, Government of India, 2019 (see Appendix table for state-wise details.)

The implementation of FRA 2006 has the great task of reconciling its people-orientation with environmental concerns. There should be a strict control both on the number of people whose claims for forest land are settled and on the extent of land

involved, so that they are within sustainable limits. It is desirable that the MoEF is allowed to determine an optimum beyond which no claims and no land will be settled. Such an optimum will have to much more stringent in Protected Areas like National Parks and Wildlife Sanctuaries.[4] Ideally, no cultivation should be allowed at all in such Protected Areas, because conflict between humans and wild life is inevitable in forests, especially in Protected Areas.

It is therefore reasonable that the claims to a right on land are settled subject to certain qualifications, such as those already mentioned like eligibility to rights being confined only to those who had primarily resided in the forests for bona fide livelihood and occupied the forest land claimed before 13th December, 2005. In the case of forest dwellers other than Scheduled Tribes, they should have resided in the forest for at least three generations or for 75 years prior to this date. It is clear that even in the case of STs, no new or recent settlers are eligible for these rights. This is necessary so that the Act does not become an incentive for fresh people to settle in the forests eventually exerting pressure for regularisation of unauthorisedly cultivated land. The ceiling on individual rights to land at 4 hectares also has the purpose of limiting the land under cultivation within forests. This ceiling is pretty high in a forest area, considering that the average size of cultivated holdings in India outside forests was only 1.1 hectare in 2010-11. However, even if a family claims that it was in occupation of and cultivating more than 4 hectares, it would *not in principle* be allowed to have the excess above the ceiling. But if the claims are divided and made in the names of sons and daughters even if living together, the ceiling on a family may be effectively evaded. Rights include responsibilities for sustainable use of forests, though it is not made clear how it would be ensured. The claimants are required to give proof of their residence within forest for the required time and also the proof of having cultivated land since then. The claims are scrutinised by a Forest Rights Committee (FRC) elected by the Gram Sabha, having 10 to 15 members, two-thirds of whom should be STs, and not less than one-third should be women. There are also Sub-divisional Level Committees and District Level Committees above them who will further scrutinise the recommendations of the FRC. According to the Act, no forest dweller should be evicted from the land cultivated by him/her, till the whole process of recognition and final notification is over. There should, however, be no objection to evicting people whose claims have been rejected after a due process, and helping them to resettle outside forests without adversely affecting their livelihood. Otherwise, there will be no control on the number allowed to live in the forests.

Two types of claims are made, for individual forest rights (IFRs) for family/individual holdings, and for community forest rights (CFRs) where land is collectively cultivated by a forest community. More than 4 million people made claims for IFRs by 31 March 2018, of which 44.8 per cent were accepted. Over 1.7 million hectares of land was involved in IFRs, the average size of holding being 0.95 hectare. The largest average size of individual holding was in Maharashtra, being 2.18 hectares (Appendix Table 3). Though the number of overall claims for CFRs

was much smaller at 79 thousand, a larger proportion of them were accepted (54.8 per cent). This proportion of acceptance was much above average in Madhya Pradesh and Chhattisgarh (64.3 per cent). Also the extent of land was involved in CFRs was 2.4 times larger at 4.13 million hectares, the average size of community holding being 59 hectares. The highest average size of community holding was again in Maharashtra, being as large as 312.31 hectares; in Himachal Pradesh it was 270.02 hectares, and in Telangana it was 254.85 hectares.

There is no information about the number of families involved per community holding, and thus about the number of people benefited through CFRs. Since the FRCs tend to be more liberal with regard to CFRs, it is quite possible for powerful elements in the village coming together to claim community land with the hope of getting it converted and broken up into individual holdings at some later date - a likelihood which should be prevented. It is worth investigating if indeed the community lands are collectively owned and operated, or if it is only in theory and on paper. It is well to remember that having community land (or even individual land rights) does not debar the member-owners from access to other forest lands to collect minor forest produce or to graze their animals. In any case, the individual holdings are too small to be a viable source of living, and their owners will naturally depend upon forests outside their holdings to supplement their livelihood. Taking the land involved both in IFRs and CFRs together, titles were distributed on 10.39 per cent of the forest area in India as on 31 March, 2018. This proportion was the highest in Maharashtra at 38.96 per cent, the next being Tripura with 29.6 per cent, followed by Gujarat with 28.49 per cent. In Karnataka, this proportion was only 0.64 per cent, the average size of individual holding being 0.57 hectare, and that of community holding being 8.1 hectare. It could be so because Karnataka is more prudent in the settlement of claims and land titles distributed, and more caring for the concerns of conservation. It may also have been due to the fact that the density of forest dwellers in forests may be much less in Karnataka than in several other states where tribal population is more significant. The compelling question over all is, having already allotted 10.4 per cent of forest area to claimants under FRA 2006, how much more could be allotted without harming the cause of conservation?

It is a wise and humane policy not to alienate the forest dwellers from the forests on which they depend for their livelihood, provided that an authority like the Gram Sabha jointly with the Forest Department ensures that they do not act in a way which harms the cause of conservation, which is the main purpose of forest management. The forest dwellers should act like friends and trustee of the forest, for in the health of forests their welfare too is ensured. Their knowledge of conservation and forest species can be made use of in improving biodiversity of forests and conserving them. The grant of land rights should be subject to certain strict conditions. One is that there has to be freeze on the size of land holding granted, and no encroachment into forests to extend cultivation is to be allowed. The second is that they should participate in fighting forest fires, check the spread of exotic weeds like eupatorium and, observe

practices which do not make the forests prone to fire. They may be rewarded for such services. Third, in the case of community holdings at least, they may grow medicinal plants and fruit trees to serve the cause of conservation or reversing climate change, instead of annual or cash crops. They may be given proper incentives for this purpose. They should not also support any forest exploiting mafias and militant groups like Naxalites.

In the long term, the policy regarding forest dwellers ought to be to encourage them to settle outside the forests and reduce the human pressure on forests. There is a viability crisis in agriculture even outside the forests. The cultivated holdings in forests are intrinsically non-viable, but made viable for living only because of access to forest resources outside their holdings. There can be a continuous pressure on forests by forest dwellers. Let alone the interest of forests and their carbon uptake and conservation role, how far is living in the forests conducive to realising the full human potential of forest dwellers themselves? In the forests, they are deprived of the benefits of education, health care and modern amenities of civilization and carry on an insecure living always vulnerable to attacks of wild life. Man-animal conflicts are inevitable for forest dwellers. An increasing number of them should be helped to settle down outside forests enjoying the benefits of civilization, with adequate incentives for the purpose. There is a greater urgency to reduce human pressure in National Parks and Wild Life Sanctuaries. Development initiatives have to be taken addressing specially to resettle maximum possible number of forest people outside forests to enable them to lead better and more secure livelihoods by including them in the mainstream. Since every human being has a right to livelihood, resettlement outside forests should not make the concerned people worse off than before, and should follow a well thought out plan for alternative livelihoods and provision of civic amenities. Resettlement package should be attractive and effective. Proper housing, free and qualitative education to the children of the resettled and credible health facilities for the whole family, and financial support till they find a viable alternative source of living should be crucial parts of the package.Half-hearted resettlement may induce these people to go back to the forests. The character of economic development in the larger economy should also be employment-increasing, to reduce the human pressure on both agriculture and forests.

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NOTES

1. (A) 'Forest Cover', as the term used in India State of Forests Reports, refers to "all lands more than one hectare in area with a tree canopy of more than 10 per cent irrespective of land use, ownership, and legal status. It may include even orchardsand plantations of areca nut, coffee, bamboo, palm etc. under private ownership. (See Appendix Table 1). On the other hand, the term 'Recorded Forest Area' (or Forest Area) refers to all the geographic areas recorded as 'Forest' in government records". While

the former concept is based on actual forest cover, the latter is based on legal status. As such, the classification into Dense, Moderately Dense and Open Forests pertains only to Forest Cover, and not to Forest Area. Forest Area on the other hand is classified into Reserved Forests, Protected Forests and Village/Unclassed Forests.(See Appendix Table 2).Though the concepts of 'Forest Cover' and 'Forest Area' do not thus match perfectly, there is a huge overlap between the two, that is, a major portion of Forest Cover comes under Forest Area under the Forest Department.

(B) Lele and Menon raise the important question of 'what is a forest?'. 'Foresters include single species plantations of teak or pine or even exotics like eucalyptus, while ecologists think of pristine treeland with multiple natural species. The country's official monitoring agency (Forest Survey of India) counts even areca nut and coffee plantations in the estimates of forest cover.' (Lele and Menon 2014: 2). If we strictly define forests as only the natural multispecies treelands, as it is this which is important for conservation of bio-diversity, then the extent of real forest cover in India would be very small indeed, which has to be safeguarded as deserving highest priority over other concerns..

2. For details of the Act, see Government of India (2007).

3. Source: Government of India, Ministry of Tribal Affairs, Reply to Lok Sabha Starred Question No.104, 2 May, 2016.

4. In 2015, there were 868 Protected Areas covering 1.65 lakh sq. km.s (23.5 per cent of forest cover), comprising National Parks, Wildlife Sanctuaries, Conservation Reserves, and Community Reserves. (Wildlife Institute of India 2016).

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APPENDIX TABLE 1

FOREST COVER IN INDIA ACCORDING TO DENSITY

(area in sq. kms)

Class	1981-83	2005	2017
(1)	(2)	(3)	(4)
I. Total forest cover*	642041	677088	708273
	(19.52)	(20.60)	(21.54)
a) Dense forest	361412	387216	406476
	(10.99)	(11.78)	(12.37)
- Very dense forest	-	54569	98158
		(1.66)	(2.99))
- Moderately dense forest	-	332647	308318
		(10.12)	(9.38))
b) Open forest	276583	289872	301797
	(8.41)	(8.82)	(9.18)
c) Mangroves	4046	4445**	4921**
	(0.12)	(0.14)	(0.15)
II. Scrub	76796	38475	45979
	(2.34)	(1.17)	(1.40)
III. Non-forest (including tea gardens)	2568960	2571700	2533217
	(78.14)	(78.23)	(77.06)
Total geographic area	3287263	3287263	3287469
	(100.00)	(100.00)	(100.00)

Sources: *State of Forest Report (1987, 2005, 2017),* Forest Survey of India, Ministry of Environments and Forests, Dehradun

Notes- Figures in brackets are percentages total geographical area. *Total forest cover includes mangroves for all the given years; however, for 1980-83 area under mangroves are separately given, whereas for years 2005 onwards, area under mangroves is spread over all categories of forests- very dense, moderately dense and open forests. **Figures on mangroves for representational purpose and is part of dense and open forests.

.APPENDIX TABLE 2

EXTENT OF FORESTS BY TYPES OF LEGAL STATUS

Year	Types of Forest by Legal Status (sq kms)				Per cent to total forest area			Per cent forest area to geographical area
	Reserved (RF)	Protected (PF)	Unclassed (UF)	Total	RF	PF	UF	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1950	344404	117927	255697	718028	48.0	16.4	35.6	21.8
1960	316312	203553	150692	691350	45.8	29.4	21.8	21.0
1970	317878	204444	129648	741053	42.9	27.6	17.5	22.5
1991	414916	233081	122081	770078	53.9	30.3	15.8	23.4
2001	423311	217245	127881	768436	55.1	28.3	16.6	23.4
2011	425494	214986	131341	771821	55.1	27.9	17.0	23.5
2015	424985	209440	130141	764566	55.6	27.4	17.0	23.3
2017	434705	219432	113881	767419	56.7	28.6	14.8	23.4

Sources: *State of Forest Reports* (issues of respective years), Forest Survey of India

APPENDIX TABLE 3

STATUS OF LAND CLAIM SETTLEMENT UNDER FRA AS ON 31.03.2018

Sl No.	States	IFRs				CFRs				Per cent area settled under FRA to total forest area
		Number of claims	Number of claims accepted	Forest area for which titles distrib--uted (ha)	Average size of holdings (ha/titles distributed)	No. of claims	No. of claims accepted	Forest Area for which titles distributed (ha)	Average size (ha/titles distributed)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1.	Andhra Pradesh	170437	92111	90756	0.99	4043	1461	182263	132.84	7.40
2.	Assam	148965	57325	0	0.00	6046	1477	0	0.00	0.00
3.	Bihar	8022	121	0	0.00	0	0	0	0.00	0.00
4.	Chhattisgarh	855238	396200	337022	0.86	31310	23352	718832	40.06	16.62
5.	Goa	9758	56	12	0.69	372	8	2	0.29	0.01
6.	Gujarat	182869	84402	52436	0.63	7187	4659	469983	133.67	28.49
7.	Himachal Pradesh	2053	129	2	0.02	170	7	1890	270.02	0.17
8.	Jharkhand	105363	58729	41650	0.72	3667	2159	40380	19.32	3.66
9.	Karnataka	275446	14667	8423	0.57	5903	1406	11394	8.10	0.64
10.	Kerala	36140	24599	13362	0.54	1395	0	0	0.00	1.23
11.	Madhya Pradesh	576944	225400	324771	1.47	39420	27469	534586	19.60	9.89
12.	Maharashtra	352950	107167	233515	2.18	11408	6374	1795166	312.31	38.96
13.	Odisha	609094	428187	249763	0.60	13712	7970	138229	21.40	6.67
14.	Rajasthan	73455	37317	22997	0.62	704	92	202	2.20	0.84
15.	Tamil Nadu	34302	5488	2192	0.58	803	311	0	0.00	0.10
16.	Telangana	183252	93639	121521	1.30	3427	721	183750	254.85	12.02
17.	Tripura	200358	129708	186150	1.47	277	55	37	0.67	29.60
18.	Uttar Pradesh	92520	17712	7630	0.43	1124	843	48887	57.99	3.41
19.	Uttarakhand	3574	140	0	0.00	3091	1	0	0.00	0.00
20.	West Bengal	131962	44444	8504	0.19	10119	686	231	0.34	0.74
	Total(all above)	4052702	1817541	1700704	0.95	144178	79051	4125834	59.00	10.39

Source: Same as in Table-3. IFRs – Individual forest rights; CFRs – Community forest rights.