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Creating a Win-environment

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Abstract -The Proposed investment in infrastructure over the next five years is a gargantuan Rs. One hundred lakh Crores. To practically achieve the target AND to get he benefit of such an expenditure requires that the works get largely commissioned, and are not largely thrown forward for completion, commissioning. There has to be an assurance of removal of bottlenecks. Cutting of trees, intruding into some forest land are bound to be an inevitable consequences of mega infrastructural projects., The Environmental Clearances with their associated time lags in getting the 'go ahead' may be a big dampener. This paper suggests an innovative way of overcoming the procedural delays so that the projects effected by forest clearances/ environmental clearances can be 'kick started.

Keywords – Environmental Clearance; Compensatory Afforestation; PPP; Forest Land Bank.

(A) Statement of the problem:

Land is required for various industrial and Infrastructural development projects like Railways, Roads, Canals, Pipelines, Dams, Mines etc. Sometimes the acquisition of Forest land becomes inevitable. Apart from the Environmental Clearances, there has to be acquisition of land for compensatory afforestation, handing over of such land to the Forest Authorities, transfer of money for compensatory afforestation, and only then is permission granted to work on forest land. This becomes a time consuming process delaying the taking off of the project.

B) Recent Govt. Initiatives, broad overview of rules:

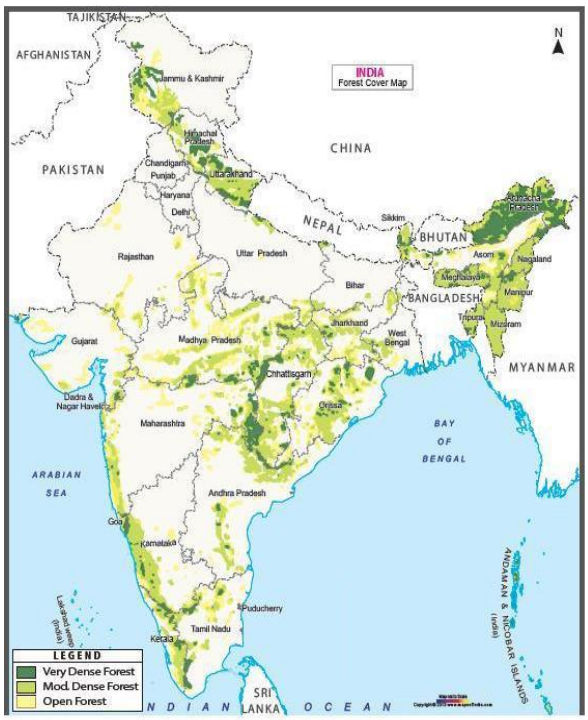
There is for each State a body called Compensatory Afforestation and Fund Management and Planning Authority (CAMPA) which has the funds from the project proponents, but unable to utilise them in a timely manner as mandated.. The relevant rules of the Forest Conservation Act stipulate that the Compensatory Afforestation should be preferably contiguous or in proximity to Reserved or Protected Forest

.C Present Scenario:

The present scenario from the Environment perspective is not very good. Government has identified lands for compensatory afforestation, has the funds deposited by various bodies, but is unable to provide the Compensatory Afforestation in the time it is mandated Meanwhile it is seen that there are wide spatial disparities in forest cover over various regions/ states, which is not even being sought to be rectified, due to concentration of effort only contiguous or in proximity to existing forests. The present efforts seem to be a back to the wall effort at sustaining the existing forest cover, at best seeking marginal increase if at all. This is a far cry from the stated national policy of having 33% area under forest cover, whereas we are currently at about 24% cover.

The concern with Indian forest cover is three fold: qualitative, quantitative and spatial distribution.

It has to be appreciated that the stated objective of 33% forest cover is a means to an end and not and end in itself. If the forests are concentrated in only some areas or corners or regions of the country , the very purpose is defeated, because large swathes of the country get exposed *to the* vagaries of climate change, extreme weather events like cloudburst and flash floods because of barren catchments. What is really needed is a balanced forest cover over the



Map showing the wide spatial disparity in Forest Distribution

What is really needed is a balanced forest cover over the length and breadth of the country. As the table below will show is just not so with very wide variations.

Alongside is given in a tabular form the quality and quantity of forest cover State/ Union Territory wise.

The Table clearly brings out that Bihar, Gujrat, Haryana, Punjab, UP have less than 10% forest, and even the forests that are there are largely degraded or what are classified as 'open Forests'.

State / UT	Geographical Area	Very dense	Moderately dense	Open forest	Total forest area	%of forested area
A&N Islands	8,249	5,678	684	380	6,742	81.73%
Andhra P	1,62,968	1,957	14,051	12,139	28,147	17.27%
Arun. P	83,743	20,721	30,955	15,288	66,964	79.96%
Assam	78,438	2,797	10,192	15,116	28,105	35.83%
Bihar	94,163	332	3,260	3,707	7,299	7.75%
Chandi.	114	1	14	6	22	18.91%
Chattis.	1,35,192	7,064	32,215	16,268	55,547	41.09%
D&N Hav	491	0	80	127	207	42.16%
Dam & Diu	111	1	6	13	20	18.46%
Delhi	1,483	7	56	129	192	12.97%
Goa	3,702	538	576	1,115	2,229	60.21%
Gujarat	1,96,244	378	5,200	9,179	14,757	7.52%
Haryana	44,212	28	452	1,108	1,588	3.59%
Him. P.	55,673	3,110	6,705	5,285	15,100	27.12%
J&K	2,22,236	4,075	8,579	10,587	23,241	10.46%
Jharkhand	79,716	2,598	9,686	11,269	23,553	29.55%
Karnataka	1,91,791	4,502	20,444	12,604	37,550	19.58%
Kerela	38,852	1,663	9,407	8,251	20,321	52.30%
Lakshadweep	30	0	17	10	27	90.33%
MP	3,08,252	6,563	34,571	36,280	77,414	25.11%
Maharashtra	3,07,713	8,736	20,652	21,294	50,682	16.47%
Manipur	22,327	908	6,510	9,928	17,346	77.69%
Meghalaya	22,429	453	9,386	7,307	17,146	76.76%
Mizoram	21,081	131	5,861	12,194	18,186	86.27%
Nagaland	16,579	1,279	4,587	6,623	12,489	75.33%
Odisha	1,55,707	6,967	21,370	23,008	51,345	32.98%
Puducherry	490	0	18	36	54	10.95%
Punjap	50,362	8	806	1,023	1,837	3.65%
Rajasthan	3,42,239	78	4,340	12,154	16,572	4.84%
Sikkim	7,096	1,081	1,575	688	3,344	47.13%
TN	1,30,060	3,672	10,979	11,630	26,281	20.21%
Telangana	1,12,077	1,596	8,738	10,085	20,419	18.22%
Tripura	10,486	656	5,246	1,824	7,726	73.68%
UP	2,40,928	2,617	4,069	7,993	14,679	6.09%
Uttarakhand	53,483	4,969	12,884	6,442	24,295	45.43%
WB	88,752	2,994	4,147	9,706	16,847	18.98%
Total	**32,87,469**	**98,158**	**3,08,318**	**3,01,797**	**7,08,273**	**21.54%**

The forest survey of India has the following classifications :

- Very Dense= All lands with tree canopy density of 70 percent (0.7 tree density) and above.
- Moderately Dense= All lands with tree canopy density of 40 percent and more but less than 70 percent (0.4 to 0.7 tree density).
- Open Forest= All lands with tree canopy density of 10 percent and more but less than 40 percent (0.1 to 0.4 tree density).
- Scrub= All forest lands with poor tree growth mainly of small or stunted trees canopy density less than 10 percent (Less than 0.1 tree density).

D) Suggested solution:

It is suggested that instead of identifying a compensatory plot for afforestation for each project say for a mine, a dam, a factory , a highway or a Railway line, , the Government may identify large chunks of land say of the order of 100 km 2 each. These should be given to Private Parties to develop forest cover. The lands so chosen will be with an eye on reducing regional forest cover imbalances hence should be more desirable than the present practice. These lands would be treated as Land Banks of Compensatory Afforestation, and be offset against any future industry/ infrastructure requirements.

E) Why would Private parties be interested?

Private parties would be invited to participate as PPP players. The Private participant could enjoy the rights to the forest produce for a certain no of years or in perpetuity, for which they may be allowed to use a part of the forest for their preferred crop say bamboo, timber etc. they may also set up a suitable processing plant nearby.

The industries with surplus liquidity could buy into land at current rates, on which a certain inflation would be assured, which will be paid by the industry finally making use of the forest land for its compensatory afforestation needs as and when their need arises.

This could be considered as a part of the CSR effort of the company.

The creation of forest wealth is a recognised method of Carbon Dioxide suppression, and can earn credit under Carbon Development Mechanism, and can be Internationally traded, earning cash for the participants.

F) other advantages

Apart from the paradigm shift of creating forest first, before destroying elsewhere, there are many other advantages of this scheme:

The present incremental afforestation displaces a few people, who resist, because due to their small numbers, there are none or inadequate rehabilitation measures put into place. Then the activity is carried on a large scale, the displaced people could be clubbed, and give adequate rehabilitation measures like schools, clinics, connecting roads etc. to their new settlement .

The displaced people could find a livelihood in the development/ maintenance of the new forest.

Since a forest would be created ab-initio on a large tract of land, it could be a very well planned effort with landscaping, drainage, water bodies, species of trees, pathways, fire lines.

With an ab-initio planning with watering holes, grazing lands, even animal species could be gradually introduced to create its own unique ecosystem possibly even inviting migratory birds. It could be a great opportunity for introducing eco-tourism, which could earn additional revenue.

MNREGA labour could also be meaningfully employed on these schemes and degraded lands could be considered for rejuvenation.

Economies of Scale could be achieved.

Regional forest cover imbalances could be rectified by this afforestation undertaken on a large scale.

Even Environmental Activists may find it hard to oppose such a scheme!