

Forests, and the Economy of India

Zubair Abid (20171076)

Introducing the Topic

- Studies have shown the importance of Forest Products to the local economy, in terms of impact on individual households.¹
- However, the total contribution of forests to the national GDP is very low.²
- Has the dependence on forest produce decreased? Are there localised blobs with greater reliance on such?

¹Hegde, Ravi, and T. Enters. "Forest products and household economy: a case study from Mudumalai Wildlife Sanctuary, Southern India." *Environmental conservation* 27.3 (2000): 250-259.

²<http://www.fao.org/forestry/country/57478/en/ind/>

What is Analysed

Done

- The contribution of Forest products to the overall GDP of the nation.
- The localised impact of Forests on specific States.
- Possible correlation between forest cover and reliance on its.

Time frame: Post-independence India, 1951-2014

Planned

- Correlation between change in forest cover and economic contribution
- Correlation between conservation movements/policies and economic contribution of Forest products.

Data Sources

- http://planningcommission.gov.in/data/datatable/0814/table_66.pdf
- <http://statisticstimes.com/economy/sectorwise-gdp-contribution-of-india.php>
- http://planningcommission.gov.in/data/datatable/data_2312/DatabookDec2014%202.pdf
- <http://www.fsi.nic.in/forest-report-2017>

The contribution of Forest products to the overall GDP of the nation

Methods

- We take data released by the Planning Commission³ and graph the changes in multiple sectors.
- Since exact Forestry data was not directly found for much of the date range, (it is classified under “Agriculture, forestry, and fishing”) we estimate the breakdown by extrapolation, and graph that as well.

³http://planningcommission.gov.in/data/datatable/data_2312/DatabookDec2014%202.pdf

The contribution of Forest products to the overall GDP of the nation (Cont.)

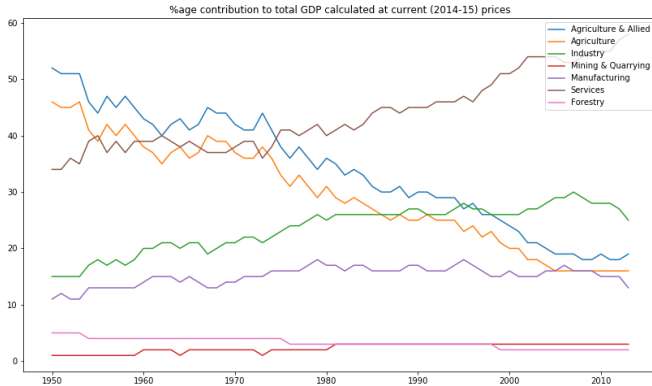


Figure 1: Figure of plots

The localised impact of Forests on Specific States

Measuring the Impact

Barik, S. K., and S. K. Mishra⁴ studied the contribution of forests to the economy of the northeastern States of India

- They refer to the lack of immediately available data and the needs for estimates to understand how much of the GDP forests actually contribute to
- As such, the only direct data they have available is on Meghalaya

Since we lack data, to see specific States that may depend on Forest produce more we use another indirect method

⁴Barik, S. K., and S. K. Mishra. "Assessment of the contribution of forests to the economy of the northeastern states of India." *International Forestry Review* 10.2 (2008): 349-361.

The localised impact of Forests on Specific States (Cont.)

Methods (1)

Economic Data by Sector provided by the government⁵ classifies Agriculture, Forestry, and Fisheries under one heading.

Alongside, *agricultural data is separately specified*, making the difference the contribution of Forestry + Fisheries.

For Inland States, we can assume that the contribution of Fisheries is not as prominent as the Forestry, and for otherwise we can estimate equal contribution. This can be further updated with the method from the next slide.

⁵http://planningcommission.gov.in/data/datatable/0814/table_66.pdf

The localised impact of Forests on Specific States (Cont.)

Methods (2)

The reliance of a local (or state-level) economy to forestry should have some correlation with the forest cover of the area⁶, i.e., a state with low forest cover will probably not have much contribution to its economy from its produce.

⁶<http://www.fsi.nic.in/forest-report-2017>

The localised impact of Forests on Specific States (Cont.)

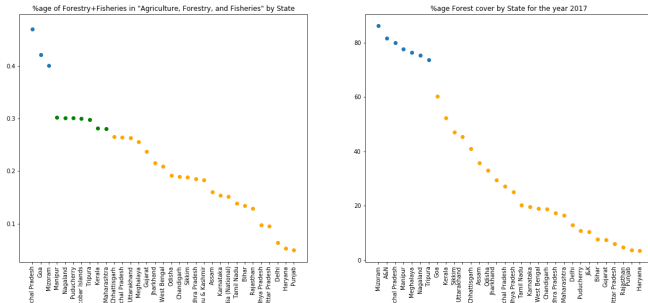


Figure 2: Agriculture by State

The localised impact of Forests on Specific States (Cont.)

Observations

- In Graph 1, 3 States are prominently less reliant on agriculture as compared to others, 2 of these are North-Eastern.
- Among the somewhat-less-reliant-on-agriculture States, on removing the coastal ones we get 5 of 8 North-Eastern States.
- In Graph 2, 7 States have a prominently higher forest coverage than the rest, of which 6 are North-Eastern.
- Meghalaya is the only State with very high forest coverage but little non-agricultural produce⁷.

⁷Barik, S. K., and S. K. Mishra. "Assessment of the contribution of forests to the economy of the northeastern states of India." *International Forestry Review* 10.2 (2008): 349-361.

Inferences

- Arunachal Pradesh and Mizoram are heavily dependent on forest produce.
- Goa has largely equal reliance on fisheries and Forestry.
- Meghalaya's situation might be indicative of forest protection laws coming into play.

Deforestation Patterns and Economic Growth

Check if gradual deforestation can be indicative of States with high forestry dependence

Conservation Policies and the GDP

Inspired by Barik, S. K. et al's work⁸ that shows the GDP contribution of Meghalaya's forest produce dropping by over 15% in 20 years, we examine if environmental policies have impacted economic growth through forestry in these states (and others)

⁸Barik, S. K., and S. K. Mishra. "Assessment of the contribution of forests to the economy of the northeastern states of India." *International Forestry Review* 10.2 (2008): 349-361.

References

- Sector-wise contribution of GDP of India: [link](#)
- Sector-wise growth of GDP of India: [link](#)
- Barik, S. K., and S. K. Mishra. "Assessment of the contribution of forests to the economy of the northeastern states of India." *International Forestry Review* 10.2 (2008): 349-361.
- Hegde, Ravi, and T. Enters. "Forest products and household economy: a case study from Mudumalai Wildlife Sanctuary, Southern India." *Environmental conservation* 27.3 (2000): 250-259.
- http://planningcommission.gov.in/data/datatable/0814/table_66.pdf
- <http://www.fao.org/forestry/country/57478/en/ind/>
- <http://www.fsi.nic.in/forest-report-2017>