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# Forest and Environment Clearances: Problems for economic growth or problems for environmental protection

**Centre for Science and Environment, New Delhi**



# Our questions:

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- 1. What has been the scale of clearances granted in the country?**
- 2. Are environmental regulations the impediment for economic growth?**
- 3. What is the cumulative impact of these individual projects?**
- 4. What is the monitoring done to ensure that the projects, once cleared, meet environmental conditions and safeguards?**
- 5. What needs to be done?**



# Scale of forest clearance

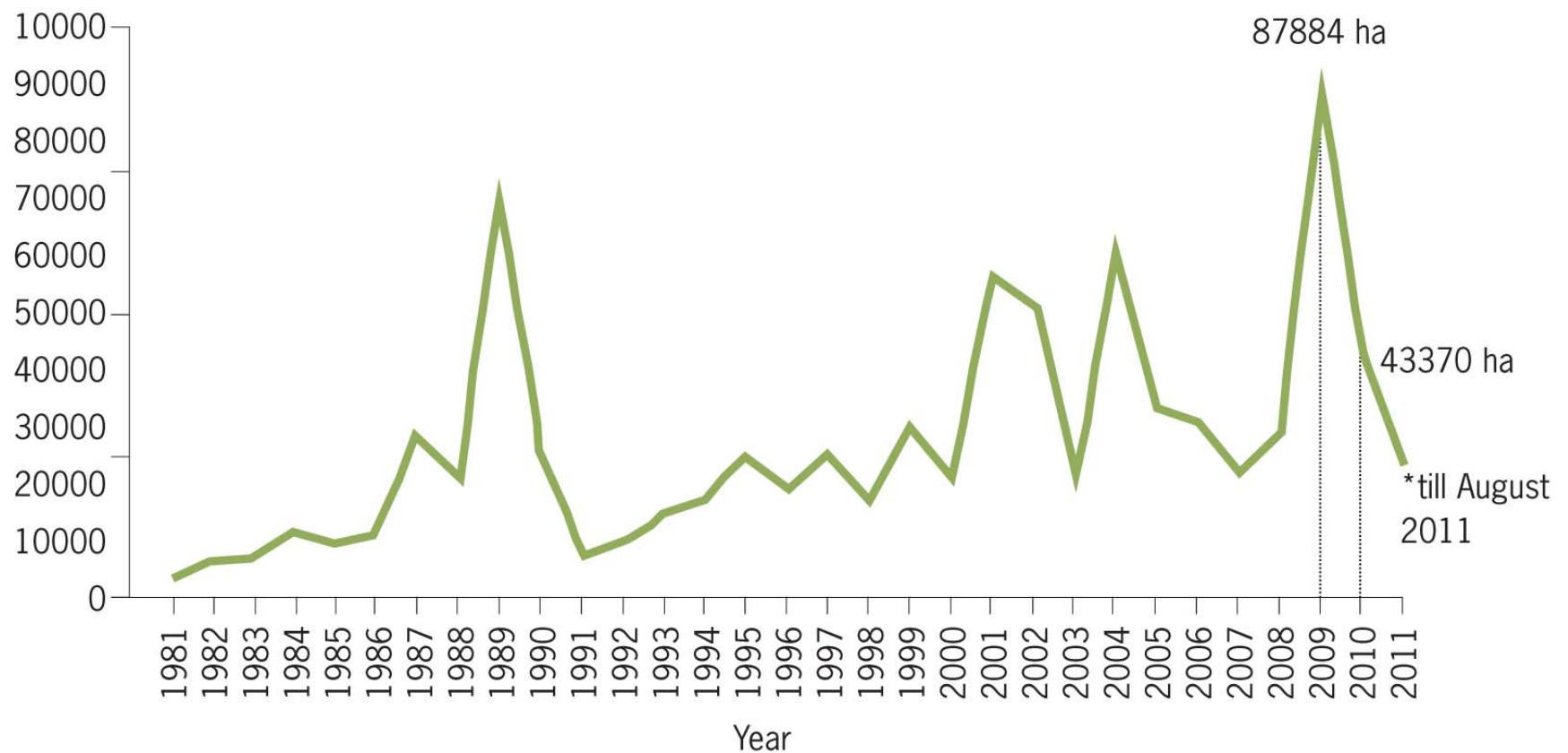
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1. Unprecedented rate of clearance in the last five years;
2. In the last five years 8,284 projects were granted forest clearance and 2,03,576 hectare (ha) of forest land was diverted -- 25 per cent of all forest land diverted for development projects since 1981. **Pace of clearance doubled**
3. In one single year – 2009 – as much as 87,884 ha of forest was granted clearances – **highest in any one year since 1981**
4. The area diverted is equal to the **average area of two tiger reserves**. It is about four times the area of a Panna or a Sahyadri or a Tadoba tiger reserve.

# Trend of forest land diverted: 1980-2011



**Figure 2: Forestland diverted\***



*\*For all projects excluding regularisation of encroachments*

# Pace of forest land cleared in last years unprecedented



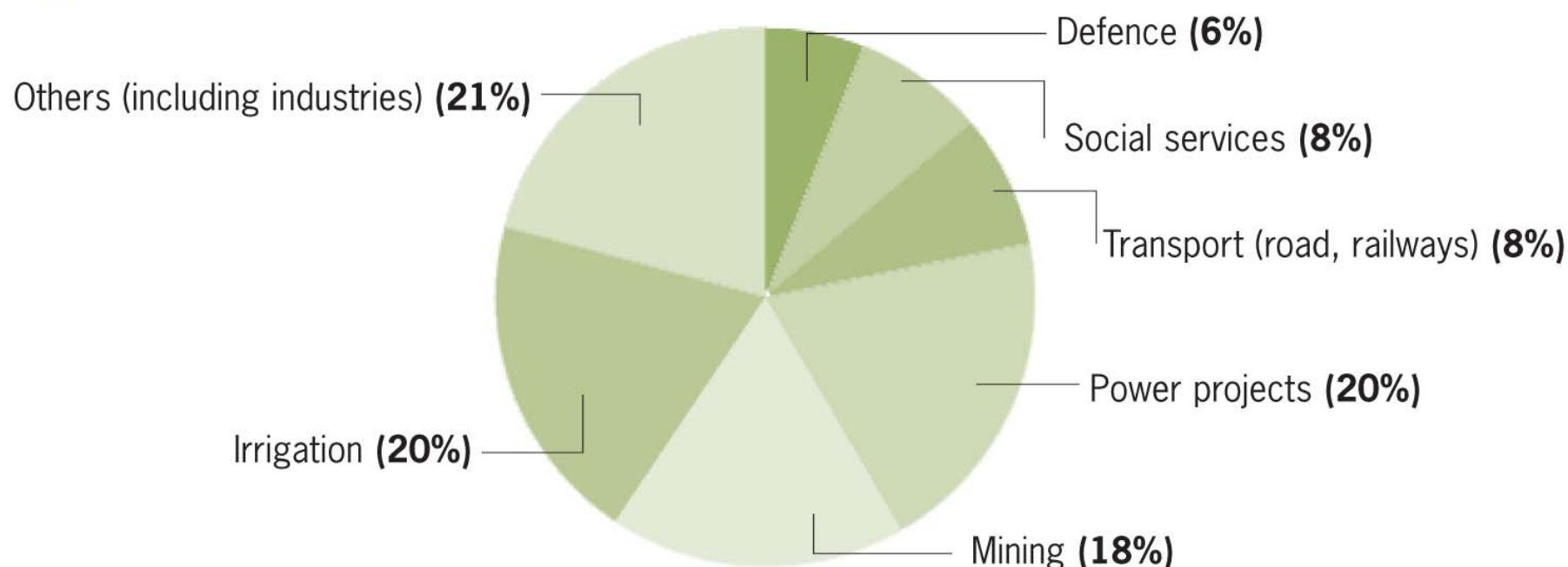
Period/Year	Forestland diverted* (in ha)
1981-92	198421.19
8 <sup>th</sup> FYP (1992-97)	84587.07
9 <sup>th</sup> FYP (1997-2002)	147397.57
10 <sup>th</sup> FYP (2002-2007)	196262.32
2007	22033.78
2008	28509.45
2009	87883.67
2010	43370.38
2011 (till August)	22627.78
<b>11<sup>th</sup> FYP (2007-2012)</b>	<b>204425.06</b>
<b>Total forestland diverted for development projects</b>	<b>830244</b>

**153881 ha — 19% of all forestland diverted for development projects from 1981 till August 2011**



# Forest clearances: last 30 years.

**Figure 3: Purpose-wise forestland diversion\*#**



\* For all projects excluding regularisation of encroachments

# For the period 1981- August 2011

## Forest clearances in 11<sup>th</sup> FYP

One-fourth of all forest diversion was for mining

	Forest area diverted (in ha)	Percentage of total forest diverted (%)
Defence	13137.9	6.4
Social services, rehabilitation and human settlement	3405.8	1.7
Transport (Road, Railways)	24387.3	11.9
<b>Power projects</b>	18898.9	9.2
Hydel	5553.7	2.7
Thermal	2199.1	1.1
Wind	2760.4	1.4
Transmission lines	8385.6	4.1
<b>Mining</b>	49904.6	<b>24.4</b>
<b>Irrigation</b>	26839.6	13.1
Others (including industries)	67851.1	33.2
<b>Total area diverted</b>	2,04,425.01	100



# Environment clearances

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## Coal

- .181 coal mines given environment clearance; the combined production capacity is at least 583 million tonnes per annum (MTPA).
- .In 2010, India produced about 537 million tonnes coal.
- .So, during last five years, MoEF has granted EC to double the coal production capacity in the country.





# Cleared..cleared..gone...

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## ⑩ Thermal power plants:

- ⑩ 267 thermal power plants adding up to 2.1 lakh MW capacity granted environment clearances. Current thermal power capacity is 1,18,409 MW.

## ⑩ Coal-thermal power plants:

- ⑩ 200 coal-based thermal power plants adding up to 1.76 lakh MW installed capacity granted environmental clearance. Current coal-based power plant capacity is 99,503 MW.

..Gone..

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## **Steel**

- 188 steel plants were granted environment clearance; adding 29 million tonnes per annum (MTPA) of sponge iron capacity and 89 MTPA of steel capacity.
- In 2010, India produced about 65 million tonnes of steel and 21 million tonnes of sponge iron.
- More than doubled the capacity in the last 5 years

..gone



## **Cement:**

- .106 cement plants with a production capacity of 190 MTPA granted environment clearance. At the end of the 10<sup>th</sup> FYP, the installed capacity was 179 MTPA.
- .The clearances will double this capacity, taking it to 369 million tonnes per annum, which is double the target set for the 11<sup>th</sup> FYP.



# Impediment to growth?

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- ⑩ It is said and said that environment is holding up economic growth
- ⑩ “India’s credit rating slipping because of green regulations”
- ⑩ “Can’t build and supply energy because of environmental delays”
- ⑩ “Coal mining held up...”



# All go. **No no-go**

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- ⑩ There is huge pressure to dismantle the current environmental regulations
- ⑩ The Chaturvedi Committee (for the GOM) wants forest clearances for coal mining to go
- ⑩ The Draft Manufacturing policy wants environmental clearances and regulations to go in manufacturing zones
- ⑩ Call is to clear projects, dilute procedures because environment “**holding up growth**”



# True or False?

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10 False

10 In all cases, environment clearances given beyond what is operational or even planned or targeted

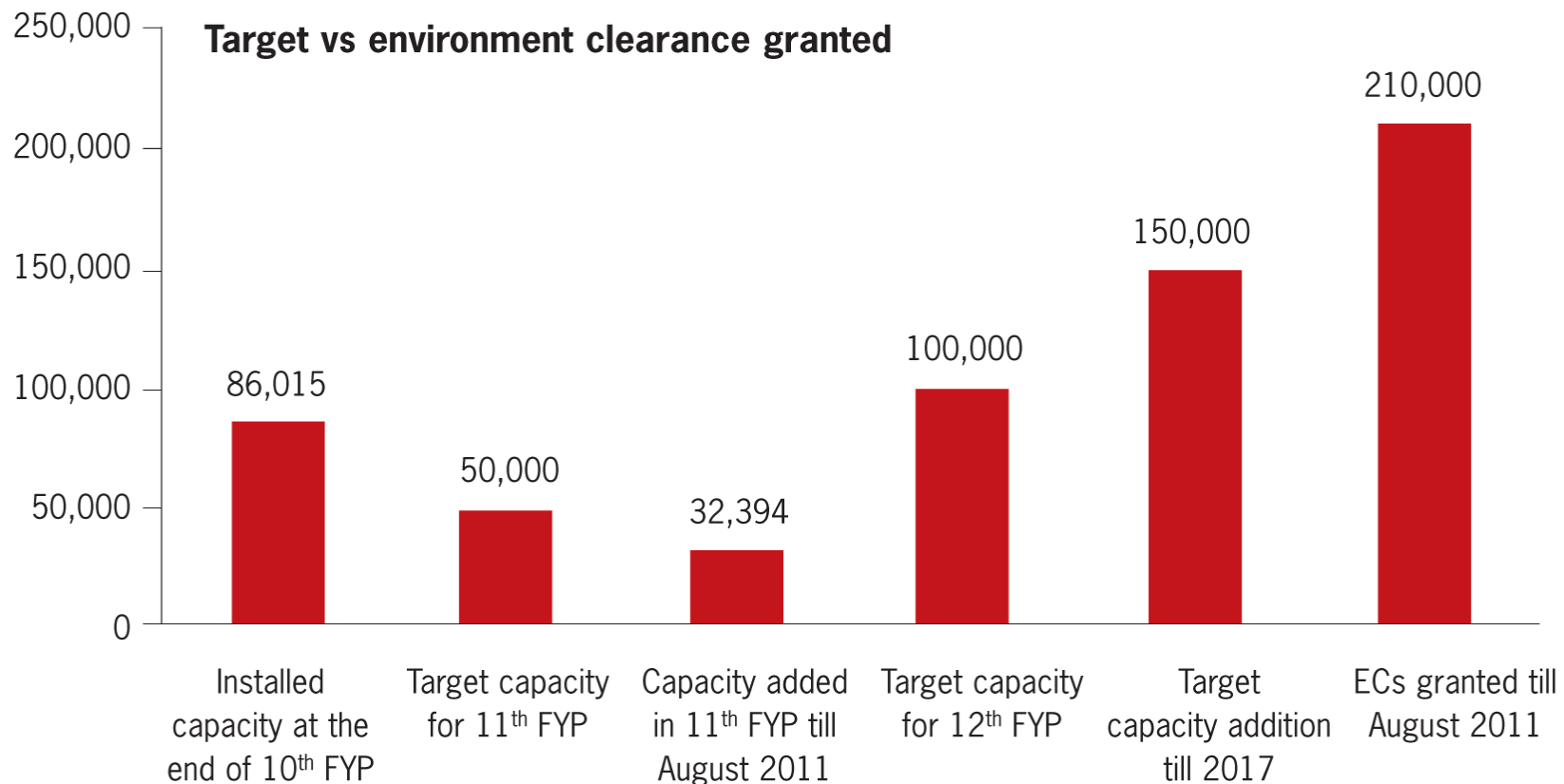


# Take thermal power

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- ⑩ Projected target for additional thermal power capacity:
  - ⑩ 11<sup>th</sup> FYP: **50,000 mw**
  - ⑩ 12<sup>th</sup> FYP: **100,000 mw**
- ⑩ In the last five years (till August 2011), MoEF has granted environmental clearance: **210,000 mw**
- ⑩ **Cleared 60,000 mw than what is proposed till the end of 2017**

# Cleared but not built: whose fault? **Only 32,000 mw built**

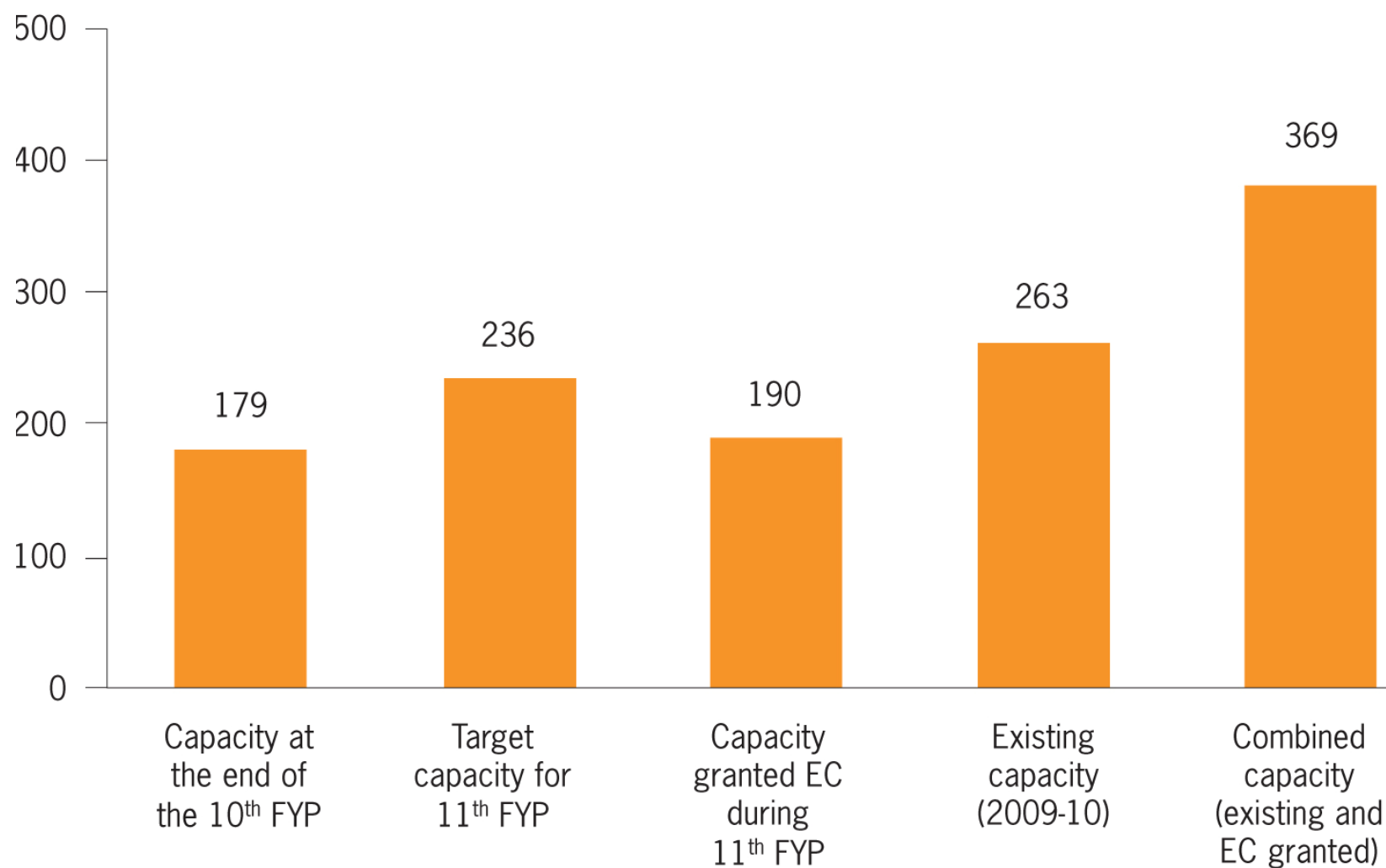






# Cement: why new projects?

**Figure 1: Target vs granted**





# Take coal mining

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- ⑩ CIL produces 90% coal; 2 lakh ha of mine lease area (including 50,000 ha of forests)
- ⑩ CIL reserves are 64 billion tonnes
- ⑩ CIL produces 500 million tonnes annually
- ⑩ MoEF has cleared 583 million tonnes in addition
- ⑩ Why is there a shortage?

# Land, water and license to pollute

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## **Land and water :**

We are seeing huge protest against this takeover across the country;

The game is:

Get land (at throwaway prices); then get water allocation (from state); then apply and get permit to pollute



# Water allocation

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## Sector-wise water allocation

Sector	Water (in million m <sup>3</sup> /annum)
Cement	88.84
Coal mining	58.3
Iron and steel	1098.08
Thermal power plants	7000
Mining	90.43
<b>Total</b>	<b>8335.65</b>

# Scam: any different from telecom?

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Land allocated for the projects cleared:

=

3.8 lakh ha

Water allocated for the projects cleared:

=

8.3 billion m<sup>3</sup> of water per year

= water needs of 250 million people

# Re-allocation of water: displacing livelihoods

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- ⑩ **Water allocated to industry/ cities**
- ⑩ Chhattisgarh: Mahanadi
- ⑩ **Amravathi: Upper Wardha project**
- ⑩ Orissa: Hirakud dam water
- ⑩ Sompeta
- ⑩ Nirma
- ⑩ All struggles against takeover of water



# Mahanadi: over-sold?

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- ⑩ Lifeline of Chhattisgarh and Odisha:
- ⑩ Last 5 years: 24 thermal power projects of 19,500 mw installed capacity granted EC
- ⑩ Water will be drawn from Mahanadi and tributaries
- ⑩ Allocated 1.55 million m<sup>3</sup> per day
- ⑩ Where will it come from?

# Top 10 thermal districts: living hell



## Top 10

Districts	Capacity of coal-based TPP (in MW)	Remark
Nellore	12260	Impact on marine ecology likely
Kutch	10195	Impact on marine ecology likely
Singrauli	10080	Critically polluted area
Cuddalore	8020	Critically polluted area
Nagpur-Chandrapur	7260	Critically polluted area
Janjgir-Champa	6043	Emerging coal-based power and steel industry hub
Angul	5734	Critically polluted area
Nagapattinam	5510	Fishing as the main occupation, the impact of sea discharge will be immense
Jharsuguda	5095	Critically polluted area
Korba	4220	Critically polluted area



# Cumulative impact: coal+ thermal and no CEPI



## Projects granted environment clearance during 11<sup>th</sup> FYP in critically polluted coalfields

District	Coal mining capacity (in MTPA)	Coal-based thermal power capacity (in MW)
Korba	77.64 +	4220
Angul-Talcher	72.17 +	5734
Hazaribagh-Chatra	97 (20% of India's current production)	4135
Singrauli	48.375 +	10080
Chandrapur	25.576 +	7260
Raigarh	19.2 +	4200
Jharsuguda	16.5 +	5095



# What needs to be done?

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## A. Forest clearances

- .The present system not working. Forest clearances are being granted at an unprecedented rate without considering the impact of forest diversion on forests, wildlife, water and the community
- .**No impact assessment reports are prepared. No system in place to check the veracity of information** based on which forest clearances are granted.
- .**There should be a complete stop to this process until a transparent and effective system is put into place.**



# Moratorium

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## B. Environment clearances

- In all cases – coal, iron ore, bauxite, limestone, thermal power projects, steel, cement – where **clearances exceed targets there should be a moratorium on further clearances.**

- In the case of thermal power and coal projects, there should be an assessment of why so much of the cleared capacity is awaiting commissioning. Projects cancelled can be considered as a swap. This swap can be done with other sectors as well.



# Reform and strengthen

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- .MoEF must use this moratorium period to strengthen and improve regulatory procedures as per the recommendations of the Supreme Court in the recent Lafarge judgement
- .MoEF must deepen the process of public assessment and scrutiny of all projects. This can be done by **greatly strengthening the public hearing process**. All filming made available on a real-time basis through streaming on the Internet
- .MoEF must revise its Environmental Impact Assessment Notification to stipulate that it will only clear projects after considering the **cumulative impact**



# Environment is development

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- .MoEF must strengthen, not dismantle, the **Comprehensive Environmental Pollution Index (CEPI)**, which allows it to scrutinize projects based on cumulative impact.
- .MoEF must strengthen its **monitoring procedures** so that affected people can scrutinise the compliance with conditions.

**Environment is not against growth. Growth is not possible with environmental safeguards**