

# MAPPING WATER SCARCITY AND POLLUTION

India's industrial zones are in water-stressed regions. Water prudence becomes critical.

### Pollution myth – Small-scale industries pollute the most

There seems to be little truth in it. Though there is no data on wastewater discharge by large, medium and small-scale sector separately, CPCB has published data on the total wastewater discharged by the entire industrial sector and the wastewater discharged by the small-scale industries separately. Based on this data, an approximate estimation was done by CSE to get some idea about the amount of pollution generated by various size-based industrial segments. To start with wastewater discharge by the large and medium scale sectors accounts for about 95 per cent of the total wastewater discharge by the Indian industry. Small-scale industries account for just 5 per cent. Of the 5 per cent wastewater discharge by the small-scale sector, more than 50 per cent is discharge by the engineering sector, whose pollution intensity in general is less than the other polluting sectors. This puts a big question mark on the claims of the regulators that SSI's are the biggest polluters in the country.

Industrial Sector	Total Indian industry (mcum)*	Small-scale Indian industries (mcum)*	Large and medim-scale Indian industries <sup>1</sup> (mcum)*
Thermal power plants	27000.9		27000.9
Distillery	37.6		37.6
Pulp and paper	695.7	396.8	298.9
Fertiliser	56.4		56.4
Steel	396.8		396.8
Sugar	149.7		149.7
Textiles	637.3	164.3	473.0
Engineering	1551.3	775.6	775.6
Organic chemicals	36.5	21.9	14.6
Others	167.2	58.0	109.1
Total	30729.2	1416.6	29312.6

Note: \*Annual wastewater discharge (million cubic meters)  
<sup>1</sup> Wastewater discharged by large and medium scale industries = Total wastewater discharged - Wastewater discharged by SSI.  
 Source: Data on total wastewater discharge from "Water quality in India (Status and trends) 1990 - 2001" published by CPCB. Data on wastewater discharge for SSI from "Annual Report-2001", CPCB. For large and medium scale industries, estimation done by CSE.

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1. Beas
  2. Ghaggar
  3. Yamuna
  4. Burhi Ganga
  5. Ram Ganga
  6. Deora
  7. Gomti
  8. Damodar
  9. Subarnarekha
  10. Baitarani
  11. Brahmani
  12. Mahanadi
  13. Musi
  14. Palar
  15. Pennaiyar
  16. Cauvery
  17. Vellar
  18. Vaigai
  19. Periyar
  20. Krishna
  21. Dudh Ganga
  22. Godavari
  23. Bhadar
  24. Sabarmati
  25. Banas
  26. Parbati
  27. Betwa
  28. Narmada tributaries
  29. Son
  30. Chambal tributaries

### Water ways: How industries pollute

- Through the discharge of contaminants into water bodies
- Through long-term transport, dispersal and deposition of gaseous emissions
- Leaching of contaminants through landfill sites

### Effects: industrial water use

- Depletes groundwater reserves.
- Puts pressure on local surface water bodies.

