FORUM FOR POLICY DIALOGUE ON WATER CONFLICTS IN INDIA

Water Conflicts in the Context of Increasing Urban and Industrial Demand

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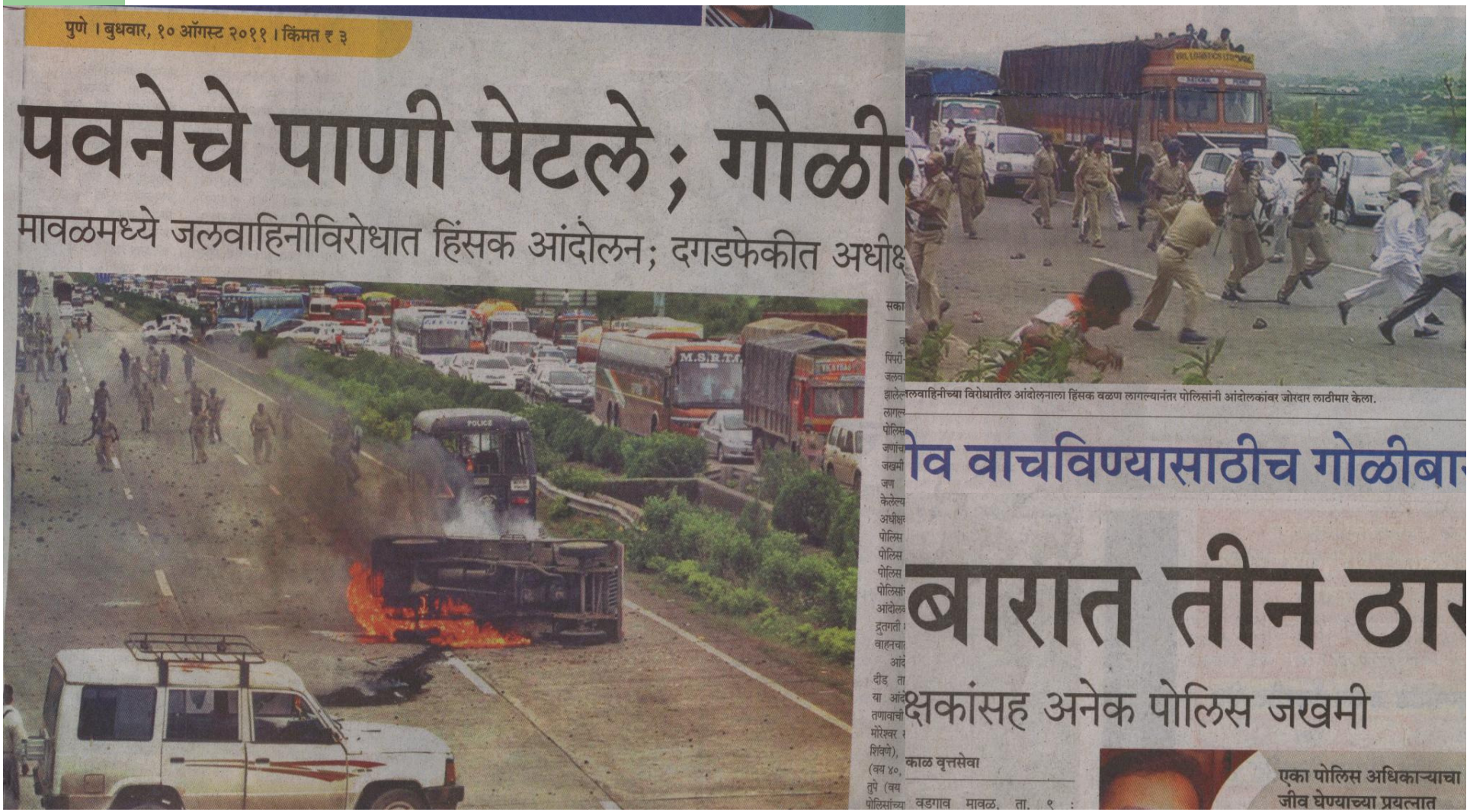
Launch of report 'Excreta Matters' on urban water-sewage

CSE, New Delhi; 8 June 2012; YASHADA, Pune

In Pune's own backyard: Conflict over Pavana water



पुणे । बुधवार, १० ऑगस्ट २०११ । किंमत ₹ ३

पवनेचे पाणी पेटले; गोळी

मावळमध्ये जलवाहिनीविरोधात हिंसक आंदोलन; दगडफेकीत अधीक्ष

जलवाहिनीच्या विरोधातील आंदोलनाला हिंसक वळण लागल्यानंतर पोलिसांनी आंदोलकांवर जोरदार लाठीमार केला.

व वाचविण्यासाठीच गोळीबा

बारात तीन ठा

सकांसह अनेक पोलिस जखमी

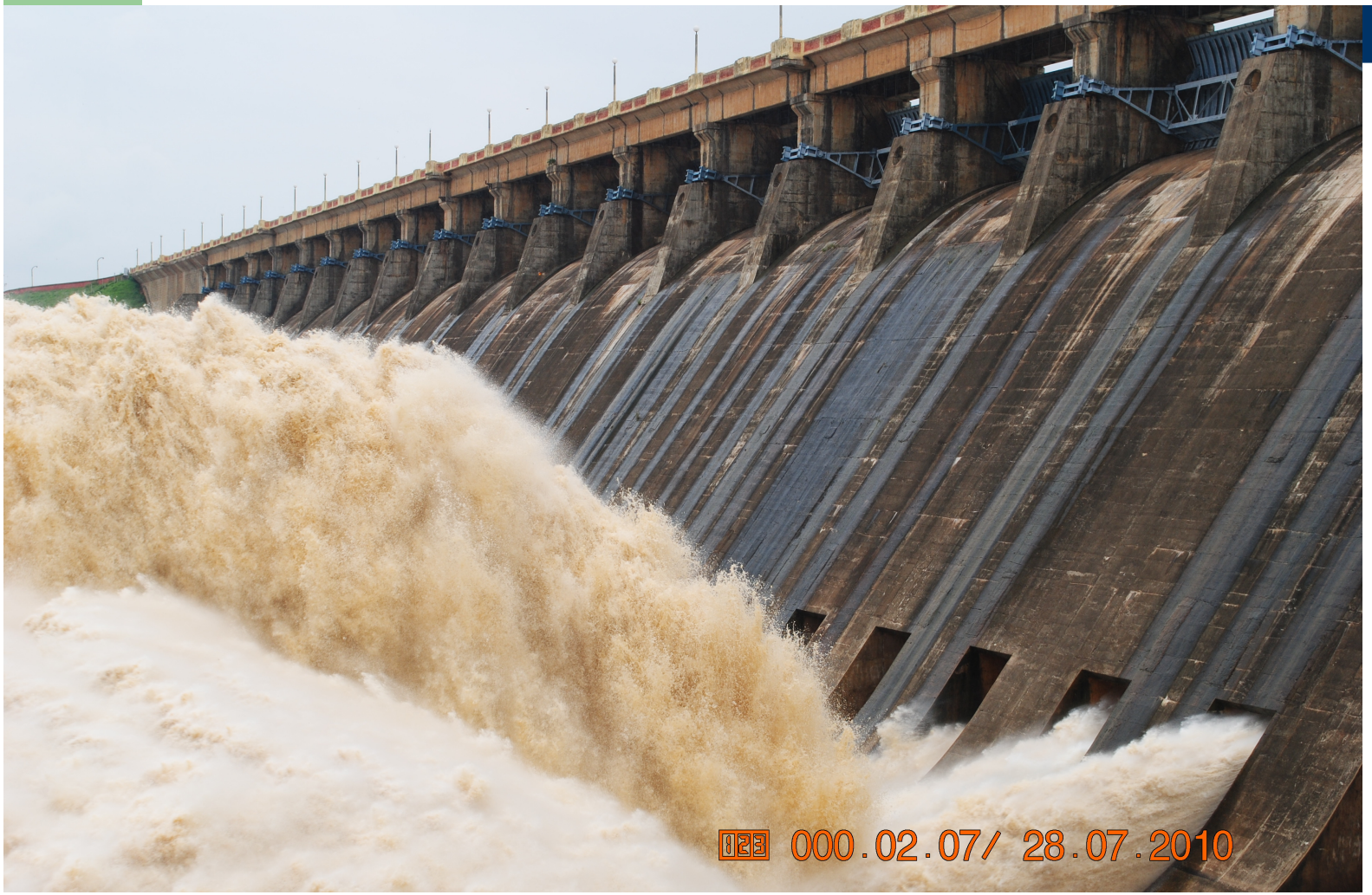
काळ वृत्तसेवा

एका पोलिस अधिकाऱ्याचा
जीव घेण्याच्या प्रयत्नात

Ganga canal water for Delhi

Urban needs versus rural livelihoods

Hirakud dam in Odisha

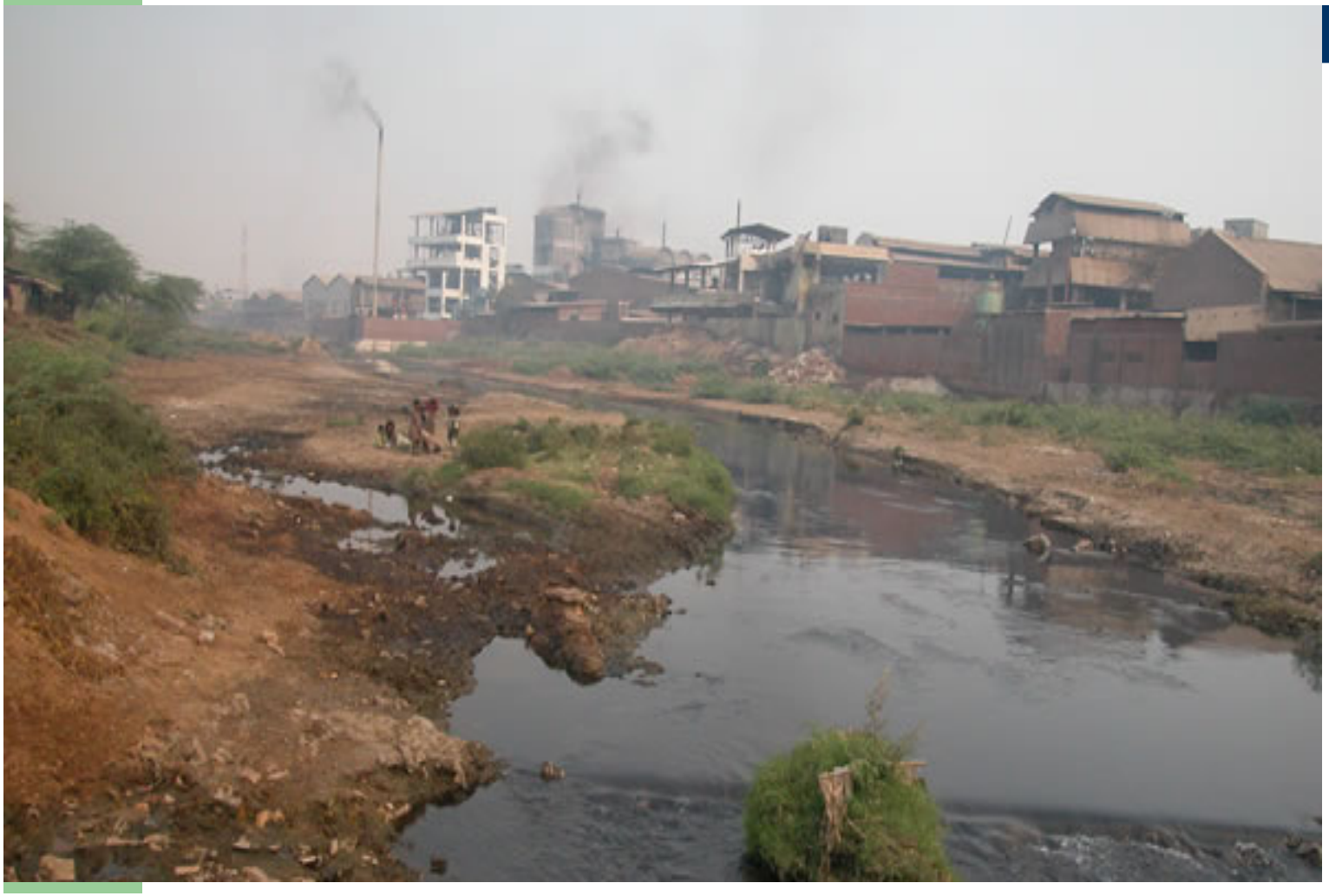


Irrigation versus increasing industrial use

Chennai, Tamil Nadu

Conflicts in the peri-urban areas between those who would mine groundwater to supply to the city versus those who want to use it for irrigation

Khari river, Gujarat



Dumping of industrial effluents from industrial estates in and around Ahmedabad

Musi river, Andhra Pradesh

Urban sewage and industrial effluent have reduced the river to a sewage drain

Conflicts mainly relate to:

- Sourcing of water
- Inter-sectoral allocation
- Equitable access
- Pollution and water quality problems created by dumping of untreated urban sewage and industrial wastes
  - The quality of return flows
- Reform process: mode of delivery, pricing, etc.

Increasing urban and industrial demand

- Increasing importance of urbanisation
  - growth in urban population
  - increasing urbanisation of rural aspirations and lifestyles
- Domestic and industrial water use:
  - In 2000: about 8% of total water use
  - Projected for 2050: about 20% of total water use
    - Likely impact of this on sewage and water quality

Diversions and re-allocations

- Increasing diversions of water from agriculture to industries and urban use
- Maharashtra experience:
  - In 2003 the government limited the powers of the Irrigation Department to reserve water for non-agricultural use to 25% of the storage in the dams
  - Set up a High Power Committee with the powers to sanction demands for reservations for more than 25% for non-agricultural uses
  - About 1500 Mm^3 of water has been diverted from agricultural use to urban and industrial use from 2003 to 2011
    - Affecting 357,600 ha of irrigated agriculture

Justice: the central issue

- The issue of justice is central in all types of water conflicts:
  - Equity within a particular water use or sector
  - Allocation of water across different sectors
- Water justice issues are different in both these scenarios
  - Equity within a particular sector shows how egalitarian the water distribution norms are
  - Allocation of water across different sectors is related to the developmental pathway chosen by the state

Way forward: Need to change mindsets

- Water is an ecosystem resource
  - Water is a resource embedded within ecosystems; not a freely manipulable resource; nor is it a resource to be indiscriminately mined
  - Concept of environmental flows: flow required for the preservation of ecosystem services
  - Issues related to water quality: who is returning how much of water to the ecosystem and in what condition
  - Water is both a local and non-local resource
  - Unidirectionality and asymmetric relationship between upstream and downstream

Way forward: Need to change mindsets

- Water is a common pool resource
  - Common pool character of water irrespective of what property regime it operates under
  - Water is not a public good
  - Divisible and amenable to sharing
  - Has multiple, competing uses and users and so there are resultant trade offs involved
  - Inherent problem of excludability; the exclusion costs involved are often very high

Way forward: Prioritisation of water uses

- Changing water use prioritisation
  - A different conceptualisation of prioritisation
    - Sequential and proportional
  - Need to disaggregate what constitutes "domestic" water
    - Need to separate out luxury water

Way forward: Water for industries

- The nature of the industrial entity like size, ownership structure, products, pollution impact and extent of reuse/recycling of water should be considered in deciding allocations to industries
- Industries should show that all other measures like recycling and re-use, efficiency measures in processes, local water harvesting are all exhausted
- Industries should invest in water saving in agriculture and only the saved water should be allocated to industries

Way forward: Investments, institutions & law

- Public investments for provisioning of water, sanitation, sewage treatment
  - With clear targets and participatory monitoring
- Nested institutional framework
  - Based on the principle of subsidiarity: starting from micro watersheds/villages to sub-basins and basins
  - Informed multi-stakeholder dialogues and negotiations
    - Access to reliable data
    - Water resource literacy
- Need for a water framework law