

Sustainable and Affordable Sanitation Solutions for Small Towns
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Lecture – 06
Environmental Policy

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Today we are going to talk about something about policy, something about Environmental Governance in India with respect to solid and liquid waste management. What I am going to do is I am going to give you an overview of environmental governance, how it is started from where it started and then I am going to talk about two cases particularly. I think few of them said that they want to understand why policy fails in practice.

So, I am going to talk about two cases particularly, one is national urban sanitation policy which was released launched in 2008 by Ministry of Urban Development. And as sir said that the policies are near prescriptions, they are just directions and actually cities and states have to adopt particular rules and regulations to implement those policies.

So, I am going to talk about how this particular policy National Urban Sanitation Policy, a kind of failed at city level implementation. The second case that I am going to talk about is of environmental impact assessment notification. So, this particular notification what it did was it came into existence around 1970s where environmental externalities of

a particular development project were asked to be accounted in the overall cost of the development project. That means, developers have to pay for the any environmental cost and I am going to talk about 2006 environmental assessment notification that makes domestic polluters like you and me also responsible for the pollution. As in they have to manage their solid waste and liquid waste within the promises of their building.

So, this particular case I am going to talk about in context of Bangalore and how it kind of led to adoption of mixed model of sewage management. So, there is centralized system as we discussed yesterday and today also we going to talk about, there is a centralize model of wastewater management where the government, mostly urban local bodies or state water and sewerage board, they are responsible for investing capital maintaining such kind of systems. And then there is decentralized system, where the private parties like you and me, commercial properties, Technoparks, all these institutions and domestic polluters are responsible for managing their solid waste putting capital investment and managing maintaining an ONM cause for that.

And how this model kind of address certain issues of Bengaluru city and this kind of it failed in certain other aspects.

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Environmental Governance

- Fourth five year plan (1969-1974) : Connection between economic development and environmental externalities
 - Focus on water pollution in cities
 - Recommended comprehensive appraisal of environmental issues in development projects
 - Establish central legislation and a central board for water pollution prevention
- 1970s: Institutionalisation of this understanding
 - June 1972: Stockholm Conference
 - Feb. 1972 constitution of National Council for Environmental Policy and Planning



So, I will just give you an overview when the environmental as a concern came into picture in 5 year plans, all of you are aware of what are 5 year plans right. Planning commission, it kind of gives you a direction for the entire state based on the resources

available based on the previous years progresses and what were the shortfalls. Planning commission gives you an overall picture and it kind of gives the direction to state and centre that this is how you can proceed for next 5 years.

So, the environmental concerns actually started to or begin to reflect in the 5 year plans from the 4-5 year plan on words ok. And these connections between the development and environmental externalities were first understood with respect to cities. It was not with respect to overall environment that we have to save and we have to conserve, it was the need because they were thinking that urbanization is actually impacting water bodies. So, this was in concern in connection to the urban cities, in concern to the urban areas.


So, the focus was on water pollution and the recommendation were to again to upraise all the development project from the lens environmental of degradation and the lens of environmental conservation. And it led to establishment of central legislation lot of water related legislation came into existence and we had constitution of Central Pollution Control Board, State Pollution Control Board. So, 1970s onward, i don't know how many of you are aware of Stockholm conference that was held in 1972 and then there was in February 1972 we had Government of India constituted an committee on National Council for Environmental Policy and Planning.

These two particular events led to development of a lot of legislations in during following years in 1970s and in 1980s.

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Legislative Framework

- These formed basis of State environment boards (known as water boards) and Legislations
- Water and Air
 - Water (Prevention and Control of Pollution) Act 1974 ; Water Pollution Cess Act, 1978 ; Air (Prevention and Control of Pollution) Act, 1981
- **Accounting for Environmental Externalities in Development Projects/Programmes**
 - 1977 : Environment Impact Assessment (EIA) for major and minor irrigation/dams projects
 - 1993: EAP (Environmental Action Programme) was formulated for improving environmental services, integrating these into development programmes
 - 1994 : EIA notification making Environmental Clearance for certain projects. Environment Impact Assessment Notification, 2006 and its subsequent amendments



Umbrella legislation : Environment (Protection) Act, 1986 (EPA) which came into force after the Bhopal Gas Tragedy

So, as I said there is Water Act, Air Act and then there is accounting for environmental externalities and development project which was first understood for big dams and big irrigation projects in 1977. And then came 1993; in 1994 EIA notification came into existence where environmental clearances required for all the projects and development projects.

And as I mention the 2006 EIA notification which makes domestic polluters also part of this environmental clearance process. And then we had a umbrella legislation which is Environmental Protection Act and most of the Acts now come under this EPA Act.

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| Environmental Governance Structure | | | | |
|------------------------------------|--|---------------|--------------|----------------------------------|
| POWERS OF POLLUTION CONTROL BOARD | | | | |
| S. NO. | POWERS | WATER ACT | AIR ACT | HAZARDOUS WASTE MANAGEMENT RULES |
| 1 | To obtain information | Section 20 | Section 25 | Section 20 of E(P) Act |
| 2 | To take sample | Section 21 | Section 26 | Section 11 of E(P) Act |
| 3 | To entry & inspection | Section 23 | Section 24 | Section 10 of E(P) Act |
| 4 | To grant consent / authorization | Section 25/26 | Section 21 | Section 5 |
| 5 | To withdrawal consent / authorization | Section 27 | Section 21 | Section 6 |
| 6 | Powers to carryout some work | Section 30 | | — |
| 7 | Emergency (remedial action) | Section 32 | Section 23 | Section 9 of E(P) Act |
| 8 | Powers to restrict through courts | Section 33 | Section 22 A | Section 16 |
| 9 | Power to give directions | Section 33 A | Section 31 A | Section 5 of E(P) Act |
| 10 | Power to declare pollution control area | Section 19 | Section 19 | Section 6 of E(P) Act |
| 11 | Power to enforce standard from automobiles | — | Section 20 | — |

Source: [Kamyaotra, n.d.]


So, this you are aware of that till 1985 we did not have any ministry at the central level, we had department of environment. So, in 1985 only we had MOEF and under that CPCBs and SPCBs were formed which had kind of responsibility of data collection policy implementation, standard formation and policy in regulations.

So, these are the particular powers of pollution control boards, I am not going to going to detail.

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Environmental Governance

- Constitutional Framework :
 - Forty-second Amendment Act, 1976:
 - **Article 48A** : Environment became one of the Directive Principles of State Policy
 - **Article 51A(g)** - list of fundamental duties of citizens
 - the Supreme Court and the High Courts can be directly approached under Article 32 and Article 226 of the Constitution of India in case of matters relating to environment.
- Policy Framework
 - National Environmental Policy- 1986 : first initiative in strategy-formulation for environmental protection in a comprehensive manner




Natioanl Urban Sanitation Policy -2008

So, what are the constitutional frameworks- under the 42nd Amendment Act, the environment kind of became part of the directive principles of the state. Before that state was not at all concerned about environmental conservation and it also became part of the list of fundamental duties of citizen, that every citizen is responsible to maintaining and conserving environment. And Supreme Court, this is very important that incase of any environmental related matter, any citizen can directly go to Supreme Court and High Court and directly file Public Interest Litigation, PILs. Policy framework we had the National Environmental Policy which first came into 1996 and with respect to sanitation we have National Urban Sanitation Policy.

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Role of Judiciary :Doctrines Evolved by Courts in India

- **Public Trust Doctrine (1996):**
 - State and its instrumentalities as trustees
 - have a duty to protect and preserve natural resources.
- **Polluter Pays Principle (1996) :**
 - polluter is liable for the compensation to the victims as also for the cost of restoring of environmental degradation.
- **Absolute Liability Principle (1987,2000)**
 - adopted to compensate victims of pollution caused by inherently dangerous industries such as dams, Gas leakages



Source: (Kamyotra, n.d.)

Role of judiciary has been very important very crucial in India. So, these are the doctrines that have been evolved by courts in India like public trust doctrine which was in case in 1996, where the court held that state and its other institutions are actually trustees, they are maintaining natural resources on behalf of us on behalf of public.

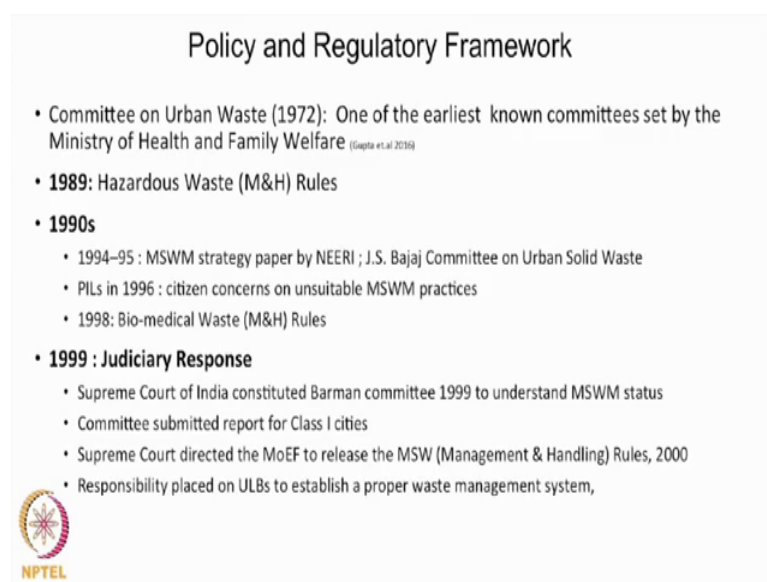
Then polluters pay principles are you aware of what is polluter pay principle? So, this also; this particular principle was also kind of given by the courts of India, and then absolute liability principle; that means, there are certain inherent dangerous industries like dams and gas leakages. So, in that they has to have a compensate inbuilt when you designs such projects ok. Whenever you are planning such kind of projects you need to have a compensation inbuilt in those designing aspects.

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Next I am going to talk about little bit I am going to give you a timeline how solid waste management the policy in regulating framework, how it has evolved over the period of time.

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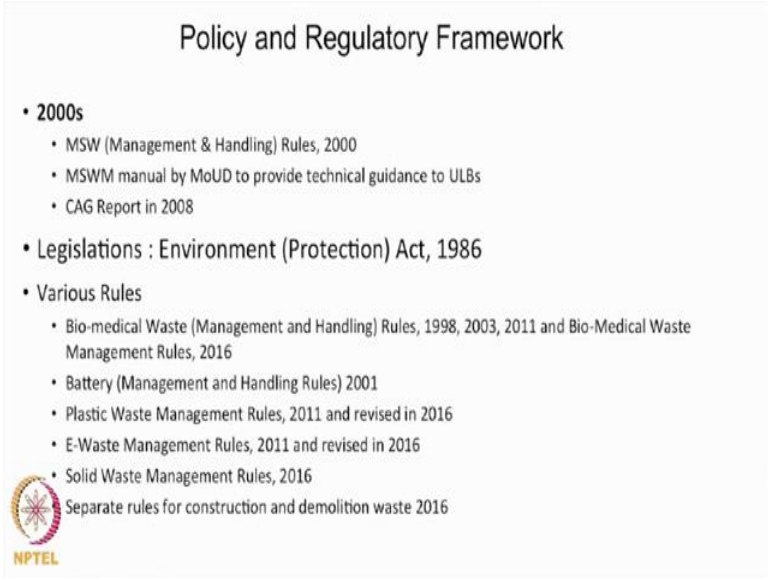
So, very first committee that was there on urban waste was in 1970s. So, you can understand in 1970s was a very crucial period when lot of environmental related you know committees legislation and lot of institutions were kind of made up by Government of India.

So, one of the earliest known committee on solid waste was by Ministry of Health and Family Welfare in 1972. Till that time sanitation, public health, water supply, solid waste were part of Ministry of Health. It was only after 1970s that the sanitation moved and water supply moved to ministry of that, time it used to be known as ministry of works and supply which later became Ministry of Urban Development.

So, this shows that initially these concerns were part of, these were understood as a basic services social services, part of health and family welfare they were connected to health, they were understood as that failure in these aspect can impact public health, later on it became part of the urban development scenario. So, then again this followed lot of waste rules 1989 first we have hazardous waste rules, 1990s there was a committee and due to the concerns of citizens on unsuitable practices in solid waste, they were lot of PILS so, that were filed in 1996 from different parts of the country that led to Supreme Court deciding that we need to have a committee to understand what kind is, what is the status of municipal solid waste management in class 1 cities.

That led to formation of rules 2000 on solid waste management and these rules actually place responsibility ultimate responsibility on ULBs.


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The slide is titled "Policy and Regulatory Framework" and lists various regulations and legislative acts. It includes a bulleted list of items from the 2000s, including MSW rules, MSWM manual, CAG report, Environment Protection Act, and various waste management rules. The NPTEL logo is visible in the bottom left corner.

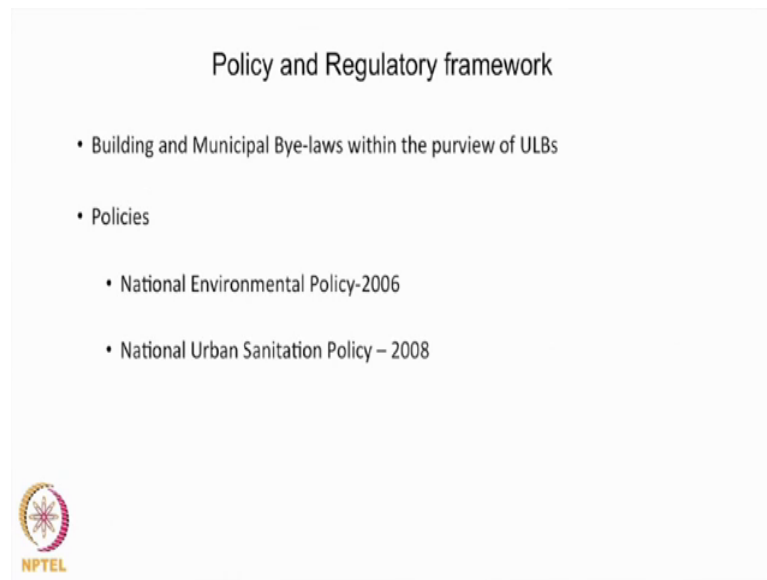
Policy and Regulatory Framework

- **2000s**
 - MSW (Management & Handling) Rules, 2000
 - MSWM manual by MoUD to provide technical guidance to ULBs
 - CAG Report in 2008
- **Legislations : Environment (Protection) Act, 1986**
- **Various Rules**
 - Bio-medical Waste (Management and Handling) Rules, 1998, 2003, 2011 and Bio-Medical Waste Management Rules, 2016
 - Battery (Management and Handling Rules) 2001
 - Plastic Waste Management Rules, 2011 and revised in 2016
 - E-Waste Management Rules, 2011 and revised in 2016
 - Solid Waste Management Rules, 2016
 - Separate rules for construction and demolition waste 2016

 NPTEL

So, this I do not have to go through these are the regulations, legislations which are under solid waste management.

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At municipal level municipality can form building bye laws as I said yesterday that town planning department can form building bye laws and municipality also. And there are these policies that comes under which solid waste is there.