

## Session I

# LEGISLATIVE REGULATION OF HAZARDOUS SUBSTANCES AND PROCESSES

In this session the basic issue presented for discussion by Dr. Indrani Chandrasekharan was the need for an umbrella legislation to regulate hazardous substances and processes. The argument for umbrella legislation was built on a two pronged reasoning. One, that legislative provisions with regard to hazardous substances and processes were scattered over a large number of statutes, rules and notifications. This widely scattered regime leading to a variety of legislative enunciations and executive interpretations of hazardousness. And two, the absence of a regulatory regime for several hazardous substances and processes. This legislation the presenter opined should be divided into two parts whilst one part should contain the definition of hazardous substances and processes the other part should contain the regulatory regime. Great emphasis was laid on the need to exactly provide what was being regulated. In advocating the umbrella legislation Dr. Chandrasekharan strongly disputed the contention that problems in the realm of law resided not in the arena of legislative prescriptions but in the region of implementation. Her viewpoint being that appropriate legislative prescriptions were not in place and the same should be worked upon.

In the responses to the theme presentation whilst some discussants were of the opinion that a uniform comprehensive legislation would improve matters, most others continued to stress the need for enforcement to the extent that one speaker wanted legislative activity to be halted in the absence of

enforcement. General suggestions on the law making process were made i.e. norms which people have to follow should be laid down with their participation.

A major query on the basic concept of a umbrella legislation came from Justice Banerjee who pointed out that existing statutes regulating hazardous substances and processes also dealt with other matters, for example the legal regulation of hazardous substances and process in the Factories Act was imbued with the ideology of labour welfare. Upon the enactment of the umbrella legislation. What happens to those matters? Can they be severed from the rest and still retain the ideological emphasis? If not, then would not unification occur at the cost of irrecoverably losing some legislative prescriptions.

Interestingly though there was an overwhelming emphasis on enforcement, all speakers were not seeking the policing model of enforcement alone. Whilst one speaker informed of the successful utilisation of the persuasive Model in West Bengal another stressed on the need to cultivate self-regulation. Laws he felt would be followed when people felt morally rather than legally bound to follow them.

## Remarks of the Chairperson Hon'ble Justice Calla of the Gujarat High Court

I may make it clear that human existence is the supreme truth and naturally the supreme purpose. And if truth of this purpose is to be achieved then we must strike a balance between the development of the industries and the problems of the hazards, which are there in the environment. We have a lot of laws the question is of their implementation. As all of you know our Constitution itself is based on the concept of trinity that is Brahma, Vishnu and Mahesh. The legislature, which is the creator, is comparable with Brahma, the Executive who maintains creation, is comparable with Vishnu and the judiciary, which has to work, as a watchdog is comparable with Mahesh.

The motive force behind recent judicial activism or rather dynamism is the faith of the people. There must be coordination between legislature, executive and judiciary if at all we mean to achieve the supreme purpose to which I referred in the very beginning.

### **Lack of Coordination**

I am reminded that head of the family he had to go to attend a function and he had just instructed his daughter and daughter in law that the pant which I want to wear in today's function is four inches long, make it short. He gave his instruction to both of them. The daughter cut it four inches, the daughter in law not knowing that it had already been done, she again cut it four inches. So at the time when the head of the family wanted to use it was eight inches short. The question is everybody was interested in achieving the object and doing the job but there was no coordination. **It was this lack of coordination between the various functionaries, which creates the problem, and therefore, we have to see that while implementing these laws, there must be sufficient coordination.**

We must identify factors, which contribute to the pollution of the environment, and then its protection. Instead of discussing the harmfulness of hazardous substances or the growth of pollution, it will be better if we concentrate on devising concrete suggestions to overcome the problems we are facing.

### Remarks of the Co-Chairperson: Mr. Vijay Sharma

I recapitulate what transpired in the inaugural session. This workshop is an effort at promoting informed and participate law making.

It aims

**Firstly:** to examine both the adequacy of the statutory framework and to devise measures, which could deal with the environment problem on a war footing.

**Secondly:** to identify difficulties on the management front, namely the inter-departmental coordination and privatisation of activities relating to environmental protection.

**Thirdly:** in the overall approach to be adopted, some distinction had to be made whilst dealing with the existing industry and the attendant human or employment programs and problems. And planning for the new industries guidelines. An important innovation suggested yesterday was the placement of an independent environment expert in the manner of a labour welfare officer to look after the environmental dimension in industries.

**Fourthly:** great emphasis was laid on the strengthening of the State Pollution Control Boards. Also because this would help in the uniform application of laws.

**Fifthly:** there was cognizance of the crisis of character and the need for attitudinal changes

**Sixthly:** to constitute a high level expert committee from different disciplines to follow up on any recommendations.

The mandate as emerging from the inaugural session would be how to ensure an effective mechanism for making law work in keeping with the precautionary principle and the doctrine of sustainable development.

#### **Why our statutory framework fail to link with real life situations.**

In November, 1994 in Kardampuri Delhi a rag picker lighted a small fire, using discarded plastic possibly containing some Organo metallic compounds on a November evening to warm himself and the ensuing toxic fumes killed four persons. A similar kind of incident occurred in a plastic market in Jwala Puri Delhi in June 1995. Yet another incident had taken place two or three years ago, in Mongolpuri in Delhi when some gas cylinders rolled over, exploded and killed. We were left clutching the Workmen Compensation Act in one hand and the Public Liability Insurance Act in the other

#### **Thematic Presentation Dr. Chandrasekharan:**

The presentation focuses on describing the existing law. Such a description is necessary before any opinion on adequacy or inadequacy is expressed. Then we look at some grey areas especially examine those situations where we want legislation's to work but are unable to obtain results.

## The Legal Regime

Basically there are twelve Acts which deal with the subject of hazardous substances. They cover safety, health, trade environment part of the handling. If their date of inception is examined the oldest one is something like a hundred twelve years old. No Act is complete without a set of rules. Each Act is accompanied with either a single or several sets of rules. For example the Storage and Import of Hazardous Chemicals Rules, the Import and Export, Storage of Hazardous Micro-organisms Rules, Hazardous Waste Management and Handling Rules have all been made under the Environment Protection Act.

Statues Relating to Hazardous Substances	
Ex plosives Act	1884
Boilers Act	1923
Petroleum Act	1931
Power Alcohol Act	1948
Factories Act	1948
Inflammable Substances Act	1952
Atomic Energy Act	1962
{Regulation} Act	1983
Dangerous Machines	
Environment Protection Act	1986
Motor Vehicles Act	1988
Public Liability Insurance Act	1991
National Environment Tribunal Act	1995

## Perspectives with Regard to the Legal Regime

What is the general perspective of people who are not very familiar with every section and subsection? How do they feel about and the Acts and rules on the subject? One feeling that everybody has is that laws either overlap or contain conflicting requirements. Next stress is laid on poor accountability norms, which lower confidence in the system as a whole. A number of NGO's complain of the poor access to information.

Many feel the environment is not taken into account when laws on hazardous substances and their management are framed. There is wide variation in the prescriptive norms. The control regime simultaneously includes legislations, which are up to date and 112 years old. The obsolete nature of some norms caused a high powered expert committee of the Ministry of Industry to recommend that these rules, specially the Petroleum Rules, the Gas Cylinder Rules and the Static and Mobile Vessel Rules had to be updated.

There are a large number of enforcement agencies and who differ in their understanding as regards the enforceability of a legislation. For example if polyvinyl chloride is subject to regulation is it being regulated only as a chemical or are products containing these chemicals also subject to regulation.

### **The problem of lack of regulation**

We have to be very careful when legislations are framed as to what we are going to regulate. Coming to the legal aspects we need to examine what are the subsisting rules today and how they perceive our concerns. Many people have said there is a plethora of legislations yet we know that on some aspects of hazardous substance management there is no existing statute. In our refineries, when the streams come out they are not classified because we don't have legislation requiring such classification. Many aspects of cryogenic substances need regulation. The government has required an Expert Committee in the Ministry of Industry to specially look into this aspect because we have had major accidents with cryogenic substances.

### **Overlapping Legislations**

Along with the problem of no legislation we have the difficulty of overlapping legislations. For example the Factories Act defines hazardous processes and takes into account, hazardous mechanical processes. Whereas the Environment Protection Act takes cognizance of processing in the chemical process industries alongwith the regulation of hazardous chemicals above certain quantities.

### **Absence of standards, practices, guidelines**

Apart from these you have lack of standards and guidelines on course of practice. Very surprisingly, none of our regulations require that either a standard or a code or practice ought to be followed. At best a procedure has been laid down for testing. Internationally and specially now in the UN an Expert Committee has been specially constituted for this purposes. The approach is to standardise the various legislations on the subject of hazardous substances to see that the prescriptions are harmoniously applied throughout the world.

### **Formulation of Guidelines Standards Practices**

In this process; we have to be very sure what are those codes, practices and standards that we need to follow.

- We need sustainable management of the environment for hazardous substances.
- We have to take preventive approach to managing risk by assessing substances before their introduction because in our country we do not have any prescriptions. Whilst all over the world these prescriptions have been in place for the last three decades we are still grappling with the idea whether such an introduction is feasible? And whether it is possible in a country like ours?
- We cannot have different prescriptions applied at different State levels or different authority levels for the same thing.
- There is a need to be consistent.
- **We have to design a legislation that takes care of this aspect.**
- What is the management required according to the levels of risk that we find in the life cycle of the hazardous substances. Now even an excess of water when it gets into the wrong passages is going to be hazardous and dangerous to the life. However it is not possible to control all inherent hazards of a substances. There has to be a cut off level beyond which substances should be regulated.
- There have to be various levels of management depending upon the potential risk or inherent hazard of the property or substance.
- We need to be consistent with international standards and obligations because slowly the subject is getting into trading. All the prescriptions being put forth today on hazardous substances are as relevant to trade hence we have to be very careful as to what we prescribe. Performance standards shall be used to control selling.
- We need to provide coordinated controls in supply, have a reporting system
- And have at least one organisation, which is responsible for hazardous substances.

### **Definition of Hazardous Substance**

In the definition provisions hazardous substances should be defined to mean: hazardous chemicals, hazardous wastes and hazardous micro-organisms and genetically manipulated organisms.

Such a definition covers the substances that are virulent and dangerous as far as life substances are concerned.

The classification for hazardous wastes and hazardous chemicals will be on the basis of inherent property it being **explosive, flammable, oxidizing, corrosive toxic to human beings, eco-toxic, or even reactive.**

It is the sum total of the inherent properties of these substances that makes them hazardous. There should be a system of assessment before introduction under these Acts.

## **Enforcement**

The last aspect requiring discussion is enforcement by existing agencies. It is a question of coupling, because it is a huge country and we need to have various authorities that have to get together on the subject.

## **The Hazardous Substances Act**

The legislation could be split into **two** parts.

In the *first* part we need to define what are hazardous substances. Such definitions are necessary because without them we have problems of understanding each other. Once you define these substances you know exactly what you want to regulate.

In the *second* classify these substances for controls. The classification will be applicable to all legislations on hazardous substances.

**This Act is not a site-specific legislation. This is an umbrella legislation which is non-site specific.** The site-specific legislation would be in place at the State or local level. These legislations would adopt this whole concept of hazardous substances, the definitions, the classifying regime, the classification controls and the performance requirements as provided in the umbrella legislation.

Illustratively let us take inflammable substances. The chemical substances itself you will classify them as flammable gases, flammable liquids and flammable solids and then you will have those that becomes flammable when coming in contact with water or any other element. Practically speaking you have five categories under flammable. And in those five categories again after you have defined what exactly is flammable you would have to take an example of chemical liquids, you will start classifying them in a similar manner.

It is for us to consider after we classify as to what we should regulate. Once we have decided the quantity and the performance requirements we come to life cycle performance. The hazardous substance has to be regulated from its manufacturing stage to the disposal.

## DISCUSSION

### **Feasibility of Uniform Legislation**

**Prof. Subramaniam:** Most of the legislations are directed at major industries whilst the ground level situation is the exact opposite. There are lots of local small-scale level industries, which are outside the purview of any environmental concerns. For example mechanics, and technicians all over the country and also domestic industries like brass making in Moradabad or the Tamirparani in Tamil Nadu. They are also a very major source of toxic chemicals to various levels. How is a legislation to be formulated to handle this problem? Further as has been pointed out anything, even some of the cooking things, could be hazardous. A gas in the kitchen, or some other chemical that is going into the food processing unit of the domestic industries all of them could turn out to be hazardous. Recently in Delhi, one of the drainages blew up, due to accumulation of methane gas caused by the non-removal of motor engines. When you talk of hazardous chemicals, you have address all these problems in their entirety.

**Mr. Das :** While I agree with Dr. Indrani that we need an umbrella act my suggestion is integrate all the legislation's the eighteen or nineteen laws that she described under one umbrella legislation. Enforcement then will be much easier, industry will have to deal with lesser number of people and as part of this umbrella act as is the case under the Factories Act, the law can insist that industry has an in-house regulator who is competent in the field of safety, occupational health and environment. It is not difficult. It is happening in the west and it is time that we in this country also look at it.

**Justice Umesh Banerjee :** Is one umbrella legislation, practicable? If you have one umbrella legislation what happens to existing statutory regimes? For example, the Factories Act is a complete code. It provides for a number of safeguards. If we have one umbrella legislation does that mean that all those safeguards, which are imprinted in that Act, shall have to be given a go by. Or that will be in addition to or supplemental to, then the Act ceases its efficacy as a complete code in itself. We have the Boilers Act, certain preventive measures are there. One umbrella legislation according to me may be farcical not a feasible proposition.

**Delegate:** My own view is that a comprehensive legislation will act as a great booster to lessen the burden of people who want to start industries.

It will also act as a check against persons who are trying to foul the environment. In order to check this environmental abuse, the one suggestion I would like to put forward is there should be one comprehensive legislation under which different categories of officials should be entrusted with the responsibility of taking care of different aspects of environment. Only then will it be possible to work effectively in this field. Illustratively there are so many motor vehicles emitting noxious gases, which are injurious to health. Except for one section in the Motor Vehicles Act there is no other section, which deals with these things. And that section contemplates imposition of fine in the first instance up to hundred rupees and for the second offence up to three hundred rupees. The question is how many motor vehicles have been challenged under this section? This under Rules of all India application that is the Motor Vehicle Central Rules made by the Union Government. The difficulty is that when environmental pollution is taking place at a very dangerous pace, our legislation is moving at a snail's pace. Therefore, there is great urgency to think of a legislation with uniform application all over the country.

**Delegate:** Dr. Indrani Chandrasekharan used the word Umbrella legislation, I would have preferred her using *Shamiana* legislation. That is I have lifted the word umbrella for my use. Perhaps it may be impracticable, to bring all the twelve current legislations into one comprehensive legislation but there is perhaps room to rationalise. As for example we have one Act on Water pollution, one act on air pollution and one, apex Act on Environment Pollution. In fact a proper amalgamation of the provisions of these three major enactments and may be a few others may result in lot of comprehension and rationalisation.

### **Enforcement**

Prof. Subramaniam: I wish to address the issue of enforcement. We don't have a proper enforcement mechanism as of now. There is no point in writing brilliant sounding laws if you can't enforce them. **In fact my position would be please don't have the laws if you can't enforce them.** Also make the laws readable to general public. There is no point in having high sounding laws with complicated syntax which common man like me cannot understand. The law should be so drafted that persons who have to enforce it can understand it. And scientists and technicians can also understand what the law expects.

Two Canadian experts were in New Delhi conducting a workshop on how to handle hazardous waste. Their experience with Canada has been that compliance with regulations is as good as their enforcement. We have too many laws, too many rules. I don't think we need to generate more regulations. Industry has and is facing a serious problem in complying with all these regulations because there are so many different agencies,

they have to deal with. A lot of organisations worldwide and of course now in India have started integrating activities of safety, occupational health, and environment into one in-house regulating agency. These aspects cannot be segregated from the way a person works. **A quality control person has been a third party. If we have to run our activities with due concern towards safety, health and environment these concerns have to be built into the way we do work.** The way we drive our car, the way a blue line driver drives has bus. You cannot have a third person taking responsibility for some thing that goes wrong. The Supreme Court in a recent judgement has fixed responsibility by defining who is an occupier under the Factories Act. May be this definition should be extended further to all other such regulations. Under the Factories Act a competent safety officer has be appointed. **Let us enhance the scope of that provision and ask for the appointment of a safety health and environment officer.** May be one person, may be more than one if the organisation is too large. Under the amended Factories Act industry is now also required to have qualified persons to operate hazardous processes. A similar situation prevails under the Indian Boiler Rules you had to have Boiler Attendants if the pressure rating of the boiler was above a certain limit.

**The minimum qualifications required for people who will be handling various kinds of hazardous need activities also to be specified.** Transportation of dangerous goods – let us not talk of dangerous goods - let us talk of transportation of human beings. Why is it difficult for us to insist or ensure that the drivers who drive these buses are trained, or certified, genuinely certified and let the public have an assurance that their lives are not going to be at risk. When you talk of dangerous substances there is again a legislation available but pressure industry that we will not have drivers available who will be able to understand what is to be done with dangerous chemicals

**Delegate:** We have too many laws in this country, too many. Dr Chandrasekaran has herself cited twelve statutes, nineteen rules, this that and the other. The only thing that is required is enforcement. Who is going to ensure enforcement? Enforcement should be by the newly constituted Pollution Control Boards. Let them be revamped. Let them do their duty, let them do their job.