Water Pollution : Its Causes and Cures

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Introduction

The ancient and medieval Indians put great emphasis on the purity of environment. Strict religious orders were in vouge against polluting the water courses like public wells and rivers. Yaganas were often performed to purify the air by burning fragrent materials. These practices in the context in which they were carried on significantly differed from the concept of purity of environment we are today striving to maintain. Because the inherent nature of pollution itself has undergone a tremendous change, therefore, today pollution is no more viewed from the point of any religious order of sacredness, but is looked upon as a scientific and technological phenomenon. It emerges from the industrialisation and urbanisation. The answer to its cure similarly does not lie in any religious order or rite; but in self restraint and adoption of better scientific and technological devices. The major off shoots of environmental pollution are : Water, Air and Noise. All these three are so inter-linked and sometimes, so overlapping that one cannot be controlled without controlling the other.

It being not possible to discuss here all the three off-shoots of environmental pollution, it is decided to take up the few aspects of water pollution only.

Legal approach

Clean water is an essential human requisite for sustenance of life; and is also a sine qua non for development of fishery resources. Its importance as an industrial prequisite cannot be ruled out for any industrial nation. In India since the advent of codified law due importance has been given to clean water. The Indian Penal Code, the first penal statute passed by the British Government as early as in 1860 contains comprehensive provisions to restraint the occurrence of pollution of water. Section 277 of the Code provides :

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> Whoever voluntarily corrupts or fouls the water of any public spring, reservoir so as to render it less fit for the purpose for which it is ordinarily used, shall be punished with imprisonment of either description for a term which may extend to three months, or with fine which may extend to five hundred rupees, or with both.

This section renders a person liable for public nuisance if he voluntarily fouls the water of a public spring or reservior, so as to render it less fit for which it is ordinarily used. A similar provision is embodied in the Northern India Canal and Drainage Act of 1873. Besides, all the Municipalities Acts contain general provisions, which empower the municipalities to control pollution of water in their respective territories.[1]

All these statutes, however, had limited application. For example section 277 of I.P.C. did not apply to river pollution and private wells. Even the tortious remedy against polluter confined only to private nuisance which could create a cause of action for an injunction, damages or both. These law armours thus, could not prove efficacious against the spread of pollution that began to occur as a result of India's rapidly growing population accompanied by increasing hazards of domestic and industrial needs with the recent added array of agricultural pesticides and insecticides which have further aggravated the problem of water pollution. Consequently, certain states began to feel the need of foreclosing the rapid growth of pollution of their water resources by passing special laws. In 1953 the State of Orissa took a lead by passing the Orissa River Pollution Prevention Act. Maharashtra, one of the most industrialised and densely populated states came out with a much more comprehensive statute : The Maharashtra Prevention of Water Pollution Act, 1969. The application of this Act is not confined only to the rivers as is in the case of Orissa Act but extends to rivers, water courses (whether flowing or for the time being dry), inland water (whether natural or artificial), subterranean streams the course of which is known and defined, or sea to such extent and tidal waters to such point as the State Government may specify in this behalf. Similarly, the statutes passed by the Central Government to control the regulation and development of interstate rivers and river valleys contained provisions pertaining to water pollution control. For instance, under section 14(1) of the Rivers Boards Act, 1956, the prevention of pollution of the waters of the interstate rivers has been assigned one of the functions of the River Boards.

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1. For a study and reference of other statutes pertaining to water pollution, see Prem Varma, Law of Adulteration and Pollution, *A.S.I.L.* 114-118 at 89 (1974).

But as in the case of general statutes, like I.P.C., these statutes too failed to keep pace with the expanding needs of industrialisation and urbanization. Therefore, the feeling began to strengthen that water pollution has become a national problem which can be tackled only at national level. Keeping this in view it was thought expedient not to depend on the efforts of individual states but to centralise the whole scheme of water pollution control. But this could be done only after having successful recourse to articles 249 and 250 of the Constitution. Because under the constitution 'water' constitutes a state subject on which the states enjoy the exclusive power to legislate; except in the case of regulation and development of inter-state rivers and river valleys to which only the Central Government is empowered to legislate by virtue of entry 56 of the union list of the Seventh Schedule.[1a]

Keeping all this in view a Committee was set up in 1962 by the Central Government to draw a draft enactment for the prevention and control of water pollution. The Report of the Committee was circulated to the State Governments. It was also considered by the Central Council of Local Self Government in September, 1963. This Council resolved that a single law regarding measures to deal with water pollution control, both at the Centre and State levels, may be enacted by the Parliament. A draft Bill was accordingly prepared and put up for consideration at a joint session of Central Council of Local Self-Government and the Fifth Conference of the State Ministers of Town and Country Planning held in 1965. In pursuance of the decision of the joint session, the draft Bill was considered subsequently in detail by a committee of Ministers of Local Self-Government from the States of Bihar, Tamil Nadu, Maharashtra, Rajasthan, Haryana and West Bengal, after making recourse to articles 249 and 250 of the Constitution. Consequently, the draft Bill was referred to the Joint Select Committee of the Rajya Sabha in August 1971. It submitted its final Report on 13th November, 1972 and a fresh Bill was accordingly drafted and placed before the Parliament. In 1974 the said Bill was passed by the Parliament which became an Act, called : The Water (Prevention and Control of Pollution), Act, 1974 (Herein after referred to as the 'Act').

Scheme of the Act

It is an enabling Act. No rules, regulations or standards have been incorporated in it. It gives wide powers to the Water Boards : to decide their own standards; their own regulations according to the local needs; to prosecute the offenders; to promote the wholesomeness of national waters. So

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1a. Now see the 42nd Amendment to the Constitution of India. However, it does not introduce any material change in this regard.

far as control of pollution is concerned, the Act tends to deal with it in two ways. One, pollution being caused by industrial effluents from the existing industry. Second, threatened pollution by industrial effluents from the industries yet to be installed. The former is controlled by the Water Boards by virtue of power vested in them under section 26 of the Act through the 'application for consent' to discharge sewage or trade effluents. It can be regulated by the Water Boards in two ways : One, by imposing restrictions under section 25 of the Act on new outlets and new discharges of trade effluents. Secondly, by advising the Government concerned with respect to location of any industry, the carrying on of which is likely to pollute a stream or well, under section 17(1) (n) of the Act.

Practical implications

The term 'pollution' is defined in section 2(e) of the Act. The scope and control of this definition is identical to the one contained in section 2(d) of the Maharashtra Prevention of Water Pollution Act, 1969. The scope of this definition is so wide that even the indirect act on the part of the polluter makes him liable under the Act. But the Act in this respect materially differs from the Rivers (Prevention of Pollution) Act, 1951 of Britain from which the provisions of our Act have been scrupulously borrowed. The British Act neither defines 'pollution' nor it provides for any rigid standards. Under the British Act each case is considered on merits. There is nothing astonishing. There exists much diversity in laws relating to water pollution which are prevalent in several countries. Broadly speaking these laws can be classified into two groups. One, which follows water quality standards, as in the case of U.S.A. and West Germany. The particular river being of a certain quality may be used for certain specific purposes, or that the river being required for certain specific purposes, must be maintained at a certain quality. The second is linked with the effluent quality standards without classifying the water, as in the case of Britain. The latter approach has been adopted in our Act. The fact that the provisions of our Act resembles with that of the British Act. can we successfully adopt the British effluent quality standards also ? The answer would be no. This we cannot do because of the differences in geographical, climatic and economic conditions. And above all our rivers being seasonal as compared to rivers of the West which flow throughout the year. Therefore, standards will ought to vary from place to place depending upon the rainfall, temperature, capacity of dilution of stream, finances and scope of industrial expensions.

Moreover, same standards cannot be enforced even against the same type of industry (say different paper industries). Also discrimination ought to be made in the matter of standards in the case of existing industries vis-a-

vis the industries yet to be installed The new industries are expected to be better equipped with the pollution control devices.

Since the effluent quality standards are linked with the dilution capacity, therefore, to fix up the standards of effluent's quality a knowledge of capacity of dilution in terms of quality and quantity of water is required. This would be possible only if we are in possession of requisite data on water quality and quantity. I can say with confidence that no Water Board in the country is equiped with such data. In fixing the effiuent's quality standards they rely absolutely on the standards fixed by the Indian Standards Institution. which are absolutely useless for them. These standards can lead only to wrong directives. In fixing the standards the Indian Standards Institution, takes into account what should be the percentage in the effluent after its treatment. ISI does not at all take into consideration the stream, its flow, the volume of water available into which the effluent is to be discharged Moreover, as submitted before, our rivers are seasonal, and therefore, their dilution capacity ought to vary with the season. But the ISI standards remain the same. This approach is also contrary to sections 27(2) and (3) of the Act which provide for variation in standards.

Another thing of considerable importance is the socio-economic impact of these standards.[2] A water Board or any other agency working for it may lay down very strict standards. These may look quite attractive as well. This, however, leads to an obvious question : Can our industries, at all, adopt such standards ? One must not forget that countries with severe laws against pollution have not in fact avoided the occurrence of widespread pollution. The law which calls for no pollution at all does not provide a practical solution to the problem.

It goes without saying that water pollution control technology is not yet sufficiently developed, and especially in a country like ours it is still in the infancy. In certain cases no suitable methods are available, and in other cases where such methods are available they are not technologically, economically and commercially feasible to adopt.

Should the above mentioned facts not be taken into consideration by the Water Boards while specifying the standards of quality of the polluting matter and issuing directives to the concerned industries for their compliance ? Should the concerned industry be treated as an offender well knowing that even after using the best practicable and available means the quality of industrial effluent cannot be brought to the specified standards ? Should not the

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2. For a detailed study, see Prem Varma, Water pollution and its economics, *National Herald*, 17th May 1976, p. 5.

concerned industry be allowed relaxation in the effluent quality standards if the industry genuinely proves that the compliance with the standards set by the water Board is beyond its economic capacity ? No doubt these may in certain cases force the Water Boards to give more weight to the economic aspects of the water pollution control rather than to promote a nation-wide programme for prevention, control or abatement of water pollution.

Problem of enforcement of standards

Under the Act, the prime responsibility to enforce effluent quality standards is vested in the respective Water Boards. Take a hypothetical case that standard 'X' is fixed for a particular effluent to be discharged into a particular stream at a particular point in particular season. Suppose a Water Board of a State 'M' does not insist on the standard 'X' for effluent from industries within its jurisdiction and instead issues consent order allowing those industries to discharge their effluents of the quality 'Z', of much lower standard, and thereby pollution occurs. What remedy the Act provides to deal with such exigencies? Can the Central Water Board step in *sou motu* and insist for standard 'X' from those industries? This has happened in the State of Maharashtra. The Maharashtra State has been granting consent orders without insisting upon the requisite standards.

Since the power to lay down standards is vested in the individual Water Board and considering the cost of pollution control devices the States may be tempted, in the absence of any uniform standards, to attract industry by providing lower standards-incentive to them, thereby causing economic loss to the State with higher standards, which it may not like. To check this mad race for lower standards-incentive the Central Water Board should come forward with some uniform minimum standards below which no Water Board be allowed to prescribe. And where no minimum uniform standards can be fixed, it should prescribe certain criteria for fixing those standards.

Disposal of polluting matter

The act of omission or commission which amounts to an offence of polluting water is provided for under section 24 (1) of the Act. According to this sub-section it is is an offence to "knowingly cause or permit" any poisonous, noxious or polluting matter, determined in accordance with such standards as may be laid down by the Water Board, to enter, whether directly or indirectly, into any stream or well by any person; knowingly cause or permit to enter into any stream any other matter by any person, which may tend, either directly or in combination with similar matters, to impede the proper flow of the water of the stream in a manner leading or likely to lead

to a substantial aggravation of pollution due to other causes or of its consequences.

The expression "knowingly" qualifies the words 'cause' or 'permit' thereby making it obligatory for the prosecution to prove in either case the existence of knowledge on the part of the polluter before he can be held responsible. Does this not dilute the efficacy of the Act? In case the polluting matter is caused or permitted to enter into any stream or well by negligence on the part of the polluter he cannot be prosecuted under the Act for want of knowledge[3]. And since the contravention of this sub-section results in penal action. the kind of knowledge the courts would take into consideration is the actual knowledge; the legal conception of constructive knowledge might not be permitted to be invoked by the prosecution.

The word 'knowingly' has been inserted by the legislature with the knowledge of the consequences of its incorporation. When the law on water pollution was being enacted the legislature had before it the practical experiences encountered by British Parliament during the last century in the the matter of legislative control of water pollution in Great Britain. In all the British statutes on water pollution, right from the River (Prevention of Pollution) Act, 1876 to the Control of Pollution Act, 1974, the word 'knowingly' has consistently been made to qualify only the word 'permit' and the word 'cause' has been left outside the purview. The relevant part of sub-section (1), of section 31 of British Control of Pollution Act, 1974 reads : "...a person shall be guilty of an offence if he causes or knowingly permits..." Section 22 (1) of Maharashtra Prevention of Water Pollution Act, 1969, is enacted almost on identical lines. The pertinent portion of the section reads : "...any person who causes or knowingly permits to enter any stream..'"

Just a contrary approach has been adopted under the Prevention of Food Adulteration Act, 1954. Knowledge is not a necessary ingredient of an offence committed under this Act. The Act imposes penalty when the act constituting an offence is committed, no matter how innocently or negligently. Section 7 of the Act provides : "No person shall himself or by any person on his behalf manufacture for sale, or store, sell or distribute..." any adulterated food, etc. A literal reading of the above section makes it clear that the rule of strict liability is applied to the offences committed under the Act. Why then under the Water Pollution Act more latitute has been

3. See also Prem Varma, Water Pollution Law, *The Hindustan Times*, 3rd January 1976, p. 5.

provided for to the polluters ? Is the pollution of water less dangerous than the pollution of food articles ? Why the rule of strict liability has been discarded in case of water pollution ? Was it so impelling that the want of appropriate water technology which led the legislature to adopt different attitude ? Or was it done because of the economic reasons ? Notwithstanding the validity of reasons which compelled the legislature to adopt liberal approach in case of water pollution, the fact remains that the provision is negatory of the objectives intended to be achieved under the Water Pollution Act.

But at the same time, the total omission of knowledge (the doctrine of strict responsibility) may prove harsh in the presence of mandatory provisions for imprisonment contained in the Act. To vitiate such situations the actions could be classified to distinct the contraventions committed 'knowingly or intentionally" from the contraventions committed otherwise. In the former case the existing penalty provision of mandatory minimum term of imprisonment is appropriately provided for. But in the latter case the courts should be vested with discretionary powers to award penalty upto the maximum provided for in the Act, considering each case on merits. While it would provide sufficient deterrent effect against negligence at the same time it would be a safeguard to the innocent offenders.

Third party remedy

The other problem that arises out of the Act is of third party's right to seek remedy against pollution[4]. Sections 25 and 26 of the Act empower the Water Boards to regulate and control pollution in their respective territorial jurisdiction. This power they exercise through the instrumentality of 'Consent Applications'. And it applies equally to the new as well as old or existing discharges. So far as new industries which are to be installed there is not much of a problem, as in those cases it can be made a condition precedent that no licence will be issued unless the concerned industry produces a 'No Objection Certificate' from the Water Board. The real problem, however, arises in the case of existing industries. How to bring down the extent of pollution to a desired level ? This is really a problem! Especially when looked in the socio-economic spectrum. Our country is a developing country. We need industries to cater to the needs of our people, to enhance their standard of living and at the same time to compete with the advanced

4. For details, see Prem Varma, Some Practical Aspects of Water Pollution Control, *Civil Affairs*, May-June 1976. The fundamental duty to protect environment enumerated in Part IV A of the Constitution is of no avail, it being not supported by any sanction.

nations in the world market. The problem is of harmonisation of pollution with industries.

The other aspect of consent order stems from the exclusive power vested in the Water Boards, under section 49 of the Act, to prosecute polluters. Take for example a person who discharges into a stream the polluting matter in strict compliance of the provisions of the consent order obtained by him from a Water Board. But still pollution takes place and thereby some loss or damage is caused to the life or property of some other person. Who should be held responsible for this loss or damage ? The polluter may plead legal authority from the Water Board to pollute. No action lies against the Water Board or its officers because of the protection given to them under section 50 of the Act read with section 21 of the I.P.C. The responsibility of the polluter is over because he has obtained approval of the Water Board and Water Board is not responsible by virtue of section 50 of the Act and so the aggrieved person cannot go to the polluter again. What remedy is left with him ? Water Board may not accede to his request even at least to amend the consent order. What safeguards the Act provide against such arbitrariness of the Water Boards ? The problem may not look serious on the face of it but experience does lead to the apprehensions—where the arbitrariness or carelessness of such bodies had resulted in the grave injustice to the aggrieved parties. The third party's right to prosecute is recognized under the American and British statutes from which the provisions of this Act have been borrowed. Then why this state of anomaly has been created in our Act ?