Dr. Ashok

Vs

Union of India and Others

Writ Petition (C) No. 1094 of 1988

(S. C. Agarwal, G. B. Pattanaik JJ)

02.05.1997

JUDGMENT

PATTANAIK, J. –

On the basis of a letter by one Dr. Ashok addressed to the Chief Justice of India indicating therein that several insecticides, colour additives, food additives are in widespread use in this country which have already been banned in several advanced countries as it has been found that those insecticides are carcinogenic, this Court treated the letter as a petition under Article 32 of the Constitution and took up the matter as a Public Interest Litigation. Notice were issued to the Union of India through the Secretary, Ministry of Health and Family Welfare, through the Secretary, Ministry of Environment and Forest, through the Secretary, Ministry of Agriculture, through the Secretary, Ministry of Industry & Chemicals as well as to Pesticides Association of India through its Secretary, Shri H.S. Bahl and the Asbestos Cement Products Manufacturers' Association. The annexure to the said letter contained 21 chemicals and additives and a prayer was made that the respondents should be directed to ban forthwith the import, production, distribution, sale and use of the listed chemicals and articles so that the citizens will not be exposed to the hazards which the aforesaid insecticides/additives are capable of causing. It was alleged generally in the petition that food, water, air, drug and cosmetic contamination are the general results of the widespread use of the chemicals in question and most of these chemicals have been banned in the United States of America and rest are in the process of being banned. Though initially the annexure to the letter contained only 21 items of insecticides and additives but by way of an application 19 other chemicals were added and thus in all the prayer of the petitioner is to prevent manufacture, production and use of 40 insecticides and/or additives. Counter-affidavits were filed on behalf of the Secretary, Pesticides Association of India, Ministry of Environment and Forest, Director General of Health Services, President of the Chemical Industries' Association, Madras. A supplementary affidavit was also filed on behalf of the Ministry of Environment and Forest. A further affidavit was also filed in August 1989 by the Deputy Director General of Health Services giving the available information on the listed chemicals as to the carcinogenicity status on the basis of research carried out by the Indian Council of Chemical Research. It was indicated in the said affidavit that the benefits accrued as a result of the use of chemicals should be weighed against anticipated risk and the whole issue be examined in totality before arriving at a conclusion. When the matter was heard on 24-9-1996 this Court observed that there has been a time-lag between the filing of the affidavits and the date of hearing of the petition and there is no material on record to indicate as to whether any further steps have been taken with regard to the control of use of these harmful pesticides and chemicals and whether any further study has been made in that regard. The Union of India was, therefore, granted time to file a further detailed affidavit clarifying the entire position. When the case was taken up for hearing on 5-11-1996 it transpired that no further affidavit has been filed

pursuant to the earlier direction and therefore, the Court was constrained to pass an order requiring the officers of different ministries involved to be present in the Court on the next date of hearing and required affidavit should be filed. Pursuant to the aforesaid order of the Court an additional affidavit was filed by the Under-Secretary to the Government of India, Ministry of Agriculture on 18-11-1996 stating therein the steps taken by the Government of India in prohibiting manufacture, import and use of certain chemicals and in permitting restricted use of certain other chemicals and insecticides. To the aforesaid affidavit a notification dated 26-5-1989 was annexed as Annexure I which notification indicates that the Government of India had set up an Expert Committee with a view to review continuous use in India of pesticides that are either banned or restricted for use in other countries. To the said additional affidavit was also annexed a notification dated 15-5-1990 of the Ministry of Agriculture which notification indicates that the Central Government after considering the recommendations of the Expert Committee and after consultation with the Registration Committee set up under the Insecticides Act, 1968 cancelled the Certificate of Registration in respect of Aldrin, restricted the use of Dieldrin, for locust control in desert areas by Plant Protection Adviser to the Government of India and restricted the use of Ethylene Dibromide as a fumigant for foodgrains through Central Government, State Governments, Government Undertakings, and Government Organisations like Food Corporation of India and others. To the said additional affidavit yet another notification of the Ministry of Agriculture dated 20-9-1986 was annexed as Annexure III which notification prohibited the manufacture, import and use of Heptachlor and Chlordane and cancelled the Registration Certificate issued by the Registration Committee to various persons. It also prohibited the use of Aldrin in India and cancelled the Registration Certificate issue under the Insecticides Act. It further transpires the Government of India, Ministry of Agriculture by Notification dated 1-1-1996 cancelling Certificate of Registration in respect of Benzene Hexachloride with effect from 1-4-1997, being of the opinion that the manufacture and use of Benzene Hexachloride hall be phased out progressively and the production of its technical grade by the existing manufacturers reduced to the extent of 50 per cent by 31-3-1996 and totally banned by 31-3-1997. The notification also indicated that the Certificate of Registration in respect of Benzene Hexachloride shall be deemed to have lapsed in respect of those registrants who are yet to obtain manufacturing licences. On behalf of the Ministry of Environment and Forest, the Director Ministry of Environment also filed an additional affidavit indicating the steps taken by the Environment Ministry prohibiting import of Polychlorinated Biphenyls. The Ministry of Health also filed an additional affidavit and Ministry of Petrochemicals also filed an affidavit. When the case was taken up for hearing on 21-11-1996 and these affidavits of different ministries were placed it was noticed that the affidavits have dealt with 21 chemicals and additives which were listed in the original petition. But there has been no response in respect of 19 other chemicals and insecticides referred to in the additional list. It was also brought to the notice of the Court that some writ petitions have been filed by the manufactures of certain chemicals challenging the notification of the Government cancelling the Registration Certificate issued under the Insecticides Act and prohibiting the manufacture with effect from 1-4-1997. It was stated that a consolidated affidavit be filed by the Union of India in consultation with all the ministries concerned in respect of 40 chemicals so that it would be easire to deal with the problem. In response to the aforesaid direction of the Court dated 27-11-1996 the Under-Secretary to the Government of India in the Ministry of Agriculture has filed a consolidated affidavit dealing with 40 items of Chemicals and the steps taken by the Government of India in the ministries concerned either prohibiting and/or allowing restricted manufacture, use of chemicals on a thorough study and on receipt of recommendations from the experts. On the basis of applications by manufacturers, in respect of the writ petitions pending in the Allahabad High Court and the Madras High Court orders were passed by this Court to get the cases transferred and those transferred petitions were also heard

along with the main writ petition.

2. Chemicals, besides food, air and water, have always been part of man's environment in some measure. Even before the earliest civilizations or agriculture, the lightning flash caused oxygen and nitrogen of the air to combine, producing oxides of nitrogen and the said nitrogen dioxide eventually combined with water and oxygen to form nitrates that significantly enriched the soil. Volcanoes contributed sulphur dioxide and particulates to the air just as fossil fuel burning power plants do today. But the total contribution of these sources was small and the earth was thinly populated. With the rise of civilizations, the sources of population increased day by day. Water polluted with lead from the pipes used in the Roman distribution system is postulated to have contributed to the decline of Rome. Miners and metal workers in the Middle Ages suffered occupational diseases from dusts and fumes generated in their trades. As early as in 1713 Ramazzini in his book Diseases of Workers has described the effects of many of these chemical pollutants of workers. When coal was introduced as a fuel the problem of pollution become much worse with combinations of fog and smoke in London becoming most famous. With the recognition of the deleterious effects of chemicals, especially in the workplace, there began measures for the control of the release of these materials and the prevention of occupations diseases. The concentrations of many of these materials in the atmosphere were quite high. The scientists began research to find out the ways and means to reduce the contents of chemicals in the atmosphere so as to check the health hazards. In 1945 Warren Cook of Switzerland published a list of the limits with abstracts of the information on which they were based. The United States Public Health Service established drinking water standards in 1946, Henry Smyth in 1956 reviewed the researches done in the field and proposed the name Threshold Limit Values for limiting air concentration for the working environment. The American Conference of Governmental Industrial Hygienists every year compiled a list after annual review indicating the deleterious effect of several chemicals and pesticides on the human health and the said study us adopted by the Occupational Safety and Health Administration of the Department of Labour as a regulation. Until 1960 there was no legislation and it is only in 1960s the Clean Air Acts were passed in the United States. There has been constant research on the use of chemicals and pesticides and its effect on the human health in most of the advanced countries and the industries also spend a substantial part of the money in establishing a research and development organisation. On the basis of experiments conducted and data available the use of several chemicals and pesticides have been either totally banned or have been permitted to be used in a regulated manner depending upon the effect of such chemicals or pesticides on the human system. In all ages men faced difficulty in protecting their crops in the field from small animals and disease-causing organisms. An insect, a field mouse, the spore of a fungus, or a tiny root-eating worm is more difficult to deal with. Since these small organisms reproduce rapidly, their total eating capacity is very great. Small pests may also be carriers of disease. Malaria and yellow fever spread by mosquitoes have killed more people than all wars. Not all insects, rodents, fungi and soil micro-organisms are pests. Most of them do not interfere with people and many are directly helpful. Millions of small animals live within a single cubic metre of healthy soil. Most are necessary to the process of decay and hence to the recycling of nutrients. Fungi, too, are essential to the process of decay in all the world's ecosystems. Pests have lived side by side with people for thousands of years. At times pest species have bloomed and brought disease and famine. But most of the time, natural balance has been maintained and humans have lived together with insects in reasonable harmony. In modern times, people are no longer willing to accept these natural cycles. Human population is now so larger that tremendous quantities of food are needed. One way to increase crop yields is to reduce competition from insects. Scientists studying a cabbage field in the United States found 177 different species of insects of which only 5 species were significant pests. The agricultural system is

subject to the normal checks and balances of a natural ecosystem. If left alone, pest species are usually kept under control by their enemies. According to an estimate insects ate 10 per cent of the food crops in the United States in 1891 and at that time very few pesticides were being used. The pest populations were controlled by insect predators, parasites and disease. But in the survey of 1970 it was found that the crop losses to insects rose to 13 per cent. The question, however, is whether it is on account of chemicals sprays or whether farmers would be better off if no pesticides were used at all still remains unanswered. There is no disputed that most chemical pesticides are poisonous to humans as well as to insects. The organophosphates which have been used extensively in North America since 1973 are much more poisonous than the DDT which was replaced by such organophosphates. Since mid-1940s many thousands of people have fallen sick or have died from severe pesticide poisoning every year. At present more than half of these are children who are expose to the toxic chemicals through carelessness in packing or storage. Most of the others are workers who handle these materials in the factory or on farms. Even workers working in the factory where chemicals are manufactured bring the pesticide dust home on their clothes and they poison the family as well. In July 1975 the Allied Chemical Company paid millions in damage suits and the plant was shut down. No amount of compensation paid in cash could make the people healthy again. People can avoid exposure to large doses of insecticides but it is impossible to avoid exposure to contaminants in food, in the air and in drinking water. Scientists in their anxiety to increase the production capacity of the soil and to prevent the food particles from various pests and insects have invented several insecticides which have caused deleterious effect on the human health. The broad spectrum pesticides have serious flaws. They upset the ecosystem, poison people and animals and possibly cause cancer. On the basis of continued research in the field several such chemicals and insecticides have been totally banned not only in the United States of America but in several other advanced countries whereas in a developing countries, like India, no effective measures have been taken so far. While examining the affidavits filed in this Court by different ministries of the Government of India to find out what effective steps have been taken in prohibiting the manufacture of such insecticides and pesticides which have been banned in other countries particularly when its deleterious effect on the human health is alarming, one thing is absolutely clear that in this country there has not been much study and research on the harmful effect of several such chemicals and pesticides. There is no coordinated organisation and the lack of coordination between different ministries of the Government who deal with different chemicals and pesticides makes the people of this country suffer. It may be true that several such insecticides and chemicals may be required in certain contingency when epidemics like plague and dengue break. But that cannot be a ground for allowing the industrialists to manufacture such commodity when it is established that the use of the commodity is grossly detrimental to the human health. Take for example an insecticide called DDT. It acts as a nerve poison, paralysing insects. It has been use to control insects which destroy food and forage crops and to kill disease-carrying insects, such as mosquitoes that carry malaria and yellow fever and lice that carry typhus. DDT is a residual poison that retains its effectiveness in a sprayed area for weeks, although it may persist in the area for years. It is harmless to most plants. The chemical was first prepared by Oothmar Zeidler, a German chemist in 1874. Its effectiveness was discovered and recognised by a Swiss Scientist Paul Hermann Muller who won the Nobel prize in 1948. It was used heavily in World War II, particularly in the Mid and South-Pacific theatres by spraying mosquito-infected areas prior to invasion and occupation. The spray programme continued after the war and was primarily responsible for eliminating malaria and yellow fever as major diseases. The said chemical, however, is toxic to people and animals. It accumulates in the bodies of animals that eat food contaminated with the substance. When dissolved in organic solvents, DDT can be absorbed through the skin. The chemical nature of DDT is not changed by process of metabolism, soil micro-organisms or sunlight. It is dangerous to birds, to fish and other forms of

aquatic life. Because of its potential danger to human health and its possible effect on several species its use has been totally banned in the United States of America by the Environmental Protection Agency since 1972. Soon thereafter the said insecticide has been banned in several other countries including Canada, Sweden and Denmark. But so far as India is concerned, it is now being produced only by M/s. Hindustan Insecticides Limited and the Director General of Health Services on getting information about the quantity required by respective States for their Public Health Programme puts it before the Requirement Committee and only on the approval of the said Committee it is manufactured and sent to different States. Thus though it has not been fully banned but its manufacture and use has been controlled. We have taken the illustration with respect to one of the insecticides only for the purpose of indicating that several insecticides which have been banned in the advanced countries like America are still being permitted to be used in this country possibly because of certain necessity.

3. Agriculture was the principal activity of Indians till nineteenth century and more than seventy per cent population was dependent on agriculture for their livelihood. In the twentieth century the country saw an industrial revolution. The rural population started migrating from villages to urban and industrial towns. But yet agriculture holds the dominant position in Indian economy. The growing realisation of acute problem of population explosion in India necessitated the policy-makers and planners to make vigorous efforts to optimise agricultural production. The idea of green revolution was floated and effective steps were taken to mechanise the agricultural process and to modernise it by using fertilizers and spraying pesticides in order to achieve self-sufficiency in foodgrains, commercial crops and other agricultural product. It was realised that endeavour should be made on war footing to boost agricultural production so as to fulfil the requirement of food for our teeming millions. One of the hurdles in boosting agricultural production was excessive loss and destruction of crops and foodgrains by insects and pests. A need was, therefore, felt to import and manufacture insecticides and pesticides to protect crops and plants from the damage of pests and insects. But the most dangerous crisis in the present-day modern world is that of global atmospheric pollution. The ecosystem has become imbalanced by uncontrolled use, abuse and misuse of natural resources and manufacture and use of hazardous products and chemicals resulting in endangering the very existence of human race. The excessive use of chemicals and pesticides for optimising agricultural production created alarming danger to health and safety of living beings in general and agricultural workers in particular. The impact of use of pesticides on global environment may vary in magnitude and exhibits a variety of behavioural patterns and modes of action. Pesticides affect man's ecosystem and their residues can get into the food chain. The amount of pesticides consumed by people depends on the manner of usage of pesticides particularly on farm crops, storage of the produce and its processing. In most of the developed countries the use of hard pesticides on agricultural crops has been either banned or restricted and other pest-control programmes are adopted in order to maintain the ecosystem. But the developing countries are still using these pesticides without caring for side-effects on the environment. In recent times the Central Government has set up the Pesticides Environment Pollution Advisory Committee in the Ministry of Agriculture to review from time to time the environmental repercussions and to suggest measures, whenever necessary. It is a fact that pesticides considered hazardous in rich countries remain in use in the developing countries. Many of the developing countries lack scientific facilities for toxicological scrutiny as also for making proper cost assessment. It is true that different countries may have different requirements but it is difficult and dangerous to assume that pesticides banned or restricted in USA or other European countries will be acceptable in the Third World countries. In India pesticides have been used over the past four decades for crop protection and control of diseases like malaria. There has been much debate over the use of pesticides at the cost of

environment and public health. One will have to weigh the benefits of the use of pesticides and the adverse effect that is produced on human health on account of such use of pesticides.

4. Right to life enshrined in Article 21 means right to have something more than survival and not mere existence or animal existence. It includes all those aspects of life which go to make a man's life meaningful, complete and worth living. As has been stated by this Court in Maneka Gandhi case [Maneka Gandhi v. Union of India, (1978) 1 SCC 248], in the case of Board of Trustees of the Port of Bombay v. Dilip Kumar Raghavendranath Nadkarni [(1983) 1 SCC 124 : 1983 SCC (L&S) 61] and in the case of Ramsharan Autyanuprasi v. Union of India [1989 Supp (1) SCC 251] that it would include all that gives meaning to a man's life, for example, his tradition, culture, heritage and protection of that heritage in its full measure. In still recent cases this Court has given liberal interpretation to the word "life" in Article 21. And in the case of M.C. Mehta v. Union Of India [(1987) 4 SCC 463] while dealing with a Public Interest Petition relating to Ganga water pollution this Court has observed that life, public health and ecology have priority over problems of unemployment and loss of revenue. In the United Nations Conference on the Human Environment held at Stockholm in 1972 it was stated that the protection and improvement of human environment is a major issue which affects the well-being of people and economic development throughout the world and it is the urgent desire of the people of the whole world and the duty of all Governments. It was also stated :

> "A point has been reached in history when we must shape our actions throughout the world with a more prudent care for their environmental consequences. Through ignorance or indifference we can do massive and irreversible harm to the earthly environment on which our life and well-being depend. Conversely, through fuller knowledge and wiser action, we can achieve for ourselves and our posterity a better life in an environment more in keeping with human needs and hopes. There are broad vistas for the enhancement of environmental quality and the creation of a good life. What is needed is an enthusiastic but calm state of mind and intense but orderly work. For the purpose of attaining freedom in the world of nature, man must use knowledge to build in collaboration with nature a better environment. To defend and improve the human environment for present and future generations has become an imperative goal for mankind - a goal to be pursued together with, and in harmony with, the established and fundamental goals of peace and of worldwide economic and social development."

5. What has been stated above in relation to the environmental hazards would apply with much greater force when it comes to health hazards. By giving an extended meaning to the expression "life" in Article 21 this Court has brought health hazards due to pollution within it and so also the health hazards from use of harmful drugs. In the case of Vincent Panikurlangara v. Union of India [(1987) 2 SCC 165 : 1987 SCC (Cri) 329], on a Public Interest Petition seeking directions from this Court to ban import, manufacture, sale and distribution of certain drugs this Court had observed : (SCC p. 173, para 16)

> "A healthy body is the very foundation for all human activities. ... In a welfare State it is the obligation of the State to ensure the creation and the sustaining of conditions congenial to goods health."

The Court in the aforesaid case extracted a passage from the earlier judgment in Bandhua Mukti Morcha v. Union of India [(1984) 3 SCC 161 : 1984 SCC (L&S) 389], which would be profitable to

extract herein : (SCC pp. 173-74, para 16)

> "It is the fundamental right of everyone in this country, assured under the interpretation given to Article 21 by this Court in Francis Mullin case [Francis Coralie Mullin v. Administrator, Union Territory of Delhi, (1981) 1 SCC 608 : 1981 SCC (Cri) 212] to live with human dignity, free from exploitation. This right to live with human dignity enshrined in Article 21 derives its life breath from the Directive Principles of State Policy and particularly clauses (e) and (f) of Article 39 and Articles 41 and 42 and at the least, therefore, it must include protection of the health and strength of the workers, men and women, and of the tender age of children against abuse, opportunities and facilities for children to develop in a healthy manner and in conditions of freedom and dignity, educational facilities, just and humane conditions of work and maternity relief. These are the minimum requirements which must exist in order to enable a person to live with human dignity, and no State - neither the Central Government nor any State Government - has the right to take any action which will deprive a person of the enjoyment of these basic essentials."

It was further observed : (SCC p. 175, para 18)

> "The branch with which we are now dealing, namely, health care of citizens, is a problem with various facets. It involves an ever-changing challenge. There appears to be, as it were, a constant competition between Nature (which can be said to be responsible for new ailments) on one side and human ingenuity engaged in research and finding out curative processes. This being the situation, the problem has an ever-shifting base. It is commonplace that what is considered to be the best medicine today for treatment of a particular disease becomes out of date and soon goes out of the market with the discovery or invention of new drugs. Again what is considered to be incurable at any given point of time becomes subjected to treatment and cure with new finds. There is yet another situation which must be taken note of as human knowledge expands and marches ahead. With the onward march of science and complexities of the living process hitherto unknown diseases are noticed. To meet new challenges, new drugs have to be found. In this field, therefore, change appears to be the rule."

6. It is necessary to examine the present problem arising out of the use of pesticides and other chemicals which on account of their adverse effects on human health have already been banned in other advanced countries. On examining the counter-affidavits filed on behalf of the different ministries of the Government it appears to us that though sufficient steps have been taken to either ban or to allow restrictive use of these insecticides but yet there is no coordinated effort and different ministries of the Government of India are involved. It also further transpires that there has been no continuous effort to have research conducted or to have minimum information about the adverse effects of the use of such pesticides and other chemicals as a result of which people at large of this country suffer to a great extent. As it is on account of lack of capacity of the people of the country to afford good and nutritious food, the average standard of human health is much below as compared to other advanced countries. In addition to that if insecticides and chemicals are permitted to be freely used in protecting the foodgrains and in increasing the agricultural production then that will bring insurmountable hazards to all those countrymen who consume those food articles. To check these maladies what is essential for the Government of India is to have a coordinated and sustained effort. In this age of computerisation and interlinking of the countries through Internet it

does not take more than a couple of minutes to gather the necessary information in respect of any particular insecticide or pesticide and how such commodities have been dealt with in other advanced countries. What is really essential is a genuine will on the part of the administrative machinery and a conjoined effort of all the ministries concerned. On the basis of the affidavits filed while we are satisfied that the different measures taken by the Central Government in totally prohibiting in some cases and in permitting restricted use in some other cases are adequate steps from the health hazards point of view and no further direction is necessary to be issued in respect of the 40 items of insecticides and chemicals identified in the petition filed, but we would direct that a Committee of four senior officers from the four different ministries involved should be constituted which Committee should have deliberations at least once in three months and take suitable measures in future in respect of any other insecticides and chemicals which is found to be hazardous for health. Such a Committee should be constituted by the Cabinet Secretary within two months from the date of the order and the said Committee may take the assistance of such technical experts as they think appropriate.

7. We would accordingly dispose of this writ petition with the aforesaid observation.

8. In the two transferred cases, the notification dated 1-1-1996 of the Central Government issued in exercise of powers under sub-section (2) of Section 27 of the Insecticides Act, 1968 phasing out progressively the manufacture and use of Benzene Hexachloride and directing that the Certificate of Registration in respect of Benzene Hexachloride issued to various firms shall be deemed to have been cancelled w.e.f. 1-4-1997, has been challenged by the manufacturers inter alia on the ground that it is beyond the scope and powers of the Central Government under Section 27(2) of the Insecticides Act to issue such notification.

9. It is contended by Mr. C.S. Vaidyanathan, the learned Senior Counsel for the petitioner - M/s. Kanoria Chemicals and Industries Ltd. as well as Mr. Jayant Das, learned Senior Counsel appearing for the petitioner in the other transferred case that consultation with Registration Committee being mandatory for exercise of power under sub-section (2) of the Section 27 of the Act and there being no such consultation with the Registration Committee the issuance of the impugned notification in purported exercise of power under Section 27(2) of the Act is vitiated and as such is liable to be struck down. It is further contended that neither there has been any investigation of its own by the Central Government nor the Central Government has received any report from the State Government on the basis of which the Central Government could have been satisfied about the insecticides in question likely to cause any risk which would enable the Central Government to cancel the Certificate of Registration, and therefore, the impugned notification is invalid in law since the satisfaction is based upon non-existent material and as such the notification in question is liable to be struck down. Lastly, it is contended that in exercise of power under sub-section (2) of Section 27 the Certificate of Registration of any insecticide specified in sub-clause (iii) of clause (e) of Section 3 or any specific batch thereof can be cancelled if the Central Government is of the opinion for reasons to be recorded in writing that the use of the said insecticide is likely to involve such risk to human beings or animals so as to render it expedient or necessary to take immediate action. Section 3(e)(iii) deals with a preparation containing any one or more of the substances specified in the Schedule. The said power, therefore, cannot be exercised in respect of any substance specified in the Schedule which is an insecticide within the meaning of Section 3(e)(i). Benzene Hexachloride being one of the substances in the Schedule issued under Section 3(e)(i) and not a preparation containing any one or more of the substances as provided in Section 3(e)(iii), the Central Government had no jurisdiction to issue the impugned notification in purported exercise of power under Section 27(2) of the Insecticides Act. In other words, what is contended by the counsel

for the petitioners in these transferred cases is : The power to prohibit or cancel the registration under Section 27(2) is in respect of those preparations containing any one or more of such substances which are specified in the Schedule and which is consumer oriented and the said power cannot be exercised in respect of any substance included in the Schedule by Parliament itself. Mr. Bhat, learned Additional Solicitor General, on the other hand contended that in construing the provisions of the Insecticides Act the Court must adopt a construction which would effectuate the objects of the statue instead of adopting a construction which would defeat its objects. According to the learned Additional Solicitor General a statute is designed to be workable and the interpretation thereof by a court should be to secure that object, unless crucial omission or clear direction makes that end unattainable, as was observed by Lord Dunedin in Whitney v. IRC [(1925) 10 TC 88 : 1926 AC 37, HL] (Tax Cas at p. 110) and was also accepted by Craies on Statute Law as well as by Maxwell on the Interpretation of Statutes, 10th Edn., and bearing in mind the aforesaid principle the provisions of Section 27 of the Insecticides Act are to be construed. According to the learned Additional Solicitor General the courts should lean against (sic) any construction which tends to reduce a statute to futility and the provisions of a statue must be so construed as to make it effective and operative, on the principle "ut res magis valeat quam pereat". The learned counsel urged that it is the court's duty to make what it can of the statute, knowing that the statutes are meant to be operative and not inept and that nothing short of impossibility should allow a court to declare a statute unworkable. The learned Additional Solicitor General contends that the Insecticides Act having been enacted to regulate the import, manufacture, sale, transport, distribution and use of insecticides with a view to prevent any risk to human beings or animals and the Central Government having been satisfied that the use of Benzene Hexachloride involves great risk to the human life, and on being so satisfied having issued the impugned notification phasing out the manufacture of such insecticide and completely prohibiting the same w.e.f. 1-4-1997, this Court should not set aside the notification by interpreting the provisions of the Act which would have the effect of frustrating the object of the legislation itself. According to the learned Additional Solicitor General no doubt the words used in sub-section (2) of Section 27 are not very clear but the expression "as a result of its own investigation" in sub-section (2) of Section 27 does not necessarily refer to an insecticide specified in sub-clause (iii) of clause (e) of Section 3 as engrafted in sub-section (1) of Section 27 and on the other hand it is wide enough to include any insecticide under Section 3(e) including a substance specified in the Schedule and such a construction alone would subserve the object of the Act. The learned Additional Solicitor General also urged that when the power under sub-section (2) of Section 27 authorises the Central Government to issue an order refusing to register the insecticide it would obviously mean that the said power could be exercised even prior to the registration of the insecticide in question, whereas the power under Section 27(1) can be exercised only after an insecticide has been registered and, therefore, Section 27(2) does not necessarily refer to Section 27(1) as contended by the learned counsel appearing for the petitioners. So far as the question of lack of consultation with the Registration Committee is concerned, the learned Additional Solicitor General contended that the notification which was issued in December 1994 itself indicates that the Central Government had due consultation with the Registration Committee and as such it was not necessary to have further consultation with the said Committee before issuance of notification on 1-1-1996. According to the learned Additional Solicitor General when Benzene Hexachloride has already been banned in several other countries in the world because of its effect on the human life, the Central Government has totally banned its production w.e.f. 31-3-1997, having decided to phase out the production progressively and any interference with the said order will be against the society at large.

10. Before examining the rival contentions with regard to the power of the Central Government

under the Insecticides Act to cancel Certificate of Registration it would be appropriate for us to find out as to what is Benzene Hexachloride and what are its effects on the human beings and the environment and to what extent it has actually been banned in other countries.

11. Benzene Haxachloride (BHC) is formed by the reaction of chlorine with benzene in the presence of light. It is also called 1, 2, 3, 4, 5, 6-HEXACHLOROCYCLOHEXANE, namely, any one of several isomeric compounds; one of these isomers is an insecticide called Gammexane. It was first prepared in 1825 and the insecticidal properties were identified in 1944 with the y-isomer, which is about 1000 times more toxic than any of the other isomers formed in the reaction. The chemical addition of chlorine to benzene produces a mixture containing at least six of the eight possible isomers of BHC. BHC has a faster but less protracted action upon insects. Its use had declined by the 1960s because of competition from other insecticides and its effects on fishes. (See The New Encyclopaedia Britannica Vol. 2, p. 115.)

12. Benzene Hexachloride, otherwise known as BHC is an insecticide specified in the Schedule to the Insecticides Act, 1968 and is different from its formulations which would also be an insecticide within the meaning of Section 3(e)(iii) of the said insecticides Act. BHC is not used as such by farmers or consumers though its different formulations or preparations containing different concentrations of BHC are used in agricultural pest control, crop protection operation as well as in public health for control of diseases like malaria, dengue and plague. In the Tripathi Committee Report which was constituted to review the continued use of DDT and BHC in the country in the light of their hazard to human health and environment pursuant to the earlier observations of the Banerjee Committee Report in 1986, it has been stated as follows :

> "1. In a large number of countries the use of BHC has been banned/withdrawn or severely restricted mainly due to bioaccumulation of residue and its associated environmental hazards.
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> 2. BHC is bioeffective against pest complex of rice, sugarcane, sorghum and pigeonpea. Its dust has also been proved bioeffective for locust control.
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> 3. It still continues to be effective in controlling vectors of malaria.
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> 4. The residue of BHC in the soil of USA persists as long as ten years. However, in other comparative studies between 1977 and 1988 the residue has been decreased from 5.64 ppm to 0.6 ppm against studies of Indian soils which have shown a half-life of only 4 months.
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> 5. Residues of BHC in water were found in a range of 1.07 to 81.23 mg/litre in studies conducted during 1985 to 1987. Ganga water was reported to be contaminated with BHC residue in the range of 2.5 to 639 nanogram per litre during 1986 to 1989.
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> 6. Reported quantum of 17.66 to 40.90 ppm of residues in rice is highest and for potatoes the quantities were below the tolerance limit. It is low in rabi crops and nil in sugarcane.
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> 7. Residue of BHC in Indian vegetables found to be higher than permissible limit as per PFA (8.0 ppm).

8. The residues of BHC in vegetable oils and oilseeds ranged between 0.2 to 6.2 ppm, which showed a declining trend.

9. Milk and milk products are contaminated with residues of BHC.

10. Meat, chicken, fish and egg are also contaminated with BHC residue.

11. There are reports of accumulation of BHC residues in human adipose tissue and blood.

12. Animal feed as well as animal products do contain BHC residues and there is an increasing trend.

13. Sub-chronic and long-term toxicity studies show storage of BHC in body tissues and steroidiogenic inhibition.

14. Studies on reproduction indicates its effect on reproduction leading to impaired reproductive function.

15. In some studies BHC is found to be mutagenic.

16. BHC has been shown to be carcinogenic to mice and rats in one study and in mice in another two studies. But it has been shown not to be carcinogenic to rats and hamstars in one study. BHC has been classified by IARC into Group 2-B i.e. probably carcinogenic to human.

17. BHC has been shown to produce immunological changes.

18. In human studies accidental long-term dietary exposure of BHC resulted in epidemic of porphyria, hyperpigmentation and neurotoxicity."

13. Thus, though it is of great use in control of malaria but its adverse effect on human health is no less particularly when it has already been shown to be carcinogenic to mice and rats and even scientists are of the opinion that it is probably carcinogenic to human beings. The Certificate of Registration granted in favour of the petitioners which are available on record indicates that it was for formulation namely BHC 10% DP, BHC 50% WP as well as BHC technical. Coming to the question of power of the Central Government under the Insecticides Act and rival contention of the parties in this Court as noticed earlier, it would be appropriate for us to notice some of the provisions of the Act.

14. Section 3(e) defines "insecticide" to mean that :

"3. (e) 'insecticide' means -

(i) any substance specified in the Schedule; or

(ii) such other substances (including fungicides and weedicides) as the Central Government may, after consultation with the Board, by notification in the Official Gazette, include in the Schedule from time to time; or

(iii) any preparation containing any one or more of such substances;"

15. Section 4 contemplates constitution of a Board called Central Insecticides Board whose duty is to advise the Central Government and the State Government on technical matters arising out of the administration of the Act as well as to carry out the other functions assigned to the Board under the Act. Section 5 stipulates the constitution of a Registration Committee which Committee is empowered to regulate its own procedure for conduct of business to be transacted by it. Section 9 provides for registration of insecticides. Under sub-section (1) of Section 9 a person desirous of importing or manufacturing any insecticide is required to make an application to the Registration Committee for the registration of such insecticide. Under sub-section (3) of Section 9 the Registration Committee is required to hold such enquiry as it deems fit and on being satisfied about the efficacy and safety of the insecticide to human beings and animals register the same. Second proviso to sub-section (3) of Section 9 confers power on the Committee to refuse to register the insecticide. Section 10 provides for an appeal against the decision of the Registration Committee to the Central Government against non-registration. Section 11 is the suo motu power of the Central Government in exercise of which power the Government can call for the record of the Registration Committee in respect of any case for the purpose of satisfying itself as to the legality or propriety of the decision. Section 13 is the power to grant licence and any person desirous of manufacturing or selling or exhibiting for sale or distributing any insecticide is bound to have a licence under Section 13. Section 14 is the power of the licensing officer to revoke, suspend or amend the licence issued under Section 13. Section 17 is the prohibition for import as well as manufacture of certain insecticides. Section 26 is the power of the State Government to require any person or class of persons to report occurrence of poisoning through the use or handling of any insecticide coming within his cognizance. Section 27, the interpretation of which comes up for our consideration in the case in hand contains the power of the Central Government in purported exercise of which the impugned notifications have been issued. Since the same provision requires the consideration of this Court the same is extracted hereinbelow in extenso :

> "27. Prohibition of sale, etc., of insecticides for reasons of public safety. - (1) If, on receipt of a report under Section 26 or otherwise, the Central Government or the State Government is of opinion, for reasons to be recorded in writing, that the use of any insecticide specified in sub-clause (iii) of clause (e) of Section 3 or any specific batch thereof is likely to involve such risk to human beings or animals as to render it expedient or necessary to take immediate action then that Government may, by notification in the Official Gazette, prohibit the sale, distribution or use of the insecticide or batch, in such area, to such extent and for such period (not exceeding sixty days) as may be specified in the notification pending investigation into the matter :
>
> Provided that where the investigation is not completed within the said period, the Central Government or the State Government, as the case may be, may extend it by such further period or periods not exceeding thirty days in the aggregate as it may specify in a like manner.
>
> (2) If, as a result of its own investigation or on receipt of the report from the State Government, and after consultation with the Registration Committee, the Central Government, is satisfied that the use of the said insecticide or batch is or is not likely to cause any such risk, it may pass such order (including an order refusing to register the insecticide or cancelling the certificate of registration, if any, granted in respect

thereof), as it deems fit, depending on the circumstances of the case."

16. Section 36 is the rule-making power of the Central Government.

17. An examination of the aforesaid provisions of the Act indicates that before registering a particular insecticide the Registration Committee is duty-bound to hold such enquiry as it deems fit for satisfying itself that the insecticide to which the application relates is safe to human beings and animals. Coming now to the core question namely whether under Section 27 of the Act the Central Government can cancel the Certificate of Registration in respect of an insecticide, it appears to us that under sub-section (1) of Section 27 when the Central Government or the State Government is of the opinion that the use of any insecticide specified in sub-clause (iii) of clause (e) of Section 3 or any specific batch thereof is likely to involve risk to human beings or animals and it is necessary to take immediate action then on recording reasons in writing the sale, distribution or use of the insecticide or batch can be prohibited in such area to such extent not exceeding 60 days as may be specified in the notification pending investigation into the matter. In other words, in respect of an insecticide within the meaning of Section 3(e)(iii) i.e. a preparation or formulation containing any one or more of such substances specified in the Schedule, the appropriate Government can immediately by issue of notification prohibit the sale, distribution or use of the same pending investigation. Under the proviso to sub-section (1) of Section 27, if the investigation is not completed within the period of 60 days then the prohibition in question could be extended for such further period not exceeding 30 days in the aggregate. Under sub-section (2) if the Central Government on the basis of its own investigation or on receipt of the report from the State Government and after consultation with the Registration Committee is satisfied that the use of the said insecticide or batch is or is not likely to cause any such risk then it may pass such order as it deems fit depending upon the circumstances of the case, either refusing to register the insecticide or cancel the Certificate of Registration, if already granted. The use of the words "said insecticide" in sub-section (2) obviously refer to the insecticide in question which was the subject-matter of consideration under sub-section (1) and in respect of which pending further investigation into the matter the Central Government has already issued a prohibition for sale, distribution or use of the insecticide in question. Therefore, the power of cancellation of Certificate of Registration conferred upon the Central Government under sub-section (2) of Section 27 can be exercised only in respect of any insecticide specified in sub-clause (iii) of clause (e) of Section 3 i.e. a preparation or formulation of one or more of the substances specified in the Schedule but the said power cannot be exercised in respect of an insecticide which is specified in the Schedule itself by Parliament. We are unable to accept the arguments advanced by the learned Additional Solicitor General that sub-section (2) of Section 27 is not restricted to an insecticide in respect of which the Central Government has already issued a notification prohibiting the sale, distribution or use pending investigation into the matter. The scheme of sub-section (1) and sub-section (2) of Section 27 is that in respect of a formulation which is also an insecticide within the meaning of Section 3(e)(iii) the Central Government for reasons to be recorded in writing and pending investigation into the matter can immediately prohibit sale, distribution or use and after further investigation can cancel the Certificate of Registration in respect thereof under sub-section (2) of Section 27. That being the position in exercise of such power under sub-section (2) of Section 27 a Certificate of Registration in respect of an insecticide under Section 3(e)(i) cannot be cancelled under sub-section (2) of Section 27. This is also in consonance with the logic that an insecticide which is the formulation of any one or more of the substances specified in the Schedule and is consumer oriented power of cancellation of registration certainly has been conferred upon the Central Government but in respect of an insecticide which does not come to a consumer and is a substance specified in the Schedule itself and therefore an insecticide under Section 3(e)(i), the power has not been conferred upon the

Central Government since the specified substance in the Schedule has been specified by Parliament itself. In view of the aforesaid conclusion of ours we would hold that those of the Certificates of Registration granted to the petitioner in respect of any formulations namely BHC 10% DP and BHC 50% WP, the order of the Central Government cancelling Certificate of Registration is well within the jurisdiction and there is no legal infirmity in the same. But in respect of Benzene Hexachloride which is one of the substances specified in the Schedule and as such is an insecticide within the meaning of Section 3(e)(i) there is no power with the Central Government under sub-section (2) of Section 27 to cancel the Certificate of Registration.

18. So far as the contention of Mr. Vaidyanathan, the learned Senior Counsel appearing for the petitioners in the transferred case that consultation with the Registration Committee is a precondition for exercise of power under sub-section (2) and such consultation being not there, the issuance of notifications is bad we are of the considered opinion that undoubtedly before the power under sub-section (2) of Section 27 can be exercised the Central Government is duty-bound to have consultation with the Registration Committee. But in the case in hand having examined the counter-affidavits filed on behalf of the different ministries of the Central Government that there has been due and substantial consultation with the Registration Committee which is apparent in the notification of December 1994 itself, and since then there has been further study into the matter and committees of experts have been constituted who have gone into the matter and on the basis of the reports submitted by such expert committee ultimately the Central Government has taken the final decision, it is not possible for us to hold that there has been no consultation with the Registration Committee before exercising of power under sub-section (2) of Section 27. The contention of Mr. Vaidyanathan, the learned Senior Counsel on this score, therefore, must be rejected. Before we part with this case and having examined the different provisions of the Insecticides Act, 1968 we find that once a substance is specified in the Schedule as contemplated under Section 3(e)(i) then there is no power for cancelling the registration certificate issued in respect of the same substance even if on scientific study it appears that the substance in question is grossly detrimental to the human health. This is a lacuna in the legislation itself and therefore, steps should be taken for appropriate amendment to the legislation. In the net result, therefore, the writ petition is disposed of with the observations made earlier and the transferred cases are allowed to the extent indicated above. There will be no order as to costs.