IN THE SUPREME COURT OF INDIA

(ORIGINAL CIVIL JURISDICTION)

CIVIL WRIT PETITION _____ OF 2003

UNDER ARTICLE 32 OF THE CONSTITUTION OF INDIA

IN THE MATTER OF: -

SRISHTI
(A registered society)
Through its Director, Mr. Ravi Shankar Agarwal
H-2 Jungpura Extension,
New Delhi –110014 ...Petitioner

VERSUS

1. UNION OF INDIA,
Ministry of Agriculture,
Through its Secretary,
Krishi Bhawan,
New Delhi-110001

2. Ministry o Chemicals, Fertilisers & Petrochemicals,
Through its Secretary,
Shastri Bhawan,
New Delhi.

3. Ministry Of Health And Family Welfare,
Through its Secretary,
Nirman Bhawan,
New Delhi;

4. Ministry Of Environment And Forests,
Through its Secretary,
B-2 Wing, Paryavaran Bhawan,
C.G.O Complex,
Lodi Road, New Delhi;

5. Ministry Of Food And Consumer Affairs,
Through its Secretary,
Krishi Bhawan,
New Delhi-110001. ...Respondents

A PETITION UNDER ARTICLE 32 OF THE CONSTITUTION OF INDIA FOR ISSUANCE OF A WRIT, ORDER OR DIRECTION IN THE MANDAMUS OR ANY OTHER NATURE, FOR FIRSTLY, A BAN ON THE PESTICIDES AND INSECTICIDES IN INDIA WHICH HAVE ALREADY BEEN BANNED IN THE OTHER COUNTRIES, SECONDLY, FOR PRESCRIPTION OF MAXIMUM RESIDUE LEVELS (MRLS) OF THE REGISTERED PESTICIDES ACCORDING TO THE INTERNATIONAL STANDARDS SET BY CODEX ALIMENTARIUS COMMISSION ESTABLISHED IN 1962 UNDER THE AEGIS OF FOOD AND AGRICULTURE ORGANISATION (FAO) & WORLD HEALTH ORGANISATION (WHO) AND MOST IMPORTANTLY, FOR THE SETTING UP OF AN EXPERT BODY FOR PREVENTION, CONTROL & MONITORING IN THE AREA of Toxics & their effects on Environment & Human health.

OF TOXICS AND THEIR EFFECT ON ENVIRONMENT AND HUMAN HEALTH, AND FOR OTHER RELATED RELIEFS.

To

The Hon'ble Chief Justice of India

And His Lordships Companion Justices of the

Supreme Court of India.

The humble petition of the

Petitioner above named.

MOST RESPECTIVELY SHOWETH: -

1. That the present Writ Petition is being filed under Article 32 of the Constitution of India as in public interest, in the wake of several recent studies which have shown alarming levels of pesticide contamination in food, water and soil resulting in severe health impacts and even deaths in humans and other species. The Petitioner herein is therefore seeking the indulgence of this Hon'ble court for an effective prevention control and monitoring of the contamination of food caused by the unscientific and unregulated use of pesticides and other chemicals.

2. That the Petitioner herein is a non profit environmental organisation registered as a society since the year 1989, under the

essential for the proper assessment of human health hazard related to pesticide exposure.

Major Reported Cases of Pesticides Poisoning

Poisoning due to pesticides can be occupational (workers involved in the manufacturing process, sprayers or farmers), accidental or intentional (suicide cases). Even through the daily diet the general population is exposed to small quantities of various types of pesticides. In 1958, Kerala had the first reported case of pesticide poisoning where 100 people died due to parathion poisoning. Pesticide poisoning cases have been reported from Bengal, Karnataka, Andhra Pradesh, Bihar, Tamil Nadu, Punjab, Haryana, Himachal Pradesh, Maharashtra, Uttar Pradesh, West Bengal and Gujarat. The date presented in the map does not give a complete picture there are many poisoning cases which go unreported. Lack of systematic and authentic date on poisoning is a serious hurdle in assessing pesticide poisoning.

Sources :

- Pesticides, Development, Toxicity and Safety, R.B. Raizada and T.S.S. Diskshit (eds.) Industrial Toxicology Research Centre, Lucknow, India, 1992.

- Laha N N , A Shankar and R Chopra, 1988 Journal Ass Phys India 36 594

- Dashora V K and D Swaroop, 1986 Journal Ass Phys , India 34 227

- Dagli A J , J S Moos and W A Shaikh, 1981 Journal Ass Phys , India 29 794

ANNEXURE P-14

Residues in human milk

Monitoring of human milk is important from two standpoints. Firstly, pesticides tend to accumulate in the fat and are relatively easy to isolate and measure and secondly to evaluate their potential risk to infants, who rely solely on mother's milk for a substantial period. Residues of these compounds in human milk have been reported from different parts of the world as reviewed by Jenson[36] and from India[29,39-43]. The levels of these contaminants in the human milk samples collected from different cities are given in Table III.

Table III. Levels of DDT and HCH content in human milk samples in general population in India

City	Number of Samples	Whole milk basis (ppm)	
		Total DDT	Total HCH
Lucknow[39]	25	0.127	0.107
Ludhiana[39]	75	0.51	0.195
Banglore[40]	6	0.053	0.014
Calcutta[40]	6	0.114	0.031
Bombay[40]	6	0.224	0.053
Delhi[41]	60	0.344	-
Delhi[42]	60	-	0.38
Ahmedabad[43]	50	0.305	0.224

In a multi-country study[45] (Belgium, China, FRG, India, Israel, Japan, Mexico, Sweden, USA and Yugoslavia) on the assessment of human exposure to selected organochlorine compunds, the residue levels for pp'-DDE and b-HCH were found to be higher in the human milk samples collected from developing countries like China, India and Mexico than in the participating developed countries.

Higher levels of these chemicals in mother's milk is a reflection of their increased burden and their translactational passage. The toxicological implication of these findings could not be assessed precisely, however, preventive measures are warranted to reduce their body burden to avoid any potential health effect.

ANNEXURE P-15

Residues in human fat

Data on DDT and HCH residues in human fat samples in the general population from different cities are given in Table II. Studies conducted by the NIOH to monitor pesticides residues in autopsy fat samples from subjects from different parts of the country indicated a wide variation[34]. The maximum DDT residues were detected in age group of 2-39 years and the higher levels of HCH residues were found in the age group of 40 years. No sex wise difference was observed for DDT and HCH residues.

The wide variation seen may be due to the geographical variations in consumption and use of these chemicals. However, the factors that may influence the storage and bioaccumulation of these chemicals are the compound intensity, efficiency of absorption, species, age, nutritional status and integrity of the organs[41]. In the absence of a suitable animal, tissue culture or human biomarker model of biologic evidence to provide objective evaluation, the pharmacological interpretation of such small amounts of pesticides in the human body is not possible.

Table II. Levels of DDT and HCH content in human fat samples in general population in India

City	Year	Number of Samples	Total DDT (ppm)	Total HCH (ppm)
Delhi[35]	1964	35-67	26.0	1.43
Delhi[36]	1973	94	21.8	-
Delhi[37]	1976	14	4.7	-
Chandigarh[34]	1980	10	20.03	2.44
Agra[34]	1980	14	12.02	2.0
Bombay[34]	1980	34	6.15	1.61
Calcutta[34]	1980	45	6.5	1.61
Bhopal[34]	1980	14	9.14	1.06
Ahmedabad[34]	1980	80	21.81	3.87
Banglore[34]	1980	116	7.82	5.05
Meerut[38]	1981	32	4.7	-
Delhi[30]	1984	340	22.25	16.85

Superscript nos. refer to the serial no. in the reference list.

Residues in human blood

Since blood is the most accessible body fluid for ascertaining residues levels, scientist at the NIOH, Ahmedabad have attempted to provide a database on the residues of DDT and HCH including other cyclodiene derivatives eg. heptachlor epoxide, aldrine, oxychlodrane, HCB and dieldrin in blood samples from general population of Ahmedabad (rural) area[28] . Heptachlor epoxide and HCB were not detected in these blood samples. The total organochlorine insecticides content in all serum samples showed an average of 200.3 ppb with a range of 58.3-321.4 ppb. Among these chemicals, HCH and DDT were the chief contaminants and their order of persistency was HCH>DDT >didldrin>oxychlordane>heptachlor>aldrin. Residues in the blood samples of the general population of other cities are given in Table I.

Table I. Levels of DDT and HCH content in human blood samples in general population in India

City	Year	Number of Samples	Total DDT (ppm)	Total HCH (ppm)
Lucknow[29]	1980	25	0.02	0.022
Delhi[30]	1982	340	0.71	0.49
Lucknow[31]	1983	48	0.028	0.075
Delhi[32]	1985	50	0.301	-

Ahmedabad (rural)[28]	1992	31	0.048	0.148
Ahmedabad (urban)[28]	1997	14	0.032	0.039

Superscript nos. refer to the serial no. in the reference list.