

Endosulfan ban and after...

story of system failure.



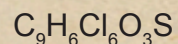
The more I learned about the use of pesticides, the more appalled I became. I realized that here was the material for a book. What I discovered was that everything which meant most to me as a naturalist was being threatened, and that nothing I could do would be more important.

— Rachel Carson

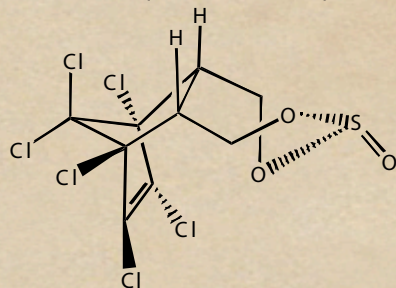
explaining her motivation for writing the book *Silent Spring*

- ◆ Globally about 1100 chemical pesticides in use
- ◆ 44 Billion USD global trade
- ◆ 6 Companies control 77% of business they have 512 molecules and of these 327 molecules have proven harmful effects environment/human
- ◆ PAN International list 448 molecules as Highly Hazardous Pesticides that need to be banned / phase out
- ◆ Agroecology options /recommendations available for all the chemical pesticides.

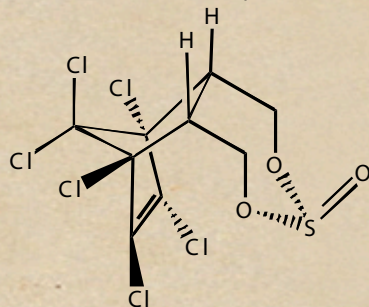
Molecular formula and structure



alpha endosulfan (endosulfan I):



beta endosulfan (endosulfan II):



Chemical group

Organochlorine, cyclodiene subgroup

CAS numbers

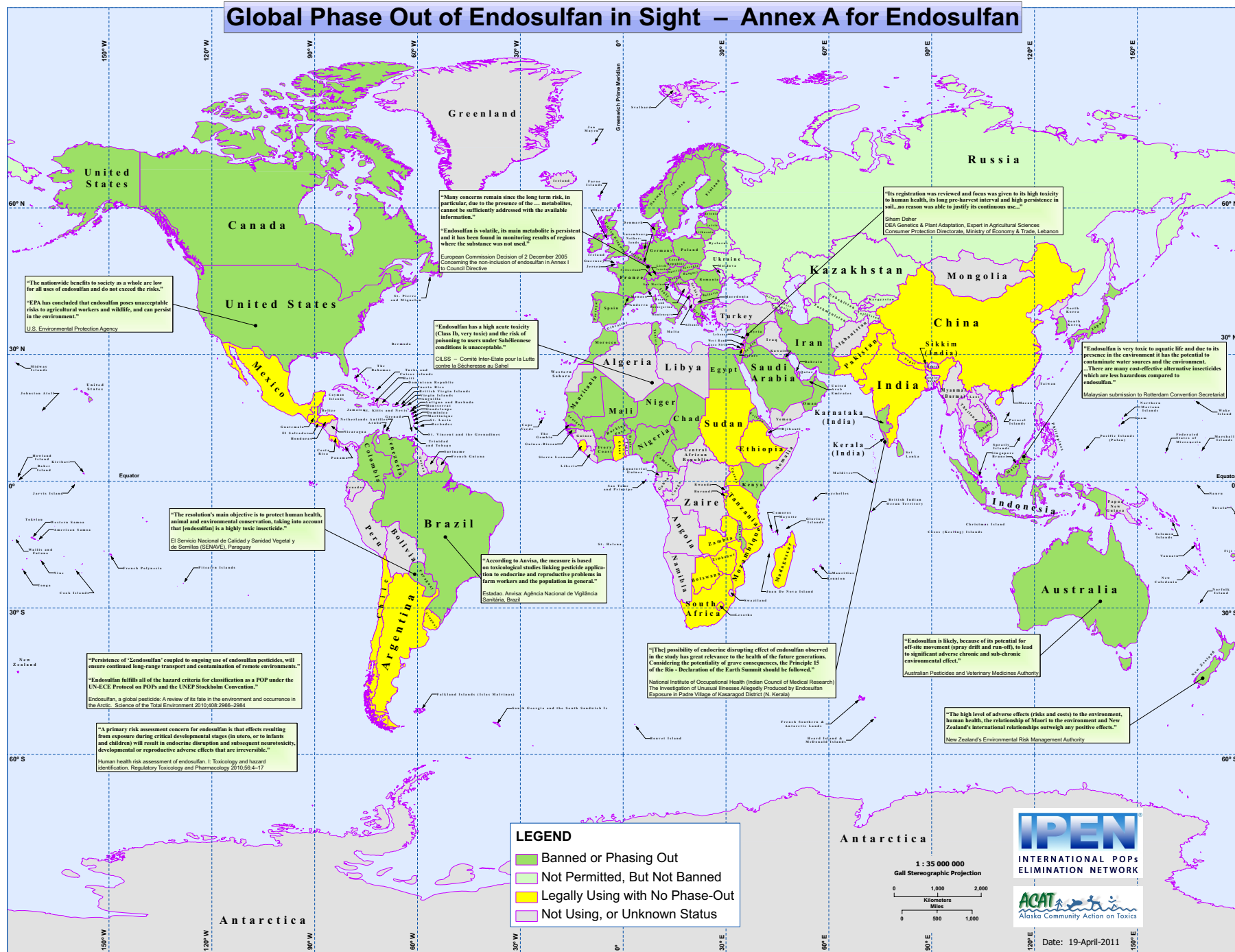
Technical endosulfan	115-29-7
Alpha endosulfan	959-98-8
Beta endosulfan	3321-65-9
Endosulfan sulphate	1031-07-8

Endosulfan is banned Globally by Stockholm convention in April 2011. The ban will come in to force in 2012. The global use of endosulfan will end in 2017.

There is exemption as per the convention and the exemption are for 5 years . India and few other countries are opt in and has not made any indications.



Global Phase Out of Endosulfan in Sight – Annex A for Endosulfan



- ◆ POP RC that reviewed alternatives to endosulfan suggested by parties to the convention is coming up with options including non chemical options.
- ◆ The government of India still not giving up endosulfan.
- ◆ GOI also refused to share non chemical alternatives
- ◆ The official stand is that endosulfan is the safest cheapest pesticide and can see collusion with industry visibly in Supreme Court, International conventions

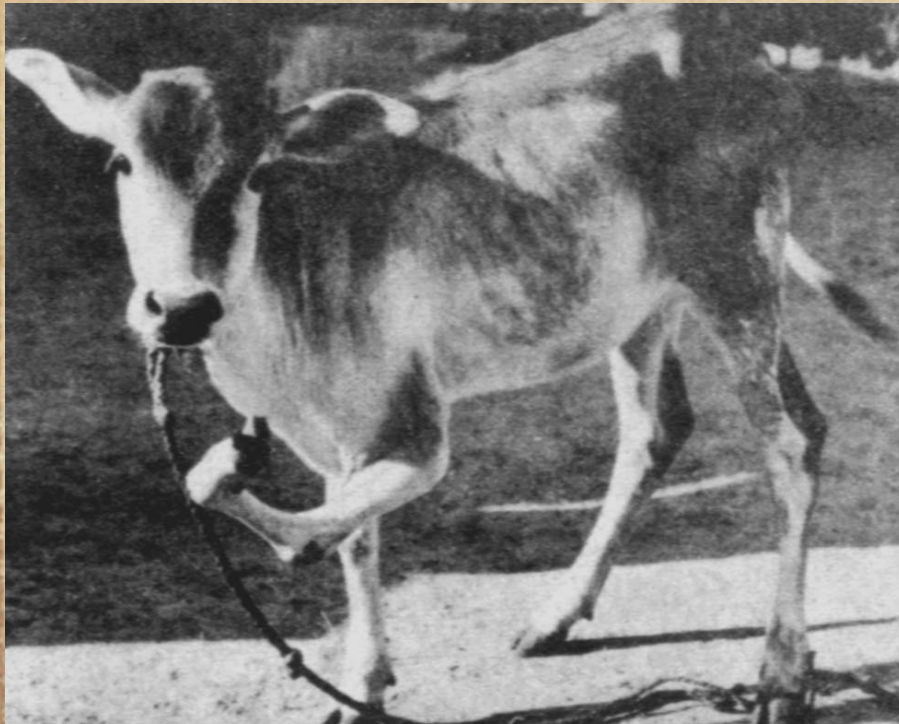




The hunger strike by Kerala Chief Minister demanding Global ban 25 April 2011.

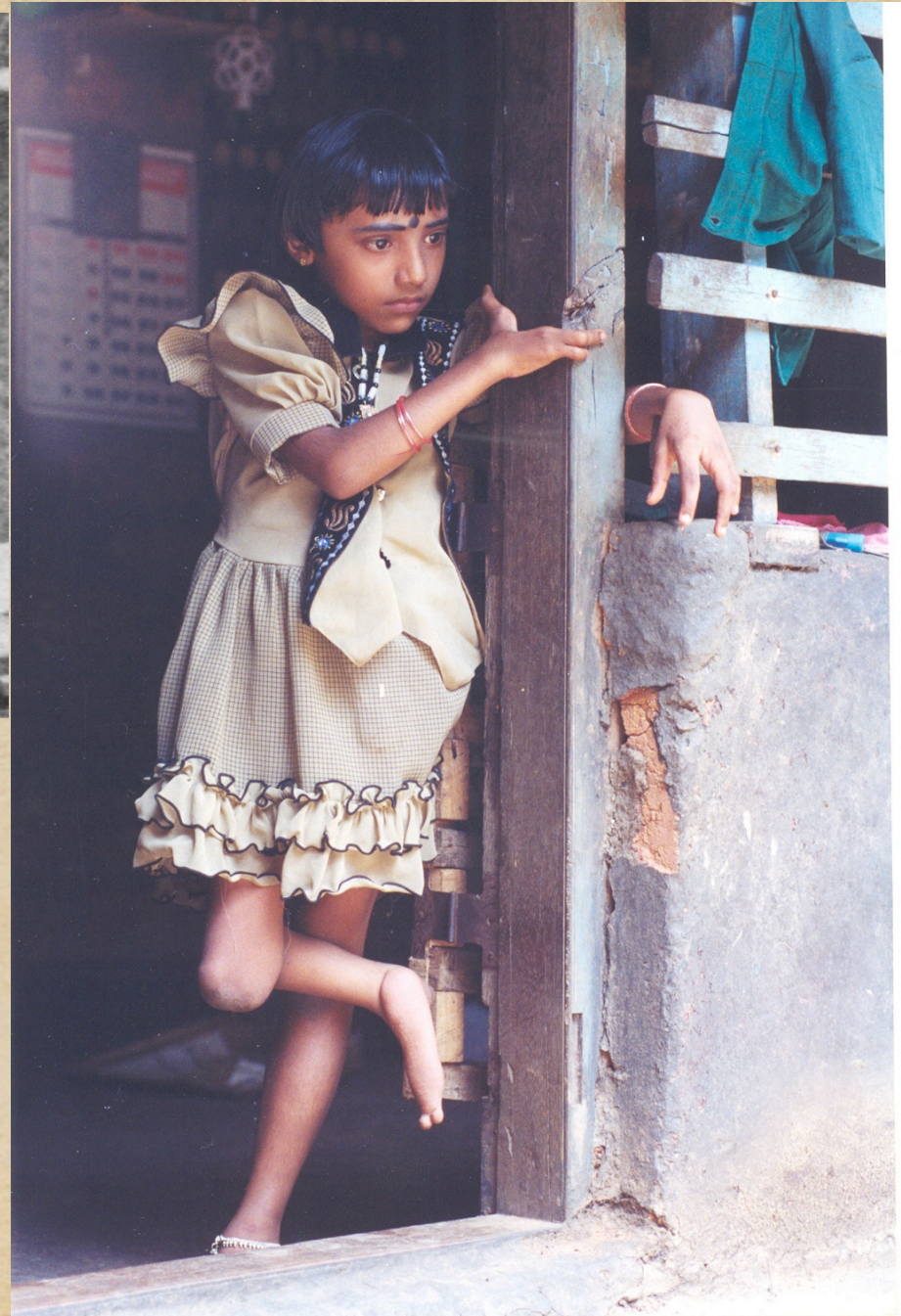
- ◆ 1978 first article and photograph calling life is cheaper than cashew
- ◆ 1992 Dr Banerji Committee recommended severe restriction which is not implemented even today.
- ◆ 1998 Smt Leelakumari moved the Munsif Court asking for relief
- ◆ 2001 Kerala Government Banned use of endosulfan in Kerala
- ◆ 2001, 2002, 2003 Court interventions
- ◆ 2005 District Endosulfan Remediation and Relief Cell formed
- ◆ 2006 State government started relief work
- ◆ 2008 Stockholm POPRC accepted nomination
- ◆ 2009 Accepted as POP by POPRC
- ◆ 2010 Recommended elimination considering - Long range transport and bioaccumulation of endosulfan as global threat.
- ◆ 2011 Stockholm Convention on POPs the COP decided to list annexure A with out specific exemptions.





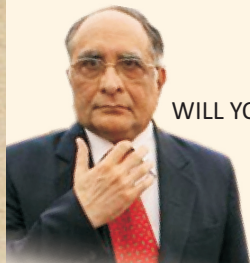
The illiterate of the 21st century
not be those who cannot read
and write, but those who cannot
learn, unlearn and relearn.

- Alvin Toffler





- ◆ Water solubility and levels in kasaragod
- ◆ Blood levels and oral dose
- ◆ Epidemiology challenged using agriculture science
- ◆ RTI and legal cases
- ◆ Personal attacks
- ◆ SLAPs
- ◆ Fragmentation and changing number game.
- ◆ Agriculture / Health debate and challenge
- ◆ Challenge to democratic systems and highest court of India.



AN APPEAL
MAY IT PLEASE YOUR LORDSHIP
HIDDEN FACTS ABOUT ENDOSULFAN

HON'BLE CHIEF JUSTICE OF SUPREME COURT
WILL YOU PLEASE PUNISH THOSE WHO MISLED SUPREME COURT?



Hon'ble Chief Justice S. H. KAPADIA

THE CALICUT MEDICAL COLLEGE STUDY ON PESTICIDE ENDOSULFAN IN KASARGOD.

Thanks to RTI Act, copy of the original report and raw data were obtained. Under pressure from local environmental NGOs and politicians, some scientists of Calicut Medical College, Kerala tried to suppress, by unethical means, the original data generated by their study. The suppression and fabrication of facts supplied an erroneous message to the general public and judiciary about Endosulfan.

Hidden Facts Now Exposed:

- **CANCERS :** In areas where Endosulfan was sprayed – 10 out of 6107 i.e. only 0.16%
- In areas where there was no spraying – 11 out of 3742 i.e. about 0.29%
- **SEIZURES:** 25% less in Endosulfan sprayed areas compared to unsprayed area
- **PSCHYCIATIC PROBLEMS, SKIN DISEASES and ASTHMA** were much less in Endosulfan sprayed areas compared to unsprayed areas.
- **MENTAL RETARDATION** was equal among both the population – sprayed/unsprayed
- **Proportional mortality rates (%) from Stroke/Paralysis, Seizures, Heart Diseases, Neonatal disorders** were much less in Endosulfan areas compared to unsprayed areas.
- **Other illnesses like kidney and liver, old age deaths** were slightly more in the sprayed area but comparable to Indian average.
- The proportion of individuals who have undergone surgeries was much less (4.49%) in Endosulfan sprayed areas and high (5.85%) in unsprayed areas.

Most shocking is the fact that the data concerning residues of Endosulfan in 41 blood serum samples were thoroughly fabricated in the study report of Calicut Medical College placed before the Hon'ble Supreme Court as "material evidence" in the WP 213 of 2011.

Did you know that two different versions of Calicut Medical College reports were submitted to Supreme Court under affidavit as true copies? Both carry fabricated and falsified data.

Hon'ble Chief Justice, May we request you to take strongest possible action against those who fabricated facts and misled you ? It is a supreme crime if a group of scientists, foreign funded environmental activists and political organisations succeed to distort the truth before the Supreme Court and get away. Let truth & justice prevail.




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violations at its peak
the industry can survive the
government did not respond
the court also silent so far.



- ◆ Endosulfan is one of the most inspiring environmental activism i have heard.
- ◆ Right from the victim to the ministers joined as the voice of the silenced.
- ◆ The local actions could get a global thinking
- ◆ It triggered change and i can see another dozen of pesticides lined up for global phase out now.
- ◆ In India the immediate challenge is to ban 67 HHPs that are banned else where and used here.



**"People are fed
by the food industry,
which pays no attention to health,**

**and are treated
by the health industry,
which pays no attention to food."**

Wendell Berry

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- www.endosulfan.in
- www.endosulphanvictims.org
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