Scrutiny of Industry Arguments on 27 pesticides ban







Above: S Anandhi & her 3 children of Othiyam Village, Perambalur district, TN after husband S Selvam (left) died due to pesticide poisoning, Nov. 2017 - Acephate & Monocrotophos implicated

Alliance for Sustainable & Holistic Agriculture www.kisanswaraj.in

Overview of the 27 pesticides

- 27 pesticides in one go This is a major step for India, no doubt but was in the offing for a long time now. Countries like Indonesia and states like Kerala & Sikkim opted for similar approaches earlier with only good results!
- 21 of these are "Highly Hazardous Pesticides"
- 17 are Deemed to be Registered Pesticides ("DRPs" 71 pesticides were in use when Insecticides Act 1968 came into force and these became DRPs)
- 3 are WHO Class Ib pesticides and 13 Class II pesticides
- 3 are endocrine-disrupting (EU), 3 are reproductive toxicants (EU), 6 are probable/likely carcinogens (US EPA), 1 WHO probable carcinogen
- 11 are eco-toxic

(Remaining **9** Class Ia and Ib pesticides in India: Class Ia – Bromadiolone, Class Ib – Abamectin, Coumatetralyl, Cyfluthin, Beta-Cyfluthrin, Edifenphos, Oxydemeton-methyl, Propetamphos, Zinc Phosphide)

Argument 1: "No harmful effects of these pesticides have come to light"

Apart from known published literature, the following is documented

- Acute poisonings documentation of deaths and hospitalisations implicated acephate, monocrotophos, quinalphos, chlorpyrifos, mancozeb, methomyl, carbendazim etc.
- Implicated in wildlife poisonings (Malathion, Chlorpyrifos, Monocrotophos etc.)
- Implicated in export consignment rejections acephate, carbendazim, carbofuran, chlorpyrifos, dicofol, dimethoate, malathion, methomyl, monocrotophos, quinalphos, thiodicarb, thiophanate-methyl etc.

AND IF YOU DON'T WATCH, YOU DON'T SEE OR KNOW! TOOLS FOR SURVEILLANCE MISSING.....

Argument 2: "This is Abrupt and Unilateral"

- DRPs have been in use in India from before Insecticides Act 1968 came into existence! 7 decades of time for different studies.... We don't know what studies have been done, and what the data says
- RB Singh Committee 1999 Captan, Dicofol, Thiram etc. (several others not in the 27 list too) studies/data asked not taken up and submitted
- CD Mayee Committee 2005 Atrazine, Butachlor, Mancozeb, Monocrotophos, Quinalphos, Thiophanate Methyl, Zineb, Ziram
- Anupam Varma Committee gave time till December 2017. We can assume many of the studies have not been done going by the Govt Notification on May 18th 2020

IRONICALLY, INDUSTRY ALSO COMPLAINING ABOUT NON-TRANSPARENCY!

"Abrupt & Unilateral"....?

- Anupam Varma Committee review processes show that the industry was part of the review.
- YK Gupta of AIIMS did not participate in at least 3 meetings, but industry did.
- Crop Life India, Crop Care Federation of India, Pesticides Manufacturers & Formulators Association of India.... Hindustan Insecticides, Syngenta, Bayer Crop Science, BASF, Chemtura, UPL, Dow, Indofil, El Dupont, FMC, Rallis, Isagro, Makhteshim, Sumitomo, Crystal Crop, Indofil etc.
- A PIL was filed in Delhi HC in fact because the Varma Committee was in the danger of being hijacked by the industry - too much industry involvement in what ought to be a independent review process - however, no civil society participation

Argument 3: "Farmers will suffer. What will they have as alternatives?"

- https://niphm.gov.in/IPMPackages.html
 https://niphm.gov.in/IPMPackages/Grapes.pdf (chemical alternatives other than proposed-to-be-banned are given, however)
- www.pestoscope.com (NPM)
- http://www.iifsr.res.in/npof/index.php?id=package of practices (Organic)

REPLACING ONE MOLECULE WITH ANOTHER, ONE INPUT WITH ANOTHER TO KILL A PEST IS NOT SCIENTIFIC PEST MANAGEMENT....

Argument 4: "Why should bans elsewhere be emulated here? Conditions there are so different....."

- If we have periodic, regular reviews of all registered pesticides, we don't have to rely on bans elsewhere as a trigger! Reviews are required to know what is the real situation, especially with registration-time biosafety assessment being not comprehensive, scientific and transparent.
- During registration, we have a "MAD" (Mutual Acceptance of Data) agreement with OECD countries how is a ban different in terms of using data from elsewhere?
- Experimental data from labs in controlled conditions coupled with the higher number of risk factors in India - direct exposures, malnourishment etc. should actually clinch it in favour of bans
- SUCH BANS SHOW THAT WE ARE EVOLVING WITH BIOSAFETY SCIENCE & POST-MODERN PEST MANAGEMENT SCIENCE
- IDEALLY, WE SHOULD SHOW THE WORLD HOW A PARADIGMATIC SHIFT IS POSSIBLE BY BOLDLY BANNING MANY OTHER PESTICIDES TOO WITHOUT WAITING FOR BANS IN OTHER COUNTRIES.

Argument 5: "This ban will lead to MNCs taking over our market"

- POISONS ARE POISONS whether made by MNCs or Indian companies - Let us not get misled by red herrings here
- We would like the entire toxic chemical industry to change everywhere where there are alternatives & there are alternatives!
- Indian companies & MNCs are working together in many products
- Indian companies <u>are</u> MNCs, exporting to other countries there, they would not like protectionism in the name of indigenous & transnational companies.....
- MNCs have, and had a larger market share BUT.....

INDIAN COMPANIES CAN NOW TAKE THE OPPORTUNITY TO LEAD WITH SUSTAINABLE ALTERNATIVES

Argument 6: "This affects a large market" How much is the loss, and to who?

- **No reliable data!** Lobby groups say 9600 Cr. Loss, in a 43000 Cr market 22.3%. PWC says 4000 Cr. Market to be affected of India's pesticides' industry market of 42000 crores. That is just 9.5%.
- Meanwhile, India's consumption of imported pesticides seems to be 5.28% of its total consumption of pesticides in the latest 5 years official data available (2014-2019), by volume.
- By value, total imports of all pesticides are \$ 5520 millions from 2013-16. China's share alone is 48.6% of total imports (\$2683 mn). Value share of imports from China of the 27 proposed-to-be-banned pesticides is estimated around 44%. **So, the ban affects China!**

Argument 7: "Farmers will be burdened by increased cost of production" - will they, if pesticide cost itself is a small part of CoC & if alternatives can bring down the cost further?

		%age in paid out cost, all-India, between 2004/05 & 2016/17 (Source: MoAFW)	Range, across years (across states in brackets)
1	Pigeonpea	6.0% (Avg of AP, Guj, Kar, MP, Mah & TN)	4.2 - 8.1% (5.3-14.5%)
2	Paddy	3.3% (Avg of AP, Ass, Bih, Chat, Guj, Har, HP, Jha, Kar, Ker, MP, Mah, Odi, Pun, TN, UP, UK, WB)	2.6 - 3.8% (0.9-7.2%)
3	Cotton	8.4% (Avg of AP, Guj, Har, Kar, MP, Mah, Odi, Pun, Raj, TN)	6.7 - 14.3% (5.0-14.2%)
4	Soybean	5.0% (Avg of AP, Cha, MP, Mah, Raj)	1.3 - 8.4% (3.4-9.4%)
5	Wheat	1.5% (Avg of Bih, Cha, Guj, Har, HP, Jha, Kar, MP, Mah, Pun, Raj, UP, UK, WB)	1.1 - 2.3% (0.4-6.1%)
6	Onion	3.3% (Avg of AP, Guj, Kar, Mah)	2.4 - 4.1% (1.9-4.9%)
7	Gram	3.5% (Avg of AP, Bih, Cha, Har, Jha, Kar, MP, Mah, Raj, UP)	0.3 - 4.8% (0.3-9.8%)
8	Sugarcane	0.9% (Avg of AP, Har, Kar, Mah, TN, UP, UK) Ov Dr Siva Muthuprakash from https://eands.dacnet.nic.in/Cost. of Cultivati	0.6 - 1.5% (0.2-3.0%)

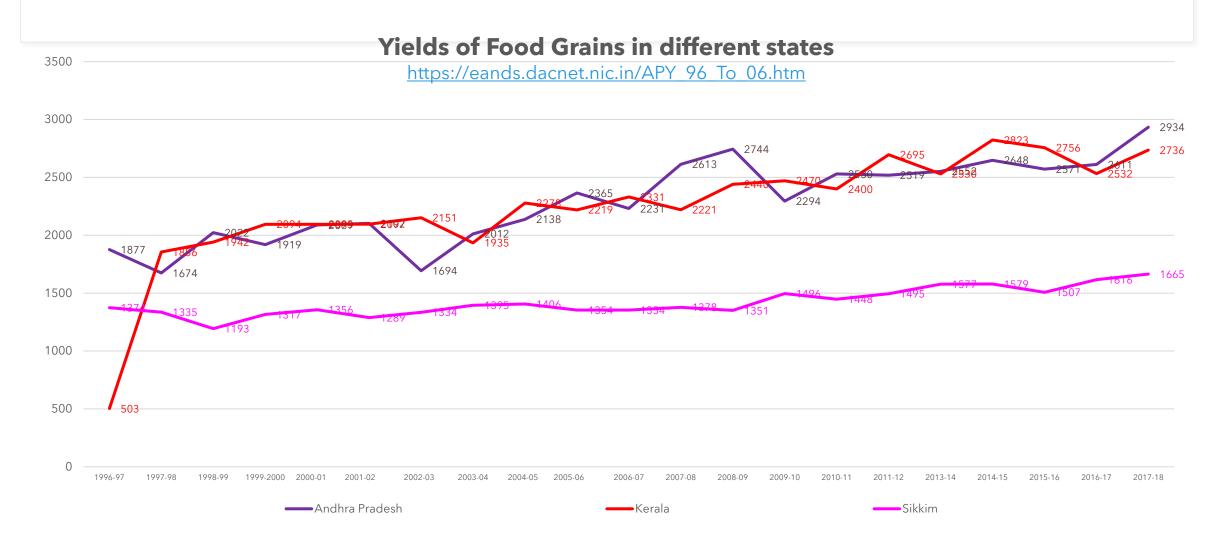
Source: Data compiled by Dr Siva Muthuprakash from https://eands.dacnet.nic.in/Cost_of_Cultivation.htm

Argument 8: "Economic growth being affected" - what about Export Rejections?

- Exports from India of Basmati Rice, Mangoes, Grapes, Chillis, Curry Leaves, Okra etc., repeatedly rejected in import destinations
- B/w Jan 2014 & May 2017, 597 import refusal reports from USA due to pesticide residues; 36 notifications just for basmati rice b/w Jn 2000 & Apr 2016 - carbendazim and acephate implicated 2005 & 2017, 1490 border rejections in EU
- No reliable estimates of total losses due to consignment rejections just one case of grape exports in 2010 due to one pesticide cost Rs 250 crores (Source: ICRIER Working Paper 345, 2017)
- Rs.1000 crore estimated loss for just rice exporters in FY2019 from just EU rejection based on pesticide norms, for eg.

Argument 9: "Yields will be affected"

Are states which adopted non-chemical approaches/ stopped some chemicals doing worse on yields?



..."Yields will be affected"

- There is no evidence that bans affect agricultural productivity and will threaten food security
- Indonesia is a well-known example for overnight banning of many pesticides subsequent story is a positive one
- Kerala stopped 14 pesticides in 2011 food grain yields have been higher after that
- Andhra Pradesh experiences with CMSA and CMNF shows that yields in fact go up, not down while pesticide usage is brought down – importantly, farmer profitability goes up & micro-studies show that NPM villages had lower suicides
- Detailed data & evaluation study reports shared in <u>Webinar 1</u> already

Argument 10: "Should these pesticides be banned just because farmers make injudicious use?"

- No point in making the victims as culprits
- The socio-economic conditions of our farmers and their acute agrarian distress will not allow them to make judicious use, even if our NARS/industry made judicious recommendations (which they don't, as documented)
- Risk Assessment should take our reality into consideration
- Meanwhile, pest management science has progressed lakhs of farmers are showing the path forward with non-chemical pest management
- Banning deadly pesticides will certainly facilitate a paradigmatic shift FARM WORKERS, FARMERS, CONSUMERS & MOTHER EARTH NEED IT!

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