**Mandate of the Special Rapporteur on the right to food**

**Questionnaire for non-governmental stakeholders to inform her report to the 34th Session of the Human Rights Council**

***(1) The use of pesticides has had detrimental effects not only on the environment but also on human health, both from direct and indirect exposure. What are the successful and unsuccessful measures taken by Governments and businesses to prohibit, ban, restrict and phase out pesticides that are harmful to human health?***

As per the latest information available, 272 pesticides (insecticides, fungicides, herbicides, plant growth regulators and biopesticdes) are registered for use in India. Government of India have banned and restricted certain pesticides. The Central Insecticide Board and Registration Committee (CIB&RC) under the Ministry of agriculture and Farmers welfare maintains a list of pesticides banned or restricted in India and publishes in their web site. The details as on the latest available list (as on 20th October 2015) are given below.

**Pesticides Banned in India**

There are 28 pesticides and four pesticides formulations banned for manufacture, import and use. There are two pesticides which are banned for use but continued to manufacture for export. In addition to the ban, eight pesticides are withdrawn from registration owing to the lack of sufficient data required as per the guidelines. Registration of 18 pesticides was refused as on the above mentioned date.

In addition, the pesticide endosulfan has been banned for production, sale and use all over India through an order from the Supreme Court of India in 2011. However, endosulfan is not included in the list of banned pesticides in India even after five years. Still, endosulfan is found in the list of pesticides registered (as on 31st Marsh 2016) and three formulation of endosulfan is still there in the list of approved uses of registered pesticides India (as on 30th June 2013).

**Pesticides Restricted in India**

A total of 13 pesticides comes under the category of restricted pesticides - three pesticides (diazinon, fenthion, fenitrothion) are banned for agriculture use, methyl parathion (50% EC and 2% DP) is banned for fruits and vegetables, monocrotophos is banned for vegetables, methoxy ethyl mercury chloride is permitted for seed treatment and captafol is permitted for seed dressing, DDT is withdrawn from agriculture use (still continue to be used for vector control), aluminium phosphide and methyl bromide are restricted to be used under strict expert supervision, sodium cyanide is restricted for fumigation of cotton bales under expert supervision, and finally cypermethrin 3% smoke generator is not allowed to be used by general public. Information on field level use of these pesticides is not yet available.

**Regulation of pesticides at State’s level**

As an effort to minimise the health and environmental impacts of pesticides in the State, Government of Kerala banned 16 pesticides (eight insecticides, four fungicides and four herbicides) in 2011. Again in 2015, the State has banned one more insecticide and restricted five insecticides and two herbicides. However implementation of these ban and restrictions are not that effective as these are still said to have been used in fields usually due to illegal trades as well as brought in from the neighbouring States. There was also an office order from the Kerala State agriculture department that certain pesticides, especially the restricted ones, are to be purchased only with the written prescription from an agriculture officer; however this is also not followed.

A review of 66 pesticides which are currently banned/restricted/withdrawn in one or more countries but continued to be used in India was carried out by an expert committee (constituted by Department of Agriculture, Gov. of India) under the chairmanship of Dr. Anupam Verma in 2015. The report submitted by this expert committee recommended a ban on 13 pesticides and phase out of 6 pesticides by 2020. This is the first time in India that a committee has recommended a ban on 13 pesticides and phase out 6 pesticides. However, the recommendation is note brought into action and the Central Insecticide Board and Registration Committee diluted the recommendation that they decided that a complete ban on use will come into effect by January 2018. Though the committee has taken efforts to review pesticides still used in India but banned or restricted elsewhere, they failed to include certain herbicides such as glyphosate (which WHO categorized as carcinogen) and isoproturon which has been banned in many countries. Such omissions make us believe that either the government is not serious about reviewing such toxic chemicals or they wanted to promote business of MNCs.

Though the above mentioned measures were seen, we feel that the government has not taken serious efforts to safeguard its people and environment from pesticides in the lights of the available profound scientific information which shows and ratify the health and environmental impacts caused by pesticides. Moreover, information revealed through field investigations make us believe that safe and judicious use of pesticides can never happen.

The pesticides businesses have not brought in any measures to prohibit, ban, restrict and phase out pesticides.

***(2) Do you believe that is possible to shift from industrial agriculture systems to agro-ecological methods?***

Yes, for sure, PAN India do strongly believes that a shift from chemicalised industrial agriculture to agroecological methods is possible and is an urgent need of the time. Indian agriculture is a low external input and non industrial agriculture. More than 80 percent of Indian farming systems are managed by small scale and marginal farmers. Predominantly it is subsistence economy of the farmer surviving by devoting his time in the available small area and producing enough to meet the family needs; and many of them use both chemical fertilisers and pesticides but the amount of these chemical inputs per unit area are far lesser than those used in certain developed countries. However, in extreme rural areas and villages farmers do not rely on chemical inputs. Contract farming off late follow the industrial model of high input farming. Given the fact that Indian farming is not the conventional industrial farming it is easy to switch to Agroecoloy.

Ecological agriculture is the only way to realize sustainable production systems. Only agroecology can address the issues seen in farming sector. We strongly feel that, from experiences across the globe and also from our own experiences, farming based on the sound science of agroecology can ensure safe and nutritious food to the world’s population, sustain small scale and marginal farmers, enhance and strengthen rural livelihoods as well as creating safe living environment. Agroecological methods do not rely on chemical inputs, and so the production system will not contaminate soil, water, air as well the food produced.

Our field experience in Indian villages, and work with small farmers and biodiversity based ecological farmers convince that the transition is easy and achievable if the State can provide market linkage and support that it was providing to the conventional sector.

***(3) Some particularly exposed or vulnerable groups such as children, pregnant women, farmers, farm workers, indigenous peoples and migrant workers, are at greater risk to the effects of pesticides due to higher exposure or increased sensitivity. Please explain the efforts undertaken by Governments and businesses to prevent and mitigate detrimental impacts of pesticides on the health of these vulnerable groups.***

So far, there are no such efforts undertaken by the government or businesses to prevent detrimental impacts of pesticides on the health of vulnerable groups. Additionally, neither proper training or advises are given to such vulnerable groups on the inherent risks of pesticide use nor field level monitoring is happening at the regulatory point of view or at government level. We do not see any such efforts or attempts from the Ministry of Agriculture and Farmers Welfare, and the Ministry of Health and Family Welfare intended to alleviate risk of pesticide exposure to vulnerable groups such as children, pregnant women, farmers, farm workers, indigenous peoples and migrant workers, etc.

However, the report submitted by the expert review committee under the chairmanship of Dr. Anupam Verma in late 2015 recommended that ‘children and pregnant women should not be exposed to pesticides’. Though such a recommendation is given, it has not mentioned how such recommendations could be realised.

The insecticide rules (Indian Insecticide Rules 1971) 19 (4) states that a warning statement "KEEP OUT OF THE REACH OF CHILDREN" shall be appearing on the label pasted on pesticides container/package belonging to the category of extremely toxic, highly toxic and moderately toxic pesticides.

***(4) Is there any study that has been done conducted by your organization using disaggregated data to differentiate and detect impacts on above mentioned vulnerable groups?***

Field studies have shown that pesticides, often not approved for specific crop pest combinations are used indiscriminately on vegetable farm within human settlement areas. A recent study noted that 19 different trademarks (brands) of 18 technical ingredients of pesticide are found to be used in the vegetable farming in a village in northern Kerala. In this, 11 are insecticides and 8 are fungicides. Among four of them (two insecticides and two fungicides) are combination pesticides contains more than one technical ingredients, the rest contains only one technical ingredient. Among them, certain pesticides are restricted in Kerala. According to the PAN[[1]](#footnote-1) International list of Highly Hazardous Pesticides (HHPs), 15 of the technical ingredients are Highly Hazardous, mean that they are dangerous and have the potential to cause or induce various severe acute and chronic diseases. An analysis shows that these pesticides are implicated in sever health hazards. Eight of the technical ingredients are neurotoxins having the potential to damage nervous system functions, 10 of the technical ingredients are carcinogenic (confirmed/possible) having the potential to cause various cancers, seven of the technical ingredients are reproductive toxins having the potential to impair and alter reproductive system functions, six of the technical ingredients are developmental toxins having the potential to interfere with foetal developmental pathway and severely impact the growth and development of foetus in the womb and children, 11 of the technical ingredients are endocrine disrupting pesticides (confirmed/suspected) that have implicated in disrupting the hormone system as well as altering the functioning of hormones. Most of the pesticides are implicated to have been linked to organ toxicity, impacting the kidney and liver functioning besides impacting the reproductive system, nervous system, hormone system, etc. These pesticides can also cause skin irritation and sensitization. In addition, five of the technical ingredients reported to have been causing worse harm to foetus and children. Report from fields indicated that such huge use of pesticides is happening close to the settlement of tribal/adivasi communities in the same village.

***(5) States have an obligation and businesses a responsibility to implement the right to information on hazardous substances. How are Governments and businesses ensuring that pesticide users and consumers are informed of the hazards and risks of pesticides used in food production?***

Despite having some statements given in the Insecticide rules (Insecticide Rules 1971) on instruction leaflet and packaging labels, other measures are not taken to ensure pesticide users and consumers are informed of the hazards and risks. The insecticide Rule18 states that the packaging of every pesticide shall include a leaflet containing details such as common name of pesticide, directions of use, warnings, cautionary statements, adequate safety measures and symptoms of poisoning, antidote and first aid treatments, instructions on safe use of disposal, etc. Insecticide Rule 19states about manner of labelling and details to be included in the label. In the label, as per the Rule, apart from details of manufacturer, name of active ingredient, volume, expiry date, antidote statement, and the colour code, warning statements such as "POISON", "KEEP OUT OF THE REACH OF CHILDREN" and "IF SWALLOWED, OR IF, SYMPTOMS OF POISONING OCCUR CALL PHYSICIAN IMMEDIATELY" for extremely toxic pesticides; “POISON” and "KEEP OUT OF THE REACH OF CHILDREN” for highly toxic pesticides; “DANGER” and "KEEP OUT OF THE REACH OF CHILDREN” for moderately toxic pesticides; and “CAUTION” for Slightly toxic pesticides are to be included.

The businesses have been following many of the aspects stated in the above Rules, but some of them are given in wage manner. According to a 2015 report published by PAN India titled ‘Conditions of Paraquat Use in India’, manufacturers have provided incomplete safety information regarding use of protective measures in the label. Certain manufactures have not properly and clearly mentioned what is the full protective clothing required while applying pesticides. Besides, farmers complained that the font by which information is printed in the leaflet is too small to read and understand.

However, toxicological details of pesticides regarding neurotoxicity, immunotoxicity, reproductive and developmental toxicity, carcinogenicity, endocrine disrupting impacts, and other long term impacts (as per the internationally accepted ratings) are not given for those pesticides which qualify the same. Additionally, neither the name of inert ingredients in pesticide formulations nor their toxicity details are made available.

Adequate trainings and awareness creation activities on the use of protective equipments, application of pesticides, precautions to be taken, disposal of containers and leftovers, etc are not provided to farmers by government agencies or business persons. Therefore, farmers and users lack right understanding about the inherent risks of pesticide use and often end up in indiscriminate and unsafe use.

The farmers of India have only a conventional understanding of agriculture; and they lack the technical understanding of pesticides, their uses, and toxicity and safety aspects. This often makes them vulnerable to misguidance, unnecessary, inappropriate and misuse of pesticides. Study conducted by PAN India (and other studies also) shows that use of many pesticides recommended by State Agriculture Universities, Agriculture Departments and Commodity Boards do not adhere to the use approved by CIB&RC. The Agriculture Universities, Departments and Commodity Boards have recommended many pesticides that have not been registered for some crops. A wide range of variations have been noted between the approved use of pesticides and recommended use of pesticides as well as actual use in the field. Besides farmers are not following the recommended waiting period (the recommended period between last application and harvest) leaving the produce unsafe for consumption with pesticide residues. Government institutions and regulatory agencies have not taken measures to curb the above mentioned issues.

***(6) Please provide your views on good practices by Governments and business to assess, monitor, prevent and mitigate the risks of exposure to hazardous pesticides, and what further steps could be taken. Answers may focus on systems present at the national, regional and/or the global level.***

A PAN India assessment revealed that more than 115 out of the 272 pesticides registered for use in India are highly hazardous as per the standards of PAN International. Neither government nor business has undertaken measures to assess, monitor, prevent and mitigate the risks of exposure to hazardous pesticides in India at the ground. Regulation and monitoring at sales points and users level is nonexistent in India. However, post harvest monitoring and residue analysis are happening at certain points.

The tolerance limits of various pesticides in food commodities (Maximum Residue Limit-MRL) are recommended by Food Safety and Standards Authority of India, under the Ministry of Health and Family Welfare. It is mandatory that MRLs for all registered pesticides should be set for all the crops they have been registered for. The FSSA has have set standards of MRL for pesticides used in India. However, MRLs are not set for all the pesticides registered for use in India. An Assessment by PAN India shows that FSSAI has set MRLs only for 107 pesticides out of 272. Additionally, it was also noted that though FSSAI has set MRLS for certain pesticides, it has found to be incomplete as they did not cover all the crops for which the pesticides had been registered.

At national level, the central government has initiated steps to monitor residues of pesticides in food and environmental samples. The Department of Agriculture, Cooperation & Farmers Welfare, Ministry of Agriculture & Farmers Welfare, have been running a central sector scheme ‘monitoring of pesticide residues at national level’ in food commodities and environmental samples since 2005-06 with the participation of various accredited laboratories under the government institutions and agriculture universities. As part of this surveillance process, they collect samples from markets and tests for residues of pesticides and reports samples detected with residues and samples with residues above the prescribed limit (MRL). During 2014-15, samples of vegetables, fruits, spices, red chilli powder, curry leaves, rice, wheat, pulses, fish/marine, meat and egg, tea, milk and surface water were collected and analysed by 25 participating laboratories for the possible presence of groups of pesticide residues such as organochlorine, organophosphorous, synthetic pyrethroids, carbamates, herbicides. Out of 20,618 samples analysed during the period; no residues were detected in 16,761 samples (81.3%); residues were detected in 3,857 (18.7%) and residues above MRL in 543 samples (2.6%) as prescribed by FSSAI. Residues of non-approved pesticides were detected in 12.5 % of the samples (Source -Annual progress report 2014-15, monitoring of pesticides at national level).In addition, residues of multiple pesticides were also detected. Presence of non approved pesticides in 12.5% samples is quite a grim picture. During 2010-11, the percent of samples with detected residues were much less considered with that detected during 2014-15. During 2010-11 residues were found in 6.8% samples, and out of which residues detected above MRL was in 1.2% samples. For many years, agriculture department have said to have undertaken campaigns with respect Integrated pest management and good agriculture practices, however, percentage of samples with residues, and residues above MRL as well as those with unapproved pesticides are on rise over the years.

Though the scheme ‘monitoring of pesticide residues at national level’ conduct tests to monitor residues of pesticides in commodities, it has been noted that n*ot* all pesticides registered for use in India are tested but only those are tested for which MRLs are set by FSSA (only 107 pesticides).Therefore the great majority of the remaining pesticides are not captured in the residue analysis, often leaves the commodities with undetected load of residues posing risk to consumers. A couple of research reports released earlier in 2016 reported banned pesticide are been used by farmers.

Though the Ministry of Agriculture has formed institutional mechanisms (National Centre for Integrated Pest Management) to promote Good Agriculture Practices, it has been continuously failing to reach at field level and attain the goal, owing to the lack of proper extension mechanisms and implementation strategies.

At States level, Kerala Agriculture University in association with the Department of Agriculture, periodically tests market sample of commodities in Kerala for pesticide residues and publishes reports. In a 2013 residue analysis, residue of pesticide banned in Kerala was detected. Here also, they do not test for all the pesticides registered for use in India. Besides, the FSSAI in the State of Kerala has taken measure to ensure safety of commodities in markets. Recently they have initiated field monitoring of pesticide use as well as campaign to ‘promote safe to eat’ commodities in Kerala, but is not taken up to the required level.

Another limitation regarding residue testing is that the participating laboratories do not have the required facilities to analyse residues of all the pesticides registered for use in India.

Issues related to national regulation not complying with the International Instruments and standards is another concern. The article provisions of the International Code of Conduct on Pesticides Management are followed incompletely. For example, uses of the herbicide paraquat dichloride in India violate several article provisions of International Code of Conduct. Additionally, violations could be noted with regard to the Chemicals Convention, 1990 and the Safety and Health in Agriculture Convention, 2001 on paraquat use.

The regulation of residue standards (such as MRL) used in India needs critical review. Dunu Roy, Director of the Hazards Centre earlier pointed that the maximum residue levels for insecticides in India are between five to 150 times higher than those set in the European Union, making food more dangerous."

**Required further steps to be taken to prevent risk**

Regarding the MRLs, more research is needed with particular attention to the Indian system of food intake which is different to Western food habits and also has a great deal of regional variation; and MRLs standards to be redefined.

Withdraw all those pesticides from the market and cancel their registration with immediate effect for which MRLs are not set.

Analysis for residues of pesticides in food commodities, soft drinks and drinking water as well as environmental sample should be conducted for all the pesticides registered in the country and for banned pesticides as well. This is extremely important in the Indian situation where public and private institutions as well as pesticide manufactures often recommend pesticides for crop-pest combination not approved nationally. In addition farmers apply pesticides even for so many crops that are not approved.

In a situation as in India, where end-use regulation is absent and also near-impossible to enforce, recommendations like avoidance of use during active foraging period of honeybees, etc. require more drastic action. It requires severe restrictions on licensing and sale itself. Much serious and comprehensive regulatory regime needs to be brought in and implemented effectively to ensure our food and farming systems are not contaminated with toxins and to safeguard environment and citizens from exposure and adverse impact of pesticides.

***(7) Gaps and weaknesses in international and national regulatory systems allow the use of pesticides that are unsafe, even when used legally and per instruction, on the market. Please provide examples of regulatory gaps (e.g. flaws in the registration process of pesticide products, lack of rigorous testing and safety standards, and lack of full disclosure to the public) and good practices in building effective protection frameworks governing the production and use of pesticides.***

The Insecticides Act (1968) and the Rules (1978) framed there under has been enacted *“with a view to prevent risk to human beings or animals*”. Though government has undertaken some measures to prevent the inherent risks of pesticide use, none of them really goes anywhere close to the serious and comprehensive regulatory regime. Right from the process of registration of pesticides regulatory flaws are noted. A serious and basic component related to pesticide registration is not being debated and incorporated into the regulatory process that the needs and alternative assessment based on pesticide’s bio-efficiency as well as bio-safety is not done; and which has resulted in registering so many hazardous chemicals for a same crop-pest combination when farming can be done without such chemicals. Thus it seems that the Indian pesticide regulatory system is not updated with the advances in pest management science.

It is also relevant to mention that when checking for safety the Registration Committee of the Central Insecticides Board (CIBRC) only tests the active ingredients of the pesticides. They ignore the effects of the inert ingredients, metabolites, contaminants, transformation by-products and synergistic effects. Their results therefore greatly understate the toxicity of their products.

Lack of adherence between the national approved use and the use recommended by State agriculture Universities, Departments, Commodity Boards and other government agencies is a serious issue to be addressed. Studies reported that the use recommended by such National and State departments or agencies does not adhere to the use approved by CIB&RC, despite having directed by Central agriculture Ministry and concerned departments. For example, a PAN India study revealed that out of the eleven use of Chlorpyrifos 20%EC recommended in the State of Himachal Pradesh, eight are not approved by CIB&RC; and all the six uses of chlorpyrifos20%ECrecommended in the Kerala State by Kerala Agriculture University are not approved by CIB&RC. Another study noted State Agricultural Departments, Agricultural Universities and Commodity Boards across the country recommended paraquat for a total of 17 crops, 10 of which it was not approved for. The manufacturers themselves recommended it for 4 crops it was not approved.

Monitoring and regulation is not happening at sales points and users level. A 2015 PAN India study showed that in the State of West Bengal, hazardous herbicides such as paraquat dichloride is decanted at sales points and often sold in plastic carrying bags and none of the safety and protective measures are observed. The same filed study also revealed that farmers apply paraquat dichloride for weed control in at least 25 crops, while CIB&RC has approved its use only in 11 crops. It is also reported that farmers are neither provided with the required safety instructions nor training on paraquat applications as well as using personal protective equipments (PPE).

Presence of residues of non-approved pesticides in food commodities indicate that such pesticides are used for food production. This happens because lack of stringent monitoring and regulation at the ground level.

It is important to note that MRLS are not set for all pesticides registered for use in India and also for all the crop-pest combinations approved for. Registration of pesticides for which MRLs (Maximum Residue Limit) have not been fixed is completely illegal as it allows production, manufacture and sale of pesticides which are unsafe as no testing of these products have been done on different crops.

A Bill by the name of [Pesticides Management Bill 2008](http://www.prsindia.org/billtrack/the-pesticide-management-bill-2008-169/) was introduced in the Rajya Sabha[[2]](#footnote-2) in October 2008. The bill if passed, will replace the Insecticides Act 1968 under which regulation of pesticides takes place in India as of today. However, the bill appears to be weak on all these fronts (precautionary approach, biosafety, alternatives, accountability etc., it has not been passed so far. The proposed Pesticides Management Bill 2008 incorporates only a few changes but they are incremental; the larger loopholes remain. For the effective management of pesticides a lot more needs to be done seriously considering the precautionary principle, comparative risk assessment, assessment on need, bio efficiency and safer alternatives, State have to given powers to regulates use of pesticides, polluter pays principle, liability and compensation, complete transparency and data disclosure.

There also some serious concerns over the review process of the recently appointed committee (Anupam Verma Committe) that reviewed pesticides banned elsewhere and used in India. The recommendation by the expert committee under the chairmanship of Dr. Anupam Verma for the use of neonicotinoid pesticides is a matter of concern. After the increasingly identified bee colony collapse phenomenon was linked to scientific evidence pointing to the impact caused by neonicotinoids, many countries have banned or restricted the usage of such pesticides. While the restrictions elsewhere are mostly related to seed treatment, it is interesting to note that the Verma Committee recommended use of neonicotinoids may be allowed with instructions to not spray during flowering stage of the crop. This ignores the impact that some of the neonicotinoid pesticides leave by systemic action by way of seed coating/treatment. This also leaves implementation issues around the restriction (during flowering stage) unclear. As the end use regulation is absent in India after pesticides are sold at the retail point, and in such a context, leaving a mere instruction will not help to save our bees and other life forms and environment.

The limitation of the review committee Headed by Dr. Anupam Verama is also questioned. The committee which was appointed to review pesticides banned elsewhere but still used in India was headed by agriculture scientists. Their ability to scrutiny the toxicity evidence (eco-toxicity as well as toxicity to human beings) is obviously limited, and such review processes would do well if such committees are headed only by toxicologists, medical and public health experts.

Using the powers that exist within the Insecticides Act, it is urgently required to notify guidelines using the powers that exist within the Insecticides Act to create such buffer zones around locations where vulnerable groups – children, pregnant women, etc –spent most of the active times such as near schools, day care centres, anganwadis, villages, hospitals, eco-sensitive zones etc.

It is also an urgent requirement that properly coordinated efforts and joint actions are to be brought in place incorporating Ministry of Agriculture & Farmers Welfare along with Ministry of Health & Family Welfare ad Ministry of Women and Child Development to deal with the health effects of pesticides especially noted in women and children.

According to industry reports, nearly 30 percent of the pesticides sold in India are either substandard or spurious. And unfortunately there is no effective regulatory mechanism to halt this out. Though, India has institutional mechanisms in place and which are supposed to implement the regulatory process , the current system fails to realise pesticide use is happening as directed by CIB&RC.

The pesticides whose toxicity is categorised based on internationally accepted ratings that ratified with sound scientific evidences such as carcinogenic pesticides, reproductive and developmental toxins, endocrine disrupting pesticides, immunotoxins, neurotoxins, genotoxins, etc. are to be phased out at the earliest.

The government does not spend much fund for scientific studies on biosafety – CIBRC is validating pesticides based on the data provided by industry, and not by research done in Government institutions. This needs to be changed as public funded research should be strengthened for generating important data related to efficiency and safety of pesticides.

***(8) Please provide examples of successful efforts (supported and incentivized by Governments) to reduce the use of pesticides in agricultural food production, including ecological methods of pest control and agro-ecology.***

There are couple of government supported schemes aimed at promoting organic farming in India. An important one is the National programme Organic Farming (NPOF). The NPOF is being implemented by National Centre of Organic Farming, under the Department of Agriculture, Cooperation and Farmers Welfare, Ministry of Agriculture and Farmers Welfare Government of India. It aims at promotion of organic farming in the country through technical capacity building of all the stakeholders including human resource development, transfer of technology, promotion and production of quality organic and biological inputs. It also promotes organic farming through low cost certification system known as “Participatory Guarantee System”.

Though the Government of India has taken some measures for proper use of pesticides by the farmers in the country, they have not resulted a notable change in this regard. Details on some of the measures are given below. The pesticide residue data generated under the “Monitoring of Pesticide Residues at National Level” are shared with State Governments and concerned Ministries/Organizations to initiate the corrective action for judicious and proper use of pesticides on crops with an Integrated Pest Management approach and to generate awareness amongst farmers.

The department of agriculture and farmers welfare (DAC&FW) emphasizes Integrated Pest Management (IPM) which promotes biological, cultural and mechanical methods of pest and advocates need based, judicious use of pesticides. DAC&FW implement a scheme “Strengthening and Modernization of Pest Management Approach in India” to promote Integrated Pest Management (IPM) which is an environment friendly broad ecological approach for managing pest problems. It encompasses pest control techniques such as cultural, mechanical and biological with minimum dependence on chemical pesticides. The Department has also undertaken “Grow Safe food” Campaign has been initiated to create awareness about the safe and judicious use of pesticides among the various stakeholders.

Besides the Central government schemes, at the State level, at least 10 States in India have policy on organic farming or programs for promotion of organic farming. For example policy on organic farming exists in the States of Sikkim, Kerala, Karnataka, etc. And the State of Andra Pradesh has adopted non-pesticidal management (NPM) of crop protection that does not employ chemical pesticides and is successfully implemented in a wide variety of crops over more than four million acres of farm area. And good news from India was that earlier in 2016, the State Sikkim has been declared as the first organic state in India.

***(9) Please share any information regarding court decisions or on-going litigation in relation to the detrimental effects of pesticides, in particular in relation to the right to food.***

* To the best of our knowledge we have three cases in the Supreme Court linked on different aspects of the pesticide. The details of this can be collected but we have not done so.
* We also have cases in the high courts in different areas in India. There is ongoing case on food safety in Delhi high court. We are getting the details and will submit the same as early as we can. An example in this regard is given below.

Delhi high court in 2012 directed an experts committee set up by it to frame guidelines within three months to check presence of pesticide residues in fruit and vegetables available in open market in the city. Taking suo motu cognisance of a media report, the court had set up the committee in May 10, 2011 to periodically examine the fruits and vegetables available in the open market to check if they contain pesticide residues.

***(10) Please provide any additional information you believe would be useful to understand challenges confronting Governments and businesses in their efforts to prevent and mitigate adverse impact of pesticides on human health, right to food and the environment.***

* Most importantly, the pesticide regulatory body should not be under the administrative control of the Ministry of Agriculture, which constitutes an objectionable conflict of interest. In order to bring comprehensive and efficient regulation the regulatory body should be either under the Ministry of Health or Ministry of Environment and Forests. The promoters should not be the regulators.
* The national regulation should be complying with the International standards (both voluntary and legally binding) so as to ensure health and environmental safety and right to safe food.
* Over the years, regulatory bodies have failed in time to time updating on scientific advancements related to pesticides. The regulatory agencies need to be updated with the post modern scientific developments related to inherent risk of pesticide use considering long term and chronic impacts as well as non toxic alternative pest management.
* Over the years, regulation of pesticides in India suffered a serious setback in terms of public confidence and credibility of the regulators with various scandals plaguing such regulation (unacceptable levels of residues jeopardising trade security, such residues as well as illegal and unscientific recommendations and use compromising health safety, bribery scams, corruption, etc.). Crop management recommendations of the public and private establishments and the pesticides industry need to be made liable for the illegalities they are indulging in. It therefore is important to make the regulation free of conflict of interest, transparent and rigorous complying with rational and scientific assessment.
* There is also the serious issue of the inability to regulate or fix liability at the end-user level; the 2013 Bihar incident of children being killed due to pesticides-poisoned food is another instance of the potential mishaps– in such a context, it is very important to understand the need to regulate at a more primary level by ensuring that highly hazardous pesticide are brought into the market in the first instance only when absolutely needed and there are no other alternatives. Even here
1. Pesticide Action Network (PAN) International [↑](#footnote-ref-1)
2. Upper house of Parliament in India [↑](#footnote-ref-2)