REAL FACTS ABOUT INDIAN AGRICULTURE

by

FEDERATION OF FARMERS ASSOCIATIONS
Dear Reader,

I have received a copy of letter written by Dr. Chengal Reddy of the Federation of Farmers to the Director of ICMR. It was very disturbing to learn that very important meeting on pesticide residues being discussed and scientists of ICMR, most of whom are Doctors, toxicologists and some pseudo scientists, activists and NGOs are invited to this seminar, most of them have never gone to farm or never grown one grain of wheat or rice.

When the agro input industry like pesticide and fertilizer industry want to attend this seminar, they are refused. Even the farmers whose life depends on crop protection were refused participation in this seminar !!

United Nations reveal that at least 30% of food grown in developing countries is lost to pests. Dr. Norman Borlaug, hailed as "the father of the Indian Green Revolution" While delivering his key note address to the FAC in Rome had said "the continued success of the Green Revolution will hinge upon whether agriculture will be permitted to use inputs necessary to cope up with hunger. if agriculture is denied the use of chemical fertilizers and pesticides, for example the world will be doomed, not by chemical poisoning but from starvation......."

We found this letter written to the Director of ICMR as an eye opener and we would like this letter to be circulated to everyone concerned with the Indian agriculture. I have personally highlighted and added some illustrations, drawings and cartoons to make it more descriptive and for people to understand the facts. There may be some similarity of cartoons with the actual activists, but this may be a coincidence. We do not intend to point finger at any one individual. We hope you will find Dr. Chengal Reddy's letter more interesting, as he has given very useful eye opening information.

Yours sincerely,

Raju Shroff
Chairman Crop Care Federation of India
Sir,

We just chanced upon your brochure announcing a 2 days seminar (20-21st Jan 05) in Hyderabad on pesticides and related matters and were shocked to read its contents and tone. For, it liberally throws such allegations on Indian farmers as:

- Abuse of pesticide
- Excessive use of pesticides

No organization of merit - government of non-government can justifiably make such allegations against Indian farmers and Indian agriculture.

US agriculture accounts for nearly 30% of world's pesticides use.

Indian agriculture accounts for about 2.8%.

However, in food production India produces more food than USA.

India is the second largest producer of paddy and wheat.

In case of total pulses, India ranks first in the world.

In fruits and vegetables production, we rank second in the world.

In case of potato production, we rank third in the world.

In case of tea and spices, we are the largest.

In sugarcane production, we are the second largest.
In overall food production, India ranks No.2 in the world. In case of intensity of pesticides use (per acre consumption) India ranks 48th in the world (Source: national Center for Agriculture, Economics & Policy Resources, New Delhi).

UK’s trade & investment website that is maintained by government of United Kingdom (www.uktradeinvest.gov.uk) approximately describes Indian agriculture thus:

"Indian agriculture is seen to have tremendous potential to be able to supply a growing world market for fresh produce including vegetables tropical fruits, flowers.....30% of India's agriculture relies on traditional methods of farming; thus the potential for organic produce exports is very high....."

A foreign country (UK, in this case) is able to accurately capture the existing realities of Indian agriculture; whereas Indian environmental activists (who rarely have first hand knowledge of Indian agriculture, give a distorted picture about Indian agriculture.

Urban based environmental activists who cannot walk or work in the agricultural farms for more than 30 minutes with knapsack sprayer fitted to their back are telling us that we do not know how to apply pesticides!

The Statesman, popular English paper on 6th Jan 05 carried a news item "Truck Drivers Call Driving Workshop An Empty Exercise". Commenting on the workshop organized by an NGO, the paper quoted a participant saying "there was no need for giving us lessons from people who have never driven heavy trucks on highways". Environmental NGOs preaching about pesticides application to farmers is no different.

Indian farmers may be illiterate and/or semi literate, but they certainly know the art of applying science adapted to local conditions.
Compare to our counterparts in the west, our farmers consume for every unit of agricultural commodity harvested:

- Less fossil fuel energy
- Less energy
- Less chemical input
- More manual labour and animal power.

The west is preaching "sustainable agriculture" but we are actually practicing "a.
The Indian agriculture, like Indian culture, is a mixture of many. We do not move away from traditional methods totally.

- **Bullock ploughing coexists with tractor ploughing.** India has 1.5 million tractors (4th in the world after USA, Japan and Italy). At the same time, India still has 80 million draught animals (first in the world). Even today, over 80% of farm produce is transported in animal drawn carts.

- **Synthetic fertilizer application coexists with a variety of natural manures.** We are the 3rd largest consumers of chemical fertilizers in the world. Still, we use 26 Crore tons of farmyard manure every year to enrich our soil, the traditional way.

- **Chemical plant protection coexists with "leave it to nature" type of plant protection.** According to the statistics maintained by Agricultural Census Division, Ministry of Agriculture, only about 18.4% of our gross cultivated lands receive pesticide application.

Therefore, the UK government is absolutely right when it says that Indian agriculture follows traditional methods even today and hence, export opportunities for organic produce are very high.

But, do we realise this ourselves?

No, we get carried away by the campaigns run by environmental activists.
Our Agriculture Ministry and APEDA say that they want to “introduce organic” in India. It is funny. Why to reinvent the wheel?

"In order to see far
see near"

A major part of our agriculture is organic by default even today. The government authorities have simply got to do a dedicated survey. For example, India is the largest producer and exporter of Tamarind in the world. Has anyone seen fertilizers or pesticides being applied to Tamarind trees in India? Why can’t Indian Tamarind be labeled and exported as “organic Tamarind” to the world market and exported at a better price? Similarly, why can’t we export palm sugar as “organic sugar”? Will Khadi Board wake up? Why can’t we have our own definitions and bench marks for the term ‘organic agriculture’ and promote that concept globally? For example, why can’t we say that in organic agriculture the ploughing of the land must be by animal drawn ploughs/cultivators and not by tractor drawn? In the era of globalization, we need people who can think creatively and carve a niche for Indian agriculture in the global market to our advantage.

Indian agriculture is integrated with dairy, poultry and aquaculture. One can hardly find an Indian farmer who does not have a few cattle, goats and hens. In coastal area, agriculture co-exists with aquaculture.

- India is the largest milk producer (91 million tons) in the world
- India is the second largest producer of inland fisheries (3.1 million tons) in the world
- India’s ranks fifth largest in case of poultry
- India produces 60,0000 mt of honey and is one among the exporting country
All these achievements would not have been possible if we have seen indiscriminately applying pesticides and poisoning the environment as alleged by environmental activists. Fish, bees and poultry birds will be the first casualties if our rural environment remains "toxic" as alleged by activists.

Environmental activists are merely producing scare stories sitting before their computers in their cozy offices. They sell such stories soaked in falsehood in international conferences to attract donations.

<table>
<thead>
<tr>
<th>Country</th>
<th>No. of Regd. Pesticides</th>
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<tbody>
<tr>
<td>USA</td>
<td>755</td>
</tr>
<tr>
<td>EU</td>
<td>600</td>
</tr>
<tr>
<td>Pakistan</td>
<td>495</td>
</tr>
<tr>
<td>Vietnam</td>
<td>432</td>
</tr>
<tr>
<td>Indonesia</td>
<td>341</td>
</tr>
<tr>
<td>Thailand</td>
<td>280</td>
</tr>
<tr>
<td>India</td>
<td>179</td>
</tr>
</tbody>
</table>

As can be seen, India has the least numbers of registered pesticides, far behind much smaller countries such as Pakistan, Vietnam or Thailand though we have much higher area under agriculture and produce a variety of agricultural, horticultural and plantation crops.

Sadly though, such facts are not properly documented and articulated in national and international forums by Government authorities and scientists.

Thanks to media campaigns by urban based urban based medical activists, the buzz word to day is "Indiscriminately use of pesticide" by Indian farmers. "It is repeated over thousand times becomes truth in point of view" says K. Bhasker. We have many Doebells at work now tarnishing the image of Indian agriculture.
The urban elite population in India uses household pesticides worth more than Rs.1,000/- crores per annum to keep their homes free of cockroaches, mosquitos, termites, rats etc. Indian agriculture uses about Rs. 3500 Crores worth pesticides.

We use pesticides to protect our crops and produce much needed food.

Have you ever heard or seen any environment NGOs advising urban people not to use mosquito killers, cockroach killers, termite killers etc.? They don't dare. They only target our agricultural practices and attempt to tarnish its image globally. And most of them receive funds from abroad for carrying out these blame campaigns. We are determined to challenge such motivated campaigns.
India's Population Growth

<table>
<thead>
<tr>
<th>Year</th>
<th>Population (Cr.)</th>
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</thead>
<tbody>
<tr>
<td>1901</td>
<td>27.01</td>
</tr>
<tr>
<td>1950</td>
<td>35.04</td>
</tr>
<tr>
<td>2001</td>
<td>102.70</td>
</tr>
<tr>
<td>2020</td>
<td>130.42</td>
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</tbody>
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India needs > 300 million tons of food grains (from the current level of 200+) by 2020. This means, increased production of 5 million tons per year for the next 20 years.

We can not afford to lose crop yields to pests and diseases. Plant protection significantly protects the crop yield losses (30-40% from pests and diseases)

Recently, Greenpeace, an US based environmental activists group published what they claimed to be health survey conducted among school going children of farmers in India who use pesticides and said that such children of farmers in India who use pesticides and said that such children were suffering from a variety of mental disabilities, low IQ etc. The USA uses pesticides 1000% times more than India. Why can't Greenpeace conduct a similar survey over there? Going by Greenpeace logic, US children must be suffering from mental disabilities 1000% more than Indian kids? Will Greenpeace USA acknowledge this publicly?

![Cartoon image of a person hoeing crops](Cartoon Productions so much with so little investment on pesticides)

Rumour mongering is an offence under Indian law. Slurs against Indian agriculture by environmental activists for self publicity and pecuniary benefits should be considered at par rumour mongering and made to be a punishable offence in India.

![Cartoon dog with words 'Cancer', 'Residue', 'Deformity'](Cartoon Rumour mongering is an offence)
However, within India, the propagated perception is that our Agri exports greatly suffer on account of pesticide residues (which is due to indiscriminate use of pesticide by Indian farmers!). Such propagated perception lead to inverted priorities being given. The policy focus driven by vested interests is on the trivial (pesticide residues) leaving out macro cleanliness and microbial contamination, which are major problems, affecting agricultural exports. All this is all out of failure to consult agriculturists, the actual producers. This must change.

New Zealand Food Safety Authority (NFSFA) maintains an informative website, which provides reassuring replies to the questions of common man regarding pesticide residues, MRLs etc. A few examples are excerpts include:

India, it is often claimed, is a computer super power. Why can't we have a website of this kind managed by Ministry of Health or Ministry of Agriculture? This would substantially reduce scare mongering and litigations by vested interests.

We visited the website of Ministry of Health (http://mohfw.nic.in). The key search word MRL brought back "0" response. We then visited ICRM’s website (http://icmr.nic.in). Our search for details relevant to MRLs was similarly in vain. The front page of your website prominently carriers (under spotlight) such mundane items as:

- Call for tender for supply and installation of modular office furniture at ICRM, Delhi!
- Appointment of travel agent for providing Air, Rail reservations for the officers and staff of ICRM.

We could not help think of the famous book "Cry, the beloved country".

We also visited the website of CODEX India. This website does not provide any information to the commoner in commoner's language about pesticide residues, MRLs etc and is in no way similar to the one maintained by New Zealand Food Safety Authority. It simply carries information, which could otherwise be found in CODEX website.

It is high time that government department website got contemporized to convey useful information in a simple language to the common man.

Ridiculing Farmers is a Fashionable past time in India. It brings great psychological delight to environmental activist to make everyone to feel that farmers know nothing. Recently some select press reports talked about A.P. farmers using Coke & Pepsi as pesticides to control crop pests in farms. When my opinion was sought in this subject I sharply told the reporter "if you are convinced of pesticides properties of Coke and Pepsi, please start using them to control mosquitoes and cockroaches in your house. Your children will be too thrilled". Well, the reporter never printed these lines. When controversies break out, what is required is common sense approach. Sadly though, what people lack most is common sense. Silence by government authorities often confounds the issues.
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Blaming farmers is another common thing in India. Whenever DDT residues are found in food commodities, scientist and environmental activist immediately jump to say that “Indian farmers are illegally using DDT for crop pest control”. Compare this with what happens in USA. Recent bio monitoring studies by US Department of Health and Human Services (Jan. 2003) show that 99% of US population carry DDT residues in their blood through DDT use in USA was banned way back in 1972. Neither US government nor the press over there blames the presence on US farmers. The US authorities explain it on the fact that DDT is an environmental contaminant; which means that DDT continues to persist and is bio-available in the environment and will show up in food commodities and body tissues. But in India no such scientific explanation comes forth from the government authorities and scientist. They blame its presence on so called illegal use by farmers, simply because we have not reacted so far.

Urban based environmental activists (who are essentially non-agriculturists) directly link presence pesticide residues on fresh and farm gate agricultural commodities to dietary intake of pesticides in India. This is incorrect – both scientifically and procedurally-and only ends up in raising false alarms. We demand that INMA and ICAR together immediately start doing “Total diet Survey (TDS) and Pesticide Data Programme (PDP) as is being done in USA”. The PDP/TDS methodology calls for sampling food items from close to point of consumption and analyzing pesticide residues only in edible portions of the food as eaten by the people. This means, for example, banana will have to be analyzed after removing the inedible peel, vegetables must be washed and inedible portions removed before analysis. This is not at all followed in India. It only leads to all sorts of imaginary dietary intake calculations of pesticide residues by interested groups.

Biomonitoring studies carried out by US Department of Health & Social Services (Jan. 2003) show that average American has in his or her body residues of 17 different pesticides. The same report carries an assurance US authorities that mere presence of residues in the body does not necessarily mean harm. The latest “Total Diet
Study (June 2003) released by US shows that their daily food item (including bread, biscuits, ice creams, carbonated soft drinks etc) carry a variety of pesticide residues. Remember the soft drinks -pesticide residue controversy kicked up by an environmental activist group last year in India? It shocked our nation with scientific explanation the way US authorities do. Their silence only sustains scientific illiteracy and nurtures scare campaigns conceived by vested interests. Indian scientists must realize that their prime duty is to promote scientific awareness and give science based assurances when the general public badly needs them. Here are a few examples from USA, New Zealand and UK.

"Residues are inevitable by products of pesticide use......the fact that they are found at all is only due to the significant advances in analytical chemistry. The tests are now so sensitive that the detection levels that can be reached is equivalent to detecting one teaspoon of salt in one million gallons of water. Levels even lower than that can be detected. The mere presence of a trace amount of a pesticide does not mean a product (water or foodstuff) is unhealthy.

"Market access for fresh fruit and vegetables depends on the production of high quality, pest and diseases free produce. Effective pest and diseases control often requires the use of pesticides.

Source: New Zealand Food Safety Authority (www.nzfsa.govt.nz/plant/subject/horticulture/residues)

"When we approve pesticides, we expect that small amounts (residues) will usually turn up in food supplies. They are also expected to turn up in drinking water".

Source: Pesticide Safety Directorate (PSD), UK

Here in our country, no such scientific and authoritative assurance comes forth from our regulatory authorities. Consequently, the urban environmental elite groups manage project pesticide to be unacceptable dangerous to environment and man.

Available information categorically shows the fact recommended application of registered pesticides do not leave residues that could pose unacceptable risks. In this context, it is worth mentioning “risk evaluation” as defined by WTO.

Risk Evaluation

"It is essential to bear in mind the risk that is to be evaluated is not only the risk ascertainable in a scientific laboratory under strictly controlled conditions, but also the risks to human societies as they actually exist. In other words, the actual potential for adverse effects on human health (needs to be assessed) in the world where people live and work”.

Vide this explanation WTO expects member countries to clearly separate theoretical risks from actual and realistic risks. Ppm. Ppb, ppt levels of pesticides residues measured in scientific laboratories can not be extrapolated to cause risks out in the real environment.

We expect Indian scientists to be having updated information as to what is happening around the world. We expect our regulatory authorities not to shy away from giving sound, scientific advice to general public whenever environmental NGOs bring up controversies regarding use of agri inputs in general and pesticides in particular. The next time when environmental NGOs blame us, we will not take it lying down.

**Environmental NGOs may please note that we are in the profession of feeding a billion plus population. We are not in the profession of poisoning them.**

In the era of globalization and in the era of WTO, it is necessary that we project the real face of Indian agriculture to the outside world. Misinformation campaign aimed at maligning Indian agriculture must end. Ours is a low cost, steady growth, and sustainable agriculture. We use a blend of traditional and modern methods. Indian agriculture is not chemical intensive. This must be documented and published world wide to our advantage.

We hope to play a proactive role in all these issues outlined above henceforth. We want to play a proactive role in all policy advocacies in the field of agriculture which includes pesticides use and regulation. We are keen to ensure that agricultural policies are not driven by irrational fears whipped up by vested interests – mainly by urban based environmental activist groups who receive massive funds from abroad.

In his thought provoking article "The Transnational Politics and "Environmental NGOs: governmental, Economic and social Activism (United Nation University Press, 2004) Paul Wapner says:

"Environmental NGOs are primarily interest groups that lobby government to promote their causes. To put it differently, NGOs are pressure groups......environmental NGOs deserve careful scrutiny in so far as they are unelected and relatively unaccountable...."

The last word is important. We must make these pressure groups accountable. Right now they seem to be accountable only to their donors!

I found ppb level of Pesticide!
Who are these environmental activists? What are their hidden agenda? They tell us not to use pesticides, they tell us not to go for bio technologically developed seeds; they tell us not to use chemical fertilizers. They are opposed to construction of large dams which keep preaching what we should be or should not be doing in Indian agriculture.

If non use of chemical inputs would make our life akin to living in paradise, then people in many African countries must be living in real paradise on earth! But, what is the reality? Starvation deaths are maximum in Africa.

Sometime ago, there were news reports planted by an environmental NGO asking us not to go for Bt crops but shift to totally organic as it would be more profitable to farmers. We immediately wrote offering at least 100 acres in every district for her advice after seeing the actual results. Our letter was published in the same newspaper and was kept in the internet too for a while. But neither she nor her clones ever came forward to actually demonstrate in the fields!

We do not need environmental activities who claim to work for Indian farmers. We need environmentalists who can work with Indian farmers.

"I am particularly alarmed by those elitists (environmental NGOs) who seek to deny small farmers in the third world access to improved seeds, fertilizers and crop protection chemicals that have allowed affluent nations the luxury of plentiful foodstuffs which in turn has accelerated their economic development."

- Dr. Norman Borlaug

We understand from your brochure that you have invited various people including those from environmental activist groups, to debate and decide on pesticide residues, MRLs, pesticide use etc. Can you explain the users of pesticides? We are the major stakeholders in all policy matters that concern pesticide use. Sad and objectionable indeed that you chose to keep farmer groups out of this important meeting.
India lives in villages. Plain fact. But the painful fact is that those who do not live in villages regulate lives of villagers. Non agriculturists decide agricultural policies without involving agriculturist. We hereby record our strong protest to this. **We expect you to consult user groups and involve us before finalizing any policy that governs use of registered pesticides in India agriculture.**

As this note would have shown you by now, we are competent and much more informed on the subject than many whom you have chose to invite to your meeting scheduled to be held in Hyderabad on 20th and 21st January 2005. We understand science. We also understand politics behind the science subtly staged by environmental activists. Remember, Indian farmers may be dhoti clad. But many of us our becoming computer savvies and are aware of what is happening globally. A visit to our website will tell you the rest.

P. Chengal Reddy  
Honorary Chairman