

# Needed: Restraint on use of pesticides



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States such as Punjab, Haryana and so on have banned the use of 10 pesticides in view of their inimical impact on agriculture. The Crop Care Federation of India, an agglomerate of the agrochemical companies, actually knows pretty well the reasons for the ban; yet the outfit has ranted and raved about the ban.

## Starting point

The use of inputs such as powerful seeds, chemical fertilizers, pesticides and so on had increased during the Green Revolution back in the 1960s. It led to an amazing increase in production of food grains, oilseeds, cotton and horticultural crops. The food grains' production, which stood at 52 million tons during 1951-52, rose up to 309 million tons in 2020-21. The production of horticultural crops such as vegetables, fruits etc. stood at 97 million tons in 1991-92 spiked to 331 million tons in 2020-21.

The intense agricultural practices resorted to in the past 50 years have led to various diseases afflicting agriculture, most of which are related to insects and pests. Initially, pesticides were used in limited quantities, but after 1970, their use shot up in cultivation of crops such as paddy, cotton etc.

During 1965-66, about 14,630 tons of pesticides were used and the figure increased to 62,180 tons in 2017-18. The use of pesticides per ha has gone up from 94 gram to 315 gram, that is, four times. This took a toll on biodiversity and intensified pollution of soil, water and air, triggering several problems. Consequently, environmental researchers and activists have slammed the excessive use of pesticides.

### **Higher cost of cultivation**

The over-the-top use of pesticides has caused several incurable diseases to the people. The union and the states at different points of time clamped a ban on some pesticides, complying with research findings and recommendations made by the various government committees.

In Kerala, agricultural labourers faced health issues by the overuse of modern pesticides in paddy fields. So, in 1991 an integrated cultivation scheme was introduced, which would combine the biological, chemical and cultural practices and control the onslaughts of pests on farming. Moreover, efforts were made to invent powerful seeds resistant to pests and diseases. Have all these efforts really paid off, reducing the use of pesticides in agriculture?

The increasing use of modern chemical pesticides had over the years increased the cost of cultivation of various crops.

According to the data provided by the Commission for Agricultural Costs and Prices (CACP), in Punjab in 1990-91, Rs.262 was spent on pesticides per hectare of paddy land. The cost shot up to Rs.5,624 in 2019-20. In this period, the price went

up from Rs. 154 to Rs.4,278 in Andhra Pradesh. The cost of pesticides per ha of cotton farm land in Gurajat rose up from Rs.680 to Rs.5,082 and in Andhra Pradesh, from Rs.757 to Rs.7,360. Likewise, in most of the states, the cost of cultivation of paddy and cotton crops has gone up considerably, according to the data.

In order to curb the use of pesticides in cotton cultivation in India, the genetically modified BT cottons seeds were introduced in 2002-03. If the cultivable land is only five per cent of the total land, the quantity rises to 40- 50 per cent, owing to the total use of pesticides. After the BT cotton seeds were introduced, the space of cultivable land and the use of pesticides have spiked to a large extent. Next to cotton comes paddy whose cultivation witnesses the use of larger amounts of pesticide.

After the 1960s, the space of paddy land had increased to 10 million ha and in turn, the use of pesticide had also gone up.

### **What's to be done**

There are no two opinions about the fact that the pesticide ban will curtail the cultivation of crops. If the pesticides are banned in toto, the global cultivation of crops will nosedive by 50 per cent. In a cascading effect, this will increase the food grains' prices four or five times, said Norman Borlaugh, U.S. agronomist, Father of Green Revolution, and Nobel Laureate, in 1970.

According to some estimates, had there been no pesticides the losses in cultivation of cotton crop would have been about 80 per cent. But the recent ban clamped on 10 pesticides by Punjab and Haryana cannot be viewed as a unilateral decision, as some manufacturers say. In fact, this decision was taken to comply with the maximum residual limits fixed for pesticide use by the European Union, in deference to the recommendations made by the Agricultural and Processed Food Products Export Development Authority and by way of meeting the demands put

forward by the Punjab rice mill owners and exporters' association. So, the ban decision can hardly be castigated.

The overuse of pesticides will indeed jack up the cost of farming, putting farmers in a fix. The environment will severely be damaged. The creatures that also make up the biodiversity such as snake, snail, crab, worm, frog etc. which are indispensably beneficial to agriculture and environment, are now vanishing from the farming lands.

Hence, urgent measures are required now to curb the use of pesticides in such a way that farm productivity is not affected. Integrated efforts must be made to propagate and practise organic farming and increase its space without using modern farming inputs.

In India, about 65 per cent of pesticides are used for cultivation of paddy and cotton. The glossy advertisements luring the farmers to sustain the use of pesticides are no less harmful than cigarette ads and so must be banned immediately.

The manufacturers of chemical pesticides too must chip in with their contribution, manufacturing environment-friendly pesticides shorn of toxicity.

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