Ban on Pesticides

Why in news?

The Centre has issued a draft order banning the manufacture and sale of pesticides on grounds of the grave risk they pose to humans and animals.

What pesticides would be banned?

- The order may ban 27 widely-used pesticides.
- This would include 12 insecticides, 8 fungicides and 7 herbicides.
- A large number of countries have already banned these pesticides and, experts say India should too.

How much pesticide is used in Punjab?

- Punjab has just 1.53% of the country's area.
- But, its pesticide usage stood at 9.2% of the country in 2018-19 and over 8% in 2019-20.
- In Punjab, chemical pesticide consumption is said to be decreasing, it is still continuous and excessive.
- It stands after Uttar Pradesh and Maharashtra in pesticide usage, but both states have a 6-times larger area as compared to Punjab.
- Punjab has started using bio pesticides and its usage has increased from 136 MT in 2014-15 to 286 MT in 2019-20.
- There is still a wide variety of pesticides available to farmers for various uses.
- Punjab tops the country in terms of per hectare usage of fertilisers.

On which crops are these 27 pesticides mainly used?

- These pesticides are used on almost all crops - rice, wheat, cotton, oilseeds, various vegetables, fruit etc.
- Punjab can do away with these pesticides, though there are no other alternatives available at present for around 9 of the 27 pesticides.

What are the alternatives available to farmers?

- There are three types of alternatives,

1. Integrated Pest Management (IPM) techniques, which are using cost-effective mechanical methods,
2. Bio-pesticides, and
3. Molecular target-specific low toxicity pesticides, usage of which is extremely low, and which are a little more expensive.

- Neem-based biopesticides, which are environment-friendly, is very effective cost-wise and yield-wise.
- It's bitter taste keeps pests away from plants.
- Moreover, the right kind of seeds and precise irrigation can help farmers keep the pests away.
- Both PAU and Punjab agriculture department have been encouraging IPM extensively.

Which methods are used to control pests under IPM?

- Under IPM, simple hand-picking, light traps, pheromone traps, sticky traps, glue boards etc. are used to control pests.
- IPM aims to protect soil and the environment from poisonous elements
- **Light trap** - Electric bulb is switched on during night time for an hour close to the fields.
- The pests get attracted to the light in the night and then lights are switched it off.
- All the attracted pests fall into the diesel/petrol mixed water and get killed.

- **Pheromone traps** - They are meant for mating disruption, for suppression of pest population, and mass trapping.
- Such traps slowly release synthetic attractants which help in the detection of a single species of insect in the fields.
- **Seed shelters** - Farmers attract birds by installing seed shelters in the fields and such birds consume the harmful insects in fields.
- IPM, heavy reliance needs to be placed upon 'monitoring and surveillance' of the crops and fields.

How does regular monitoring & surveillance help against pest attacks?

- It can make farmers aware of the presence of pests and insects in the field at an early stage.
- This will help them arrest the problem before it crosses the Economic Threshold Level (ETL) of the presence of these pests.

- Punjab had seen the lowest cotton productivity in 2015 when whitefly had attacked the cotton crop on a large area.
- But there is a 30% decrease usage of pesticides in the cotton crop from 2016

to date.
- There is an increase in its productivity to 756 kg lint per hectare in 2016, a year after the devastating loss of the cotton crop, and 800 kg in 2019.

How else is less usage of pesticides beneficial?

- Instead of spraying herbicides to clear weeds, farmers can hire manual labour to remove it.
- This will save their fields from chemical sprays.
- Also, the money spent on buying harmful pesticides can be diverted towards paying the labour engaged in handpicking such weeds.
- Farmers use herbicides to clean weeds from their fields and the area around the fields to keep pests away.

Source: Indian Express

SHANKAR IAS PARLIAMENT
Information is Empowering