

# Pesticide Residue

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- Pesticide residue refers to the pesticides that may remain on or in food after they are applied to food crops.
- Exposure of the general population to these residues most commonly occurs through consumption of treated food sources, or being in close contact to areas treated with pesticides such as farms or lawns.
- Many of these chemical residues, especially derivatives of chlorinated pesticides, exhibit bioaccumulation which could build up to harmful levels in the body as well as in the environment.
- Persistent chemicals can be magnified through the food chain and have been detected in products ranging from meat, poultry, and fish, to vegetable oils, nuts, and various fruits and vegetables.

## Pesticides Usage in India

- India is the fourth-largest producer of pesticides in the world. According to a report by database Research and Markets, the Indian pesticides market was worth Rs 197 billion in 2018.
- Pesticide market is further projected to reach a value of Rs 316 billion by 2024, growing at a Compound Annual Growth Rate of 8.1% during 2019-2024.
- The total as well as per hectare consumption of pesticides in India shows a significant increase after 2009-10.
- As the cost of manual weed control has risen due to an increase in agricultural wages, this is one of the reasons for the recent increase in pesticide use.

## International Regulation

- International Maximum Residue Limits -Codex Alimentarius to define the residue limits; this was established by Food and Agriculture Organization of the United Nations (FAO) and World Health Organization (WHO) in 1963 to develop international food standards, guidelines codes of practices, and recommendation for food safety.
- Currently the CODEX has 185 Member Countries and 1 member organization (EU)

### **India Regulation**

- Pesticides are regulated in India through the Insecticides Act, 1968 and Insecticides Rules, 1971, the experiences in administering this Act over the last five decades has exposed certain gaps.