

Lecture 28: INTEGRATED PEST MANAGEMENT - ISSUES AND OPTIONS ECOFRIENDLY IPM-INDIGENOUS/TRADITIONAL TECHNOLOGIES IN IPM

Constraints in IPM have been listed by IPM task force as follows:

i. Institutional constraint

IPM requires interdisciplinary approach to solve pest problem. Lack of coordination among different institution is a constraint. Research programme based on farmer's need - is lacking.

ii. Informational constraint

Lack of information on IPM among farmers and extension worker. Lack of training on IPM.

iii. Sociological constraint

Some farmers feel it is risky to adopt IPM compared to use of pesticides alone. Our farmers are habituated to using more pesticides.

iv. Economic constraint

Lack of funds for training farmers and extension workers on the use of IPM.

v. Political constraint

- Vested interest associated with pesticide trade
- Pesticide subsidy by Government

These are the constraints for the implementation of IPM.

Options/strategies in IPM implementation

Acceleration of IPM implementation requires the following

i. Farmer's participation

Farmers must be encouraged to participate in IPM and give their views.

ii. Government support

Government can remove subsidies on pesticides and allot more fund for IPM implementation.

iii. Legislative measures

Suitable legislation (law) may be passed for adopting IPM by all farmers (IPM will be successful only if adopted on community basis).

iv. Improved institutional infrastructure

National level institution for implementation of IPM is a must. Data base on role of biotic and abiotic factors on pest population, crop yield are required.

v. Improved awareness

Awareness should be created at all levels on IPM i.e. Policy makers, farmers, consumers and general public. NGOs (Non Governmental Organisation) should be made aware of the advantages of IPM.

Ecofriendly IPM

- IPM which lays more importance on environmental safety. All methods except the use of chemical insecticides are encouraged.
- 'Organic farming' is a new concept where no chemical pesticide or fertilizer is used in agriculture.
- Ecofriendly IPM may be followed in organic farming
- Ecofriendly IPM uses methods like biological control, behavioural method, physical, cultural and mechanical methods.
- Here more stress is given to environmentally sustainable pest management.

Indigenous/Traditional technologies in IPM

The following are some examples of traditional technologies in IPM

i. Cultural methods: (a) Farm level (b) Community level

- which were originally practiced by farmers.

Examples: Already covered in previous classes.

ii. Physical and mechanical methods originally followed by farmers

e.g. (a) Use of storage bins, treatment of stored grain with vegetable oil etc., to ward off storage pest.

(b) Tanjore bow trap for rats

Other examples can also be quoted.

iii. Farmers' wisdom on pest control tactics as follows

e.g. (a) Use of **scare crows** to ward off bird pests

(b) Use of '*Kavankal*' to ward off birds

(c) Use of '*Pachakavya*' a mixture of cowdung, with other ingredients has been tried as a pest control agent - Research is ongoing.

(d) Use of chilli mash and garlic juice spray against rice earhead bug

Many other similar techniques are followed by farmers. Research has to be done to prove their usefulness in IPM.