

# Regulating Pesticide Usage through Mobile Technology

#### What is the issue?

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• In India there are reported cases of deaths due to excessive usage of pesticides.

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• Use of technology will help the government to regulatethe usage of pesticides.

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#### What are the incidents of deaths due to pesticide usage?

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 $\bullet$  In 2013, in Bihar, more than 20 school children lost their lives after consuming mid-day meal contaminated with a highly toxic pesticide.  $\mbox{\ \ }\mbox{\ \ }\mbox{\$ 

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• In India, the consumption of pesticides has shown an upward trend from approximately 14,000 metric tonnes in 1965 to close to 56,000 metric tonnes in 2014-15.

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 Recently in Yavatmal district of Maharashtra, more than 30 farmers and farm labourers have died due to pesticide poisoning.

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## What measures were taken to regulate pesticide usage?

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• Government of India enacted the Insecticides Act, 1968, which regulates the import, manufacture, sale, transport and distribution and use of pesticides.

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• The Insecticides Rules of 1971, made the pesticide containers mandatory to carry a specific colour mark which is associated with the toxic nature of the pesticide.

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• The Pesticide Management Bill, 2008 was also proposed and pending in Parliament.

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- Crop Pest Surveillance and Advisory Project has been initiated by the Maharashtra government in 2008.
- Regulations regarding basic educational qualifications of pesticide dealers were introduced in 2015.

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### What are the challenges in regulating pesticide usage?

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- Farmers has poor awareness about the hazardous nature of the pesticide, farmers are often unaware of the implication of the colour codes or instructions in the pesticide containers.
- For the selection and application of pesticides, farmers rely heavily on the dealer for advice, such advices are driven by their economic interest rather than knowledge of pest control.

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• In 2016 government exempted existing licensees who are more than 45 years old and who have pesticide dealership experience of more than 10 years, from educational qualification on pesticides.

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 Non-genuine pesticides flood the market and sales of such products account for approximately 30 per cent of the volume of the domestic pesticide industry.

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## How technology can be used to regulate pesticide usage?

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• Mobile technology can be roped in to develop a multi-purpose Pesticide

Prescription and Transaction System (PPTS).

- The mobile number of the farmers need to be registered with the proposed PPTS and a prescription in the form of a unique reference number (URN) will be sent to the farmer by SMS.
- $\bullet$  The URN will also serve as the prescription tracking number, the URN will be shared with the dealer who will validate the URN with the PPTS.  $\$
- $\bullet$  The system will then generate a receipt along with details of prescription including the URN.  $\mbox{\sc h}$
- For each transaction, the PPTS will also provide information about hazards and suggest safety measures to the farmer.
- $\bullet$  The inbuilt traceability feature will also help to limit the selling of illegal and non-genuine pesticides.  $\mbox{\sc h}$

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**Source: The Indian Express** 

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