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## The basic rules of safe agrochemical use

## Recognize the problem

Farmers use chemicals for preventing, repelling or killing insect pests, diseases, nematodes or weeds. These chemicals are useful, but are a danger to the health of farmers and consumers if not used well. The problem is that farmers often:

- Do not wear protective clothing
- Do not read and follow instructions on the pesticide containers/bottles
- Do not store pesticides in original containers. This can lead to mistakes, such as formalin being mistaken for water if stored in a water bottle
- · Store pesticide in their living room and breathe in the chemicals
- Use empty pesticide containers later on for food or water
- Throw containers into water (streams, lakes, dams)

This has poisoned farmers, communities and their livestock. Symptoms of intoxication are diarrhoea, vomiting, high temperature, headaches, dizziness, itching, sore eyes, "burned" skin, and, in the long term, cancer.

Only a cap as protective clothing is not enough. Minimum are mask, gloves, goggles or at least sun glasses. (Photo by Roy Bateman)



## **Background**

Chemical pesticides are made to kill, so they are toxic. Farmers must be able to use these pesticides with a lot of care to protect themselves. If some basic rules are followed, farmers can eliminate much of the danger.

## Management

- Wear protective clothing when mixing and spraying. Most accidents happen during
  mixing because the pesticide is highly concentrated at this stage.
- Read instructions on container/ bottle label carefully. Follow instructions on safety, first
  aid, dosage, timing of sprays, pre-harvest interval (PHI), restricted re-entry interval
  (REI) into field after spray, and the maximum number of sprays
- Check toxicity level information on the label. Red labels are very toxic, yellow are toxic, blue are moderately toxic and green are least toxic, but remember all are toxic to some extent.
- Do not eat, drink or smoke when spraying or between sprays
- Do not spray in windy conditions, and never spray against the wind
- Do not spray later than indicated by the pre harvest interval on the label.
- · Wash hands with soap after using pesticides
- Avoid pesticide storage as much as possible:
  - Keep pesticides in original containers/bottles in a locked place, and never with food.
  - Try to use all of the product and avoid storing opened containers/bottles.
  - If you have product leftover, then mix into a sprayer, dilute concentration by 10, and spray again. This dilute spray has little effect on the crop, but you get rid of pesticide.
  - Regularly wash protective clothing. Store clothing away from living rooms and pesticide storage, but store measuring cups and sprayer inside pesticide storage.

When using a pesticide, always wear protective clothing and follow the instructions on the product label, such as dosage, timing of application, and pre-harvest interval.

All these signs show some kind of serious danger to you, consumers or the environment. (Photo by UNECE)



The recommendations in this factsheet are relevant to: Zambia



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