

# SAFE HANDLING AND USE OF PESTICIDES



## WHAT ARE PESTICIDES?

Pesticides are agro-chemicals used to prevent and control weeds, diseases and pests on the farm.

## WHY SHOULD I USE PESTICIDES?

- It protects crops and improves quality
- It saves time and reduces costs
- It increases farmers yields and income

## HOW DO I APPLY PESTICIDES ON MY FARM?

Use knapsack sprayers for spraying pesticides. They are either hand held or carried on the back

### SAFE HANDLING AND USE OF PESTICIDES

#### a. Purchase

- Identify weed, disease, pest and buy the correct pesticides
- Buy original pesticides from reliable and trusted agro dealers (ensure agro-chemicals and containers are sealed in good condition, has NAFDAC number, and not expired)
- Store and keep pesticides away from food and children

#### iii. Store and keep pesticides away from food and children

#### b. Handling

- Before Spraying
  - Read and understand the instructions of how to use the agro-chemicals and the sprayer equipment to use.
  - Use all the correct parts needed for spraying (e.g. spray guard, mini boom, or lance extensions), and select the right nozzle (see instructions on knapsack sprayer).
  - Personal Protective Equipment(PPE) should be worn before handling any agro-chemical.
  - Filling the sprayer:
    - Before putting agro-chemical into sprayer, make sure that the sprayer is clean, without leakage and working properly.
    - Follow the instructions on the label of the agro-chemical manufacturer on how to mix it before use.
  - Spray in direction of the wind or in the evening.
  - Do not eat or smoke during spraying

#### ii. During Spraying

- Spray early in the morning before it becomes very hot and when there is little wind.
- test the sprayer to make sure it delivers the right quantity and pattern.
- Set spraying speed and area covered by adjusting spray height and nozzle spacing.
- follow the correct spray technique and spray plants thoroughly by running sprayer at correct speed and correct pressure. Maintain a steady pace and uniform coverage.

#### iii. After Spraying

- It is always better to measure and mix correctly to avoid any left over pesticides. In cases of left overs, add extra water and spray around the boundaries of your farm.
- Do not pour remaining mixture or wash sprayers and chemical containers in water bodies.
- Wash the sprayer with soapy water after spraying.
- Dig a hole away from the farm and any living area, fill it with charcoal and carefully pour the wastewater in the hole. Cover the hole with sand.
- Wash yourself thoroughly with water and soap after using agro-chemicals, especially before drinking and eating.

#### c. Disposal

- Never reuse empty containers because you, your family, animals and the environment can get seriously contaminated.
- Triple rinse all empty containers immediately after spraying: fill the empty container for 1/4 with water and shake well. Pour the wastewater into your knapsack sprayer.
- Repeat this 2 times.
- Puncture the container at the bottom to avoid reuse.
- Bring the container back to the retailer or bury it in a separate disposal pit away from the farm and living area. Cover the disposal pit with sand and place a warning sign next to it.

#### d. Storing your pesticides

- Keep all agro-chemicals away from people and children
- Store them, in their original containers, in safe and ventilated places
- Label all agro-chemicals correctly.
- Keep all agro-chemicals away from food
- Do not leave your agro-chemical in the field when not in use.

## SAFETY TIPS

If a person becomes contaminated by concentrated agro-chemical or spray mixture:

- wash the affected area with plenty of water
- If the person feels unwell (sickness, headache, dizziness, pains in body), see a doctor and take the agro-chemical label with you and show the doctor
- if help contact is on the product, it can be contacted.

## ASSESSING FIELD CONDITIONS

- soil moisture is needed to activate or move some agro-chemical into the soil so that it can kill weeds, so study the product label to see which applies.
- Have enough weed seedlings growing to justify after germination spraying?
- If weeds are suffering from drought, the agro-chemical may not work well and spraying may be a waste of money.
- Are there any susceptible crops next to the plot to be sprayed? In light wind the Agro-chemical may drift to neighbouring plots.
- Check the label on the container for the crops in which the agro-chemical is safe to use and do not allow it to fall onto other crops.
- Never spray agro-chemicals closer than one metre to any water course.
- Never spray when the wind is moving small branches of trees and bushes.
- Are conditions too hot for spraying? Under these conditions, the

**NB** Children and pregnant/breastfeeding women should NEVER handle or apply pesticides