

# Package 118

Type: Radio spots

2021

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**Radio spots on improving resilience to changes in the climate for farmers**

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**Notes to broadcasters**

Weather forecasts and climate-smart farming information helps farmers, especially small-scale farmers, reduce their vulnerability to drought and flooding and save their crop from other adverse effects of weather.

In these spots, you will learn more about climate-smart agriculture and how farmers can take advantage of such information in their farming activities. The spots include:

1. Rainwater harvesting

2. Planting materials

3. Land preparation

4. Germination tests

5. Fertilizer application

6. Transplanting

7. Methods of weed control

8. Tree planting

9. Pest and disease control

10. Harvesting

11. Marketing challenges

12. Maintaining product quality for the market

The spots vary in length from 45-60 seconds and could be played multiple times during programs and at other times during the day to educate farmers on climate-smart farming.

**Spot #1: Rainwater harvesting**

**NARRATOR:** How can water from the rains be harvested so that farmers can use it during a dry spell? Here are three major ways.

 One: Identify slopes on the farm and dig trenches along the slope to direct rainwater into a constructed reservoir or dugout.

 Two: Create dugouts on the farm to trap the rains. If your soil does not contain a lot of clay, line the dugout with polythene sheet to hold the rainwater and prevent seepage.

Third: Collect rainwater from rooftops on farm structures in a cistern or other appropriate vessel.

**Spot #2 Planting materials**

**FARMER 1:** Good morning, (name). I hear there will be little rain this year.

**FARMER 2:** I am very much aware!

**FARMER 1:** So why are you still planting your maize, knowing very well you need enough rains for it?

**FARMER 2:** I use seeds which mature in just 75 days. It’s a short-season, drought-tolerant variety.

**NARRATOR:** Farmers! Did you know that there are maize varieties that mature in 75, 90, and even beyond 100 days? But if the forecast says there will be little rainfall for the growing season, choose a short-season, drought-tolerant variety that takes fewer days to mature. This variety can take full advantage of the little rain.

**Spot #3 Land preparation**

**NARRATOR:** Hello, listeners. When preparing land, you must consider the nature of the land and the type of soil.

 Why?

For sloppy (hilly) lands, plough across the slope or along the contour to reduce erosion during heavy rains. This means that running water will not gather enough speed to wash the soil away.

For soils which can easily become compacted, do not use heavy machinery like tractors. They will make the soil even more compact. Compacted soils do not allow rainwater to be absorbed into the soil. Instead, water either pools on the surface or runs off. You can also incorporate organic matter to break apart compacted soil.

For light soils, farmers can use conservation agriculture practices such as minimum or no tillage instead of ploughing. This is because light soil can easily be washed away by rains after ploughing. For light soils, incorporate organic matter to bind the soil together.

Do not build bunds at land preparation unless soils are more than 7.5 cm deep. Deep, black soils drain poorly, so water pools near contour bunds, making them unstable.

 When land is poorly prepared, farmers may sow unevenly, resulting in low density plantings and low yields. So pay attention to the nature and type of soil for improved yields.

**Spot #4 Germination test**

**TEACHER:** Students, it is highly recommended that farmers conduct a germination test before planting seeds.

 Who can tell me why?

**Student 1:** Because it makes farmers confident of the viability of seeds. It also reduces the cost of production, and helps farmers determine why seeds didn’t germinate after planting. It also saves time.

**Student 2:** Germination tests also help farmers avoid refilling and determine the quantity of seeds they need.

**TEACHER:** Farmers, conduct a germination test immediately after you acquire your seeds.

**Spot #5: Applying fertilizer**

**TEACHER:** Students, ifthe seasonal weather forecast predicts heavy rainfall throughout the farming season, what’s the best way to apply fertilizers?

**Student 1:** The best method for a season with heavy rainfall is deep placement.

**TEACHER:** Why?

**Student 2:** Because it stops fertilizer from being washed away by heavy rain, and reduces the evaporation of nitrogen fertilizers when the temperature is high.

**TEACHER:** Correct! And remember: for deep placement, fertilizer should be buried five cm deep, close to the root zone of the plant.

**Spot #6: Transplanting**

**Farmer 1:** Good morning, (name of farmer 2). You had the whole day to yourself, so why are you transplanting in the evening?

**Farmer 2:** You should always transplant when soil is moist and soft. Hence, the best time is during the very early hours of the day or late in the afternoon when the sun is less intense.

**NARRATOR:** Transplanting in the early morning or the evening helps transplants adapt to their new environment. And it reduces the risk that seedlings will dry out in the sun or hot temperatures in the afternoon.

**Spot #7: Weed control**

**NARRATOR:** Experts prefer to use physical and biological ways of managing weed to using herbicides.

 Why?

First, because herbicides can beharmful to the environment.

 Second, herbicides are expensive.

And third, because herbicides can hurtaquatic creatures when they run off into water bodies.

 Instead of using herbicides to manage weeds, try crop rotation, mixed cropping, mulching, and cover crops.

**Spot #8: Benefits of tree planting**

**TEACHER:** Students, let’s talk about tree planting and its benefits to farmers. Who can mention four benefits?

**Student 1:** I know trees help mitigate the impact of climate change and serve as windbreaks. They reduce the loss of soil nutrients, and the fourth is … eerh … another student can help me out.

**Student 2:** Trees help reduce the greenhouse effect.

**TEACHER:** Great! Strong points there. You know, as trees grow, they help reduce the impact of climate change by removing carbon dioxide from the atmosphere, storing carbon in trees and soil, and releasing oxygen into the atmosphere. Trees provide many benefits to us farmers, every day.

**Spot #9: Pest and disease management**

**Farmer 1:** Eiii! (Farmer 2), what are you waiting for?

**Farmer 2:** Meaning?

**Farmer 1:** Your crops are not doing well at all. I see discoloured fruits and leaves on your crops, irregular-shaped leaves, and holes in the leaves.

**Farmer 2:** I know, but what should I do?

**Farmer 1:** The moment you notice these changes, you know that your crops are infested with pests or infected with a disease. You must take immediate steps to manage your problem!

**NARRATOR:** Farmers! Regularly monitor your farms to check the level of pests and diseases so you don’t lose your crops.

**Spot #10: Harvesting**

**NARRATOR:** It’s a fact that most grain crops can be badly affected by continuous rains just when a farmer is ready to harvest. How can farmers outwit this challenge?

By timing your planting date according to the weather calendar and the maturity period of your crop variety.

You should time your planting so that your harvest coincides with dry conditions at the end of the rainy season.

Soplant with the weather calendar in mind to harvest high quality grains.

**Spot #11: Challenges with marketing produce**

**NARRATOR:** A glut of produce on the market means low prices for farmers. Here are some key suggestions to avoid a glut:

 First and foremost, stagger your plantings.

Secondly, join forces with other farmers to create better storage facilities. Storing your produce allows you to market it later when prices are higher.

Last but not least, process some of your produce immediately after harvest.

Staggering planting helps farmers avoid harvesting and selling all their produce at the same time. Then, farmers can get the best price.

**Spot #12: Maintaining product quality**

**Farmer 1:** (Farmer 2), your produce arrived on the market in very good condition despite the heavy rains. What’s your secret?

**Farmer 2:** I listened to the weather forecasts ahead of the harvest. When I heard that heavy rains were predicted, together with other vegetable farmers, I hired a long, strong vehicle that could withstand the bad roads to the market.

Our produce was packaged well to withstand transportation shock and maintain the right temperature in transit.

**NARRATOR:** Every harvested crop needs to be transported, either to the market or to the packing house for storage. So it’s important to consider the weather and its effect on your produce when you plan your transport.

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