Growing Cassava Commercially in Nigeria

a training manual

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...a training manual

Specific objectives
The specific objectives listed here are the specific ideas and skills being taught on the associated page. The trainer should strive to ensure that the objectives for each lesson are met.

Discussion questions
The discussion questions are intended to link the traditional knowledge held by the participants to the 'new knowledge' passed in each lesson. It is also intended to create a participatory atmosphere where farmers' histories are respected. Finally it is believed that the knowledge and experience an individual farmer possesses is beneficial to the learning of the entire group.

Note to trainer: how to use this trainer's guide.
Each page of this guide presents new ideas on how to farm cassava productively. After page 3 this guide treats every page as a distinct lesson with distinct objectives. All information for trainers is only a suggestion and can be used as is, omitted or refined. Not every activity can be carried out or every discussion question asked, therefore it is up to the trainer to use his or her own discretion. This guide assumes that some of the participants will have previously farmed cassava. This course is to be taught outside in an available field.
Pg. 2

Training method
For each page a suggested lesson is given. Each suggested training method makes use of all the discussion questions, activities and review questions and meets all the specific objectives.

Activity
Almost all lessons include at least one activity. Activities are intended to help farmers understand the information concretely and practice the skills and knowledge of the course. Not all activities can be carried out and they will depend on available materials and time.

Materials
The materials needed in course:
containers
clayey soil, stony soil, loamy soil
Hoes (one for each participant)
Pencil or pens for farmers
Variety of cassava plants
Cutting knife
Basket
Chemicals or substitutes
Protective equipment
Inter-row weeder
Knapsack sprayer
Measuring equipment
Fibrous cassava root.

Review question
The review questions are intended to reaffirm the information presented in each lesson or to connect the lesson to the farmers' individual practices.

General objectives of course

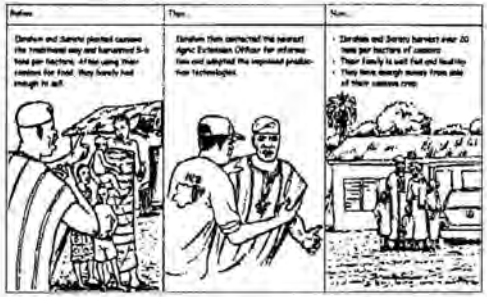
By the end of the course farmers will:

1. gain knowledge of productive methods of growing cassava in Nigeria and improve on their practice.
2. be able to commercially grow profitable cassava crops.

Discussion questions

1. Where do you presently farm?
2. How many participants here have ever farmed cassava?
3. Where do you presently find information on farming?
4. What are your major limitations to production?

How to grow a good cassava crop in Nigeria



Training method

1. Introduce yourself. Provide your name and farming background.
2. Ask participants for names and years of farming experience.
3. Explain purpose of course: *The purpose of the course is to familiarize participants with productive methods of growing cassava as well as to share traditional knowledge amongst farmers. The goal of this course is to increase the yields of participants and to convert sustenance farming into commercial farming.*
4. Read story; explain potential of increasing profits by using improved production technologies.
5. Ask discussion questions 1-4.

Specific objectives

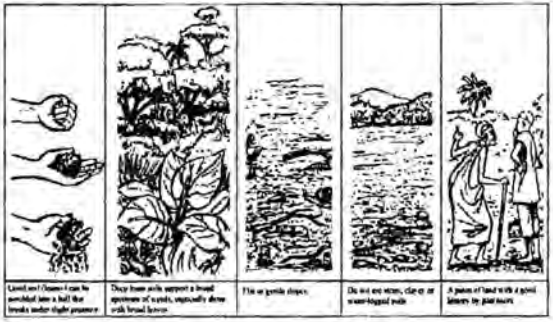
By the end of the lesson farmers will:

1. be able to identify soil quality.
2. be able to select best location for planting a cassava crop.

Discussion question

1. What are some indicators of good farmland in this region? What are some factors that indicate good farmland?

Step 1. Select a good site



Training method

1. Explain that although cassava is grown in all areas of Nigeria, crop quality can be highly dependent on soil quality.
2. Ask discussion question 1 then explain importance of noting 5 identifiers of farm and quality: soil type, vegetation, topography, soil physical properties and land history.
3. Begin with soil type; explain characteristics of good soil and how it can be referred to as loamy soil.
4. Next explain soil physical properties to avoid. Proceed with activity 1.
5. Explain: when choosing land, examine what type of vegetation is growing at site. Wide range of weeds with broad leaves is good indications of good, loamy soil.
6. Explain: flat and gentle slopes is the most advantageous topography for farming cassava
7. Explain that previous land use can have significant impact on future crops. Explain what type of land uses may have negative impact on future cassava crops.
8. Ask review question 1.

Activity

1. Present containers of loamy, clayey and stony soils. Pick up soil in your hands and show to farmers while explaining characteristics of soil. Ask farmers to approach containers and inspect soil themselves.

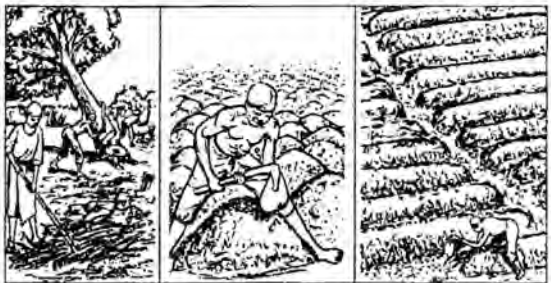
Materials

- 3 containers filled with good soil, clayey soil, and stony soil. **Label containers.**

Review question

1. Considering all 5 land quality identifiers, what are the positive or negative characteristics of your farm land.

Step 2. Prepare your land properly



Specific objectives

By the end of the lesson farmers will:

1. judge their current methods of land preparation against taught methods for strengths and weaknesses.
2. understand benefits of minimal tillage and ridge and mound preparation.
3. be able to increase topsoil volume per plant.

Discussion questions

1. What happens to crops if farmers fail to properly prepare land before planting?
2. What are good land preparation techniques?

Training method

1. Ask discussion questions 1 + 2.
2. Describe benefits of minimum tillage to conserve soil, organic matter, moisture and reduce soil erosion.
3. Judging from response of the 2nd question proceed with activity 1.
4. In using their plots as models and by making mounds explain how method increases soil contact with stem cuttings (increase topsoil volume per plant) and leads to better plant establishment and reduced weed competition. Explain, using models, how (make ridges or mounds if necessary) ridges and mounds prevent water logging.

Activity

1. Ask two or three farmers to physically demonstrate their land preparation methods, comment on all positive characteristics then, if any, note areas which may need improvement.

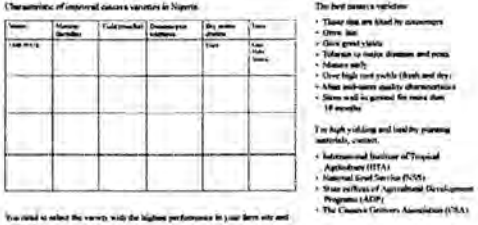
Materials

- 1 or 2 hoes

Review questions

1. In what ways is it possible to reduce weed competition and increase production?
2. What are some methods of reducing water logging?

Step 3. Choose desirable varieties



Specific objectives

By the end of the lesson farmers will:

1. understand the benefits and detriments of using improved varieties.
2. describe differences between varieties.
3. identify good characteristics of cassava plants.
4. know sources of high yielding varieties.

Discussion questions

1. Is anyone currently using or has used improved cassava varieties? What are the characteristics of these improved varieties?
2. What are some advantages or disadvantages of using improved crop varieties (needs not be limited to cassava)?
3. What characteristics of cassava plant would you find beneficial?

Training method

1. Ask discussion question 1 + 2.
2. In addition to responses provided by farmers explain advantages and disadvantages of using improved varieties. Advantages: higher yield through pest and disease resistance; potential for higher income. Disadvantages: may cost money to purchase, may not be suitable for your environment, may require increased inputs.
3. Explain: improved varieties are cassava varieties created in research institutions. Characteristics are: *explain characteristics.*
4. Ask, of those using improved varieties, have any of you had any problems using improved varieties?
5. Describe different varieties available. Inform farmers how to use tables on page 6, 20, and 21.
6. Ask discussion question 3.
7. **Explain differences between varieties.**
8. Proceed with activity 1.
9. Ask review questions 1 + 2.

Activity

1. An explanation of reliable sources of improved varieties will act as this lesson's activity. List sources and contact information. Provide farmers with writing material.

Materials

- Pencil or pens for farmers.

Review questions

1. Of the varieties available from IITA which would be most beneficial for this region?
2. How is it possible to acquire improved varieties?

Specific objectives

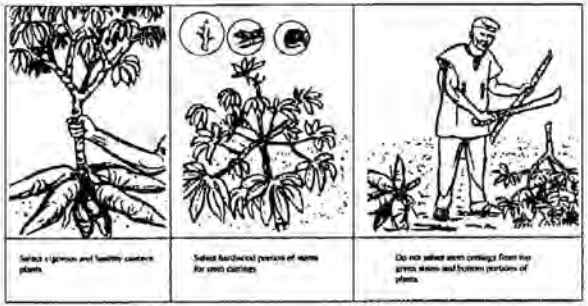
By the end of the lesson farmers will:

1. be able to select healthy planting materials from their crops.
2. describe characteristics of suitable vs. unsuitable planting materials.
3. properly select hardwood portion of cassava plant to be used as planting material.

Discussion questions

1. how do you choose which plant to use as planting materials?
2. what are some problems you may face if unsuitable planting materials are chosen.

Step 4. Select healthy cassava stems



Training method

1. First ask discussion question 1 + 2.
2. Explain negative consequences of choosing planting materials from unhealthy plants.
3. Proceed with activity 1.
4. Explain: unhealthy/unsuitable plants show symptoms of pest and disease damage on stems and leaves. Healthy/suitable planting are 8-15 months old and show no sign of damages. Use examples to demonstrate signs of damage.
5. Explain that healthy plants are chosen for propagation because they show attributes of resistance which children plant may show.
6. Proceed with activity 2.
7. Ask review questions 1 + 2.

Activities

1. Display examples of healthy and unhealthy plants. Have farmers pass around examples and identify good and negative characteristics of plant.
2. Using plant portions, demonstrate proper cutting technique. Explain that top/green portion and bottom portion should not be used.

Materials

1. A portion of a healthy cassava plant.
1. A portion of an unhealthy cassava plant.

Review questions

1. Why should healthy plant be chosen as planting materials?
2. What is most desirable part of plant to be used for planting material?

Specific objectives

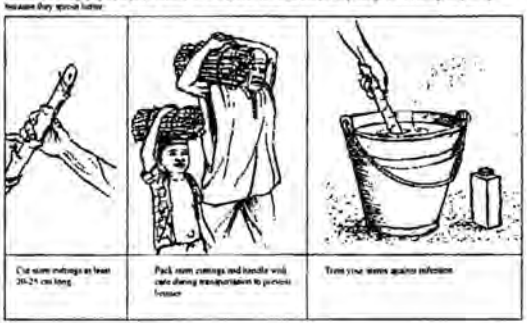
By the end of the lesson farmers will:

1. prepare and handle cuttings properly
2. explain advantages and disadvantages of treating cuttings.

Discussion questions

1. Are any of you using this method to planting material selection and preparation?
2. Do any of the farmers here have experience treating stem cuttings with insecticide or fungicide? Was there a noted increase in yield and was there a long-term benefit (i.e. did you recover your costs of purchasing insecticide and fungicide)?

Step 5. Prepare and handle cuttings properly



Training method

1. Explain that bruises and damage to nodes worsens sprouting because nodes are location of sprouting. This can lead to smaller yields. Indicate on stem nodes.
2. Proceed with activity 1. Emphasize that cutting should not occur on node.
3. Explain: cuttings may or may not be treated with fungicide/insecticide. Explain advantages and disadvantages of treatment. Advantages: protects plants against insects and disease; may increase yield and profits. Disadvantages: costs; health risks.
4. Proceed with activity 2. Explain and use all safety precautions necessary for chemical use.
5. Ask discussion questions 1 + 2.
6. Ask review questions 1 + 2.

Activities (demonstrations)

1. Demonstrate procedure of cutting stems into sections 20 – 25 cm of length (hint: this is about the size of one and a half hands).
2. Demonstrate treatment of stem cuttings. Prepare solution using correct volumes of chemical and water. Explain process.

Materials

1. Stems from previous step.
2. Knife
3. Water
4. Basket and container
5. Chemical (any substance different from water may be substituted.
6. Protective equipment

Review questions

1. What portion of cutting is most important to preserve?
2. What precautions should be taken when using chemical?

Step 6. Select correct planting time

Specific objectives

By the end of the lesson farmers will:

1. choose the best time of the year for planting according to their region.
2. understand necessity of planting in rainy season.

Discussion questions

1. What time of the year do farmers start cassava planting?
2. What factors influence planting time?
3. What other events or responsibilities coincide with planting season?

Training method

1. Ask discussion questions 1,2 + 3. Determine when planting usually occurs.
2. Explain that cuttings planted in wet season sprout better and establish better. Give times of wet season for tropical region and savanna region.
3. Explain that dry season planting has negative impacts on yield because cuttings must remain in moist soil to sprout.
4. Inform farmers that if water table is low, or rain continues late in year it is possible to plant during dry season.

Review questions

1. Why are crops planted during dry season unsuccessful?
2. Which times of the year in this specific region is it possible to plant cassava?

Specific objectives

By the end of the lesson farmers will:

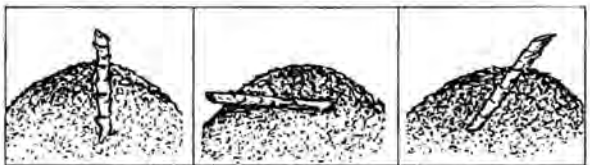
1. understand the benefits of three different planting methods.
2. choose best planting method considering their intentions and soil type for their farms.

Discussion question

1. Can anyone demonstrate how they plant their cassava cuttings? *Give farmer cutting, have farmer explain reasoning for planting using their method.*

Step 7. Methods of planting cassava cuttings

Cassava stem cuttings may be planted vertically, at an angle or horizontally, depending on soil types



Plant vertically in sandy soils with 2/3 of length of cutting below the soil to produce deeper living storage roots

Plant at an angle in loamy soils to produce more compactly arranged roots

Training method

1. Ask discussion question 1. Examine advantages of presented method. Make note of any possible problems which may arise.
2. Proceed with activity 1. When presenting each method describe the characteristics of each method.
3. For vertical planting explain that this method prevents lodging *(explain if necessary)* and provides roots with good anchorage.
4. For horizontal planting explain that this method gives multiple stem production and many roots but are smaller in size
5. For angle planting explain that this method poduces plants that are easy to harvest and have more compactly arranged roots but is best in loamy soils.
6. Explain choice of planting method depends on soil conditions and farmers' intentions but improper planting methods result in small roots, plants that lodge and are difficult to harvest.

Activity

1. Separate entire gathering into smaller group of 2 or three. Pass out cuttings. Demonstrate three different planting methods. Ask groups to follow using cuttings and mounds prepared from step 2.

Materials

- Cuttings from step 5
- Mounds or ridges from step 2

Review questions

1. If a farmer wanted to increase stem production, which planting method should he use? What are some disadvantages of that method?
2. What is the ideal soil type for planting at an angle? What are the advantages of this method?
3. How can a farmer guard against lodging?

Specific objectives

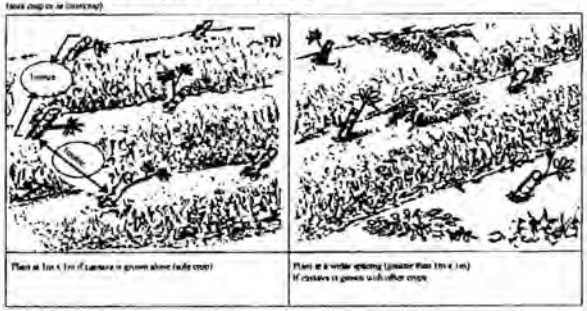
By the end of the lesson farmers will:

1. learn the best planting method for cassava
2. identify proper spacing to be used depending on situation.

Discussion question

1. How does a cassava farmer space out his plants?

Step 8. Plant at correct spacing



Training method

1. Ask discussion question 1. After discussion emphasize that spacing is dependent on variety of plant and whether plot is only cassava or if it is intercropped.
1. Explain why sole cropped cassava needs less space compared with a cassava crop intercropped with other crops.
2. Explain branching varieties need more space then non-branching varieties due to spread of branches.
3. Ask review question 1 + 2.

Proceed with activity 1. Explain that necessary spacing (depending on variety and cropping system) should be determined during land preparation (step 2) in order to correctly space mounds and ridges.

Activity (demonstration)

4. Gather available cuttings from step 7. Demonstrate branching (1 mx1 m), non-branching (0.8 *down row* x 1 m *across rows*), intercrop branching (1 m *down row* x 1.5 m *across rows*), intercrop non-branching (1mx1m). Demonstrate how paceing can be used to estimate distance. *One large pace = 1 m; length of foot=0.3 m*

Materials

- Cutting remaining from step 7.

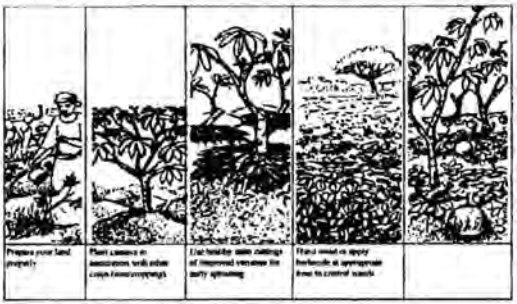
Review questions

1. What variety and cropping system need least amount of spacing?
2. What variety and cropping system need most amount of spacing?

Specific objectives
By the end of the lesson farmers will:
1. be able to use the four different weeding techniques discussed.
2. understand benefits and disadvantages of each technique.

Discussion question
1. Ask farmers to share any experiences they have encountered from weed competition.

Step 9. Control weeds early



Training method
1. Ask discussion question 1. Emphasize the importance of weeding.
2. *Describe the 4 method of weeding described and explain their advantages and disadvantages.*
3. Manual weeding: **Adv:** possible to fully weed plot. **Dis:** time and labor intensive.
4. Cover crop: **Adv:** possible to gain profits from another crop; less labor for hand weeding. **Dis:** Not all weeds are suppressed; a second crop must be maintained.
5. Inter-row weeder: **Adv:** Fast and effective if used with hand weeding method. **Dis:** Costs associated with equipment; not possible to reach all weeds. Perform activity 1.
6. Herbicide: **Adv:** Fast and highly effective. **Dis:** Associated costs, potential health risks and crop risks if used ineffectively. Perform activity 2.
7. Ask review question 1.

Activity (demonstration):
1. Demonstrate the proper use of the inter row weeder.
2. Demonstrate the proper use of the backpack sprayer.

Materials
- Inter-row weeder
- Backpack sprayer
- Solution to use in sprayer (need not be a herbicide solution)
- All necessary safety equipment

Review question
1. Considering your means and farming technique what weed control method is suitable for your farm?

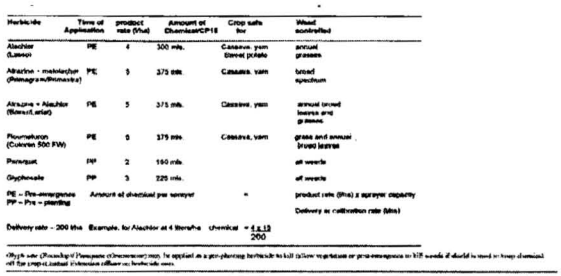
Specific objectives
By the end of the lesson farmers will:

1. be able to differentiate between the different herbicides available.
2. obtain information on how to acquire chemicals.
3. correctly prepare chemical solution to be applied using a backpack sprayer.

Discussion question:

1. Has anyone used herbicide on his or her crops (need not be restricted to cassava) before? *Ask farmers to share experience and advice other farmers.*
2. Is anyone familiar with prices of herbicide? Of those who have used it before is it cost effective to use it herbicide compared with manual weeding?

Step 9b. Herbicide use in root and tuber crops



Herbicide	Time of Application	product rate (l/ha)	Amount of Chemical/CP15	Crop suits for	Weed controlled
Alachlor (Lasso)	PE	4	300 mls.	Cassava, yam Sweet potato	annual grasses
Atrazine - metolachlor (Primagram/Primextra)	PE	5	375 mls.	Cassava, yam	broad spectrum
Atrazine + Alachlor (Gesaprim, arlar)	PE	5	375 mls.	Cassava, yam	annual broad leaves and grasses
Flourmeturon (Cotoran 500 FW)	PE	5	375 mls.	Cassava, yam	grass and annual (true) leaves
Paraquat	PP	2	150 mls.		all weeds
Glyphosate	PP	3	225 mls.		all weeds
PE – Pre-emergence PP – Pre – planting	Amount of chemical per sprayer		=		product rate (l/ha) x sprayer capacity Delivery or calibration rate (l/ha)

Delivery rate – 200 l/ha Example, for Alachlor at 4 l/ha/ha chemical = $\frac{4 \times 15}{200}$

(Glyph sate (Roundup) or Paraquat (Gramoxone) may be applied as a pre-planting herbicide to kill fallow vegetation or pre-emergence to kill weeds if should be used as heavy chemical off for crops (contact extension officer on herbicide use).

Training method

1. Open with discussion question 1 + 2.
2. Explain difference between two types of herbicides: selective and complete killing.
3. Introduce selective killing herbicides for use on cassava crop *alachlor, altrazine+metolachor, atrazine+alachor, floumeturon.*
4. Instruct farmers on how to use table on page 13 and identify differences among herbicides.
5. Introduce total killing herbicides for use on cassava crop *paraquat, glyphosate.*
6. Explain characteristics of total killing herbicides, how to use properly, in what situations and what damages to expect if used improperly.
7. Proceed with activity 1.
8. Ask review question 1 + 2.

Activity (demonstration)

1. Using a backpack sprayer, a container, chemical and water prepare a solution to use in backpack sprayer. Carefully explain that the product rate shown on the table on pg. 13 indicates how much chemical is to be used per hectare **when 200L/ha of solution is delivered.** Explain to determine how much chemical is needed in sprayer; divide product rate by delivery rate and multiply by size of sprayer in liters.

Materials

- Backpack sprayer
- Container
- Water
- Herbicide (need not be herbicide but some other liquid other then water).
- Measuring equipment

Review questions

1. *Give chemical ask* what type of herbicide, complete or selective, is it? What type of weeds does it control?
2. *Give chemical ask* for a twenty liter backpack sprayer; how much chemical is needed?

Step 10. Fertilize your soil

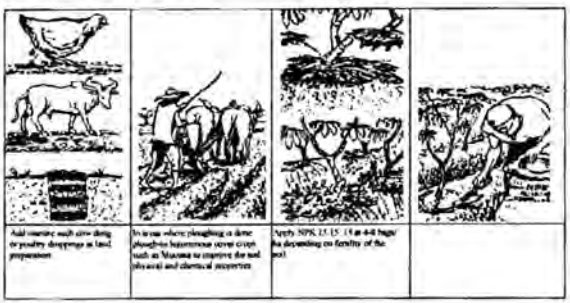
Specific objectives

By the end of the lesson farmers will:

1. understand reasons for and benefits of fertilizing land.
2. be able to use the mineral fertilizer, the green manure and the animal dung to fertilize their crops.

Discussion question

1. Which farmers here are using fertilizers? Ask the relevant farmers their methods of applying fertilizer.
2. What are the prices of the three different fertilizers?



Training method

1. Explain why fertilizing is important.
2. Describe three different fertilizer materials that could be used for cassava crop .
3. Describe the proper method of applying mineral fertilizer, the type and the prices.
4. Ask discussion questions 1 + 2.
5. Ask review questions 1 + 2.

Review questions

1. Why does continuous cropping eventually reduce the yield of future crops?
2. Why does fertilizing have the potential to increase yields?

Step 11. Intercrop cassava with other crops

Specific objectives

By the end of the lesson farmers will:

1. understand the benefits of intercropping.
2. be able to intercrop cassava with maize.

Discussion question

1. Has anyone intercropped cassava before? Was there an increase in land productivity or any noticeable decrease in cassava yield?

Training method

1. Explain the potential benefit of improved land use when cassava is intercropped with other crops. Benefits include potential of a greater total yield, reduced weeds, soil erosion and crop loss.
2. Ask discussion question 1.
3. Explain planting technique of cassava/maize crops. Explain ridges should be prepared with cassava planted on the peaks of the ridges and maize in the valleys.
4. Explain that branching habits of cassava should be considered when spacing plants.
5. Proceed with review question 1.

Materials

- Hoes (one per farmer).

Review question

1. If branching variety of cassava is used in an intercropping system with maize, what should the spacing be?

Specific objectives

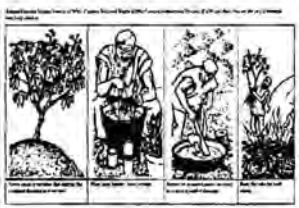
By the end of the lesson farmers will:

1. understand negative impact of pests and diseases on yields.
2. know methods of controlling pests and diseases

Discussion question

1. *Ask farmers to share their experiences with pests and diseases.*

Step 12. Diseases



Step 13. Pests

Training method

1. Ask discussion question 1.
2. Perform activity 1. Identify definite signs of disease, which farmers may not have identified in activity.
3. Explain possible methods of disease control:
    - Selecting planting material from cassava plants showing no signs of diseases damage.
    - Burning all diseased plants to prevent spreading
    - Communicating with other farmers about diseases and resistant varieties.
    - Using resistant varieties.
4. Perform activity 2. Identify definite signs of pest infestation that farmers may not have identified in activity.
5. Explain possible methods of pest control:
    - Selecting planting material from cassava plants showing no signs of pest damage.
    - Planting resistant varieties
    - Using pesticide.
6. Ask review questions.

Activities

1. Pass a sample of diseased cassava plant to farmers and ask them to identify the disease symptoms.
2. Show farmers examples of cassava plants suffering from pest infestation. Ask farmers to identify signs of pest damage.

Materials

- Examples or pictures of diseased and pest infested cassava plants.

Review questions

1. What is the method of obtaining pesticide?
2. What is the method of obtaining resistant varieties?

Specific objectives

By the end of the lesson farmers will:

1. be able to identify best time to harvest cassava in their region considering local schedule.
2. understand potential damage to cassava roots if harvesting is delayed.

Discussion question

1. At what time of the year does cassava fetch the highest prices? Why? Does this coincide with harvest period?
2. How many months after planting does it take to have a mature crop of cassava.

Step 14. Harvest your cassava at appropriate time.

Training method

1. Ask discussion question 1 + 2.
2. Ask in this region what the normal times are for harvesting cassava.
3. Explain that the optimum time for harvesting cassava depends on soil factors, climate and variety.
4. Ask which farmers are planting early maturing varieties and which farmers are planting full season variety.
5. Explain optimum time to harvest early maturing varieties (9-12 months) and full season varieties (12-18 months)
6. Discuss the relevant climatic conditions in the region where the course is being held.
7. Proceed with activity 1.
8. Ask review question 1.

Activity

1. Pass around fibrous cassava root. Describe characteristics of fibrous root and explain that this problem is a result of delayed harvesting.

Materials

- Fibrous cassava root

Review question

1. Of the farmers who are presently farming cassava, depending on variety how many are harvesting at the optimum time?

Specific objectives
By the end of the lesson farmers will:
1. properly store stems depending on length of storage and climatic conditions.
2. understand the risk of dehydration when storing stems.

Discussion question
1. What happens to cassava stems that become dehydrated? Are there any observable characteristics.

Store cassava stems properly.

Training method
1. Explain that it is possible to store stems for up to three months if done properly.
2. Explain that storage can be difficult due to easy stem dehydration.
3. Ask discussion question 1.
4. Explain storage methods and lengths in wet season. Long-term storage (1-3 months) store stems in bundles under tree. Short-term storage (2-4 weeks) store under roof in shade.
5. Explain storage methods and lengths in dry season. Long term storage store upright in pits and water regularly.
6. Emphasize the importance of only storing healthy stems.
7. Ask review question 1.

Review question
1. *Given situation (long/short storage, dry/wet season) ask for how long stems can be stored.*

Good harvest and profits bring joy!

Training method

To close the session restate the purpose of the course. Explain to farmers that the methods presented in the book are researched and proven ways of increasing yield and profit given proper conditions. Explain that by using some of these methods farmers should be able to increase their yearly profit.

Discussion questions

1. Ask farmers which information provided in the course was new to them.
2. Ask farmers what methods they think they will be able to use in their farm.

The Commonwealth of Learning (COL) is an intergovernmental organisation created by Commonwealth Heads of Government to encourage the development of open learning and distance education, through the fostering and sharing of knowledge, resources and technologies. Headquartered in Vancouver, Canada, COL is the world's only intergovernmental organisation dedicated solely to promoting and delivering distance education and open learning, and is the only official Commonwealth agency located outside Britain.
Mandated to be in the vanguard of technological change in education and training, COL and its international network of partner organisations have helped the Commonwealth's 53 member nations and their citizens realise widespread access to quality, current education and training for over fifteen years.
Fully operational since 1989, COL is financially supported by Commonwealth governments on a voluntary basis. It responds to Commonwealth needs through in-country and regional programmes and initiatives, as well as fee-for-service consulting for international agencies and national governments.
www.col.org

The International Institute of Tropical Agriculture (IITA) was founded in 1967 with a mandate for improving food production in the humid tropics and to develop sustainable production systems. It became the first African link in the worldwide network of agricultural research centers supported by the Consulative Group on International Agricultural Research (CGIAR).
www.iita.org

Total Development International Foundation (TODEV) is a Non governmental organization in Nigeria, that started operation in 1995 as WorldReach International. The focus of TODEV is to empower women, children and youths in the rural and urban area by making available information required for development. TODEV packages information required for setting up and managing agricultural enterprises profitably in a format easy to understand by all and sundry. Enterprise development, financing, career based guidance and social advocacy on technological issues are significant thrust of this vision.
e-mail: totaldevinternational@yahoo.com

Oke-Ogun Community Development Network (OCDN) is a grassroot organisation interested in the dissemination of information for development. OCDN has an information centre in Ago-Are and hopes to set up more information Centre in other locations in Oke-Ogun area of Oyo State in Nigeria.

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