










# Training of Trainers Workshop

Biofortification Series

# Important!

- This module is designed to potentially serve a wide variety of audiences (nutritionists and agronomists, policymakers, extension workers, farmers)
- Not all of the material will be relevant to all audiences
- Please refer to the accompanying Facilitator's Guide for guidance on how to adapt these materials to your audience and facilitation best practices.

# Legend

Icon	Description
 Xm	Expected Duration, minutes
	Quick Review/Survey Questions
	Brainstorming Session
	Discussion Session
	Group Activity
	Animated Slide
	End of Animation





# Welcome

During this session, we will review the training materials for the Biofortification series and discuss best practices for training preparation and delivery.

# Quick Survey



*By show of hands:*

- *How many of you have facilitated trainings before?*
- *How many of you have facilitated trainings or workshops related to Biofortification?*
- *How many of you have been trained in facilitation skills?*
- *How many of you have never facilitated trainings?*



# Objectives

**By the end of this session, you should be able to:**

- Summarize the objectives of the biofortification training
- Outline the contents of the training module(s) and explain the overall structure of the presentation
- Prepare in advance to facilitate a training session and modify presentation materials for your specific audience
- Apply basic presentation best practices when speaking with PowerPoint slides
- Demonstrate how to facilitate the different type of interactive sessions and summarize the instructional purpose/value of each type of activity



# Agenda

- Standard “housekeeping” items for session (break times, end time, facilities, meals)



# Meet the Facilitator

- Name
- Role, Organization
- Credential(s)
- Fun biographical detail



Insert photo of  
facilitator  
(if available)



# Ground Rules

- Mobile phones off
- In addition to lecturing, there will be opportunities for discussions and asking questions.
  - To keep things moving, we might have to cut some conversations short and move on to the next topic
  - Not everyone will get to answer every question, but everyone will get multiple chances to speak and be heard throughout the session
  - If one or two people are answering every question, we will politely ask them to give someone else a chance to speak.

# Ground Rules

As participants in this learning experience, we need to:

- Share our ideas without fear of criticism, and listen to the ideas of others without criticizing
- Engage in discussions without arguing
- Help other participants and accept help from others
- Create a safe, supportive environment for everyone to learn
- Have fun

# Activity (Groups)



## Meet Your Fellow Participants

- Pair off with another participant (ideally someone you don't already know)
- Talk to them and find out the basic information they would include on their “facilitator” slide:
  - Their name
  - One interesting fact about their professional background
  - A piece of “fun” biographical trivia:
    - Hobbies
    - Favorite foods
    - Favorite holiday destination
- Reconvene and have each pair introduce each other to the rest of the class

# Discussion



*What might be the purpose of starting with a silly activity like the one we just did?*



# Objectives and Audiences

for the Biofortification Training Series

# Discussion



*What has been the best training you've ever attended? What made it so memorable?*

*What has been your worst ever training experience? What went wrong?*

*As a learner, what benefit do you hope to receive from this training session? What would make participation in this training session worthwhile for you?*

# Brainstorming



## Purpose of Biofortification Series

*What are we ultimately trying to achieve by conducting these trainings? What do we want people to do after completing this training that they would not have done otherwise?*



## Learning Objectives

- **Skills** - “How to” steps for specific tasks
- **Knowledge** – Information to aid decision making
- **Attitudes** - Ethics / values / perspective to change behavior



# The Purpose of Biofortification Series

- Help our audience recognize the problem of micronutrient deficiency and “hidden hunger”
- Explain the potential of biofortification to alleviate hidden hunger
- Differentiate biofortification from other interventions
- Clarify any misconceptions or concerns our audience might have about biofortification (e.g., confusion between biofortified crops produced through selective breeding and GMOs)
- Motivate participants to support biofortification in whatever capacity they can (e.g., government ministries enacting policies, food processors buying more biofortified crops, extension workers educating farmers, etc.)

# Discussion



*Are children more capable of learning new things than adults?*



## Young Learners vs. Adult Learners

- Most assumptions about “learning” formed in school
- Differences in brain matter less for complex subjects
- Adults highly capable of learning complex skills, concepts
- Real issue is *motivation*

# Brainstorming



## Young vs. Adult Learners

*What motivation does a child have for participating in learning at school? How do they benefit?*

*How are an adult learner's motives the same or different for participating in training? How do they benefit?*





## Young Learners

- Directly rewarded for performance in school
- View teacher as authority figure, seek approval
- Limited prior experience – unable to judge importance of information
- Often do not retain learning long-term unless personally interested in subject

# Adult Learners

- Rewarded for job performance, not training
- Seek approval of bosses / clients, not training facilitator
- Will judge importance of new information based on prior experience
- Can retain learning long-term *if they see a practical benefit*



# Brainstorming



## Target Audience

*What types of target audiences do we want to reach with the Biofortification Training Series?*

*How might the needs, interests and expectations of these audiences differ?*

*What benefit will they receive from the training session?*

*What would make participation in the training sessions worthwhile for them?*



# Target Audiences

- Nutritionists and agriculturalists
- Policymakers
- Extension workers
- NGO staff
- Farmers
- Other stakeholders in agricultural value chains
- Academics, researchers and students





# Benefit to Learners

- List the different audiences for the Biofortification training and the benefit to each group of learners

# Overview of Training Materials

Module Contents and Objectives

# Quick Survey



*By show of hands:*

- *How many of you have read the training materials in detail?*
- *How many of you have skimmed through some of the training materials on Biofortification?*
- *How many of you have not yet seen the training materials?*





## Biofortification Series

- Biofortification training series currently consists of three modules: Biofortification, High Iron Beans and Maize
- Each module includes a PowerPoint slide deck, a Facilitator's Guide and a Participant's Guide

# Where to find training materials

- Insert links / screenshots of where training materials can be found





# Preparing to facilitate

Not all the materials would be relevant to all potential audiences.

- Clarify who will be in the audience and how many people will attend
- If possible, survey your audience in advance to find out what they want to get out of the training and any specific issues they'd like to see covered



# Activity (Groups)



## Making content decisions

*Break out into groups. Look at Unit [X] of the [Biofortification] module.*

*Assign each group a target audience (e.g. policymakers, government employees, farmers, private businesses etc.)*

*How would you adjust the slide deck for your target audience?*

- What would you leave in?*
- What would you remove?*
- What would you shorten or simplify?*
- What might you add or elaborate upon?*

*You have 10 min to discuss in your groups.*



# Quick Review



Which of these modules are NOT in Biofortification series:

- A. Biofortification (Introduction)
- B. Calcium Cassava
- C. High Iron Beans
- D. Provitamin A Maize

# Quick Review



What is our goal when modifying the materials?

- A. Ideally everyone would learn everything, but maybe we would need to cut things for time
- B. We want to focus on whatever topics interests us the most, as facilitators
- C. Focusing on information and activities that are most relevant to our specific audience will increase the chance that they will learn and retain the material

# Discussion



*What is the value of having participants answer surveys or multiple choice questions?*

*What should we do if most participants answer a question incorrectly?*

# Advance Preparation

What to do before you facilitate

# Discussion



*What can you do to prepare to facilitate a training session?*

*Those of you with training facilitation experience, what are some of the ways you typically prepare?*

*How far in advance should we start preparing?*



## Preparing to facilitate

- Start preparing several days in advance, at least
- Review the materials and adapt as needed
- Keep in mind the size of the audience and facility limitations when you select appropriate activities
- Schedule time to rehearse the presentation and practice activities with your colleagues



# Time matters

- Find out how much time you have available for the training session
- As you rehearse, be mindful of time required for conducting activities and discussions
- Prioritise information and activities based on the amount of time you have for the training and the needs/interests of your audience





## Schedule / Timetable

- Based on outline and rehearsals, estimate time when each unit should begin
- During session, check your progress against the schedule
  - Can have assistant watch time
- If behind, quicken pace of presentation
- If ahead, stay ahead or spend more time in discussion, etc.

# Discussion



*What are the risks if you underestimate the amount of time that will be required to deliver the training?*

*What are the risks if you overestimate the amount of time?*

*Which seems like the greater risk?*



## Facilities

- Find out where the training will be held and visit in advance if possible
- Is there a projector and screen? Flip charts and markets?
- If you are doing activities that involve cooking, is the necessary equipment available?





## Materials

- Be sure to bring any seed/crop/food samples, empty jars, or other items required for activities
- Items are listed in facilitator's guides

# Best practices for preparation

## Do

- Review and rehearse materials well in advance
- Practice and time your presentation and allow generous time for activities / discussion
- Determine what is most relevant to your specific audience and prioritize use of instruction time
- Contact host organization / facility manager in advance to review logistics

## Don't

- Wait to review materials until immediately before session
- Assume that times indicated on slides will always be exact (especially if adapting content)
- Try to cover absolutely everything in full detail, regardless of time constraints
- Assume everything you need will be available in terms of facilities, equipment

# Presentation Skills

Tips, Techniques and Best Practices

# Quick Survey



What is the most important thing a facilitator can do to help participants learn?

- A. Give an entertaining and informative presentation
- B. Know as much as possible about the subject matter in case some participants ask difficult questions about advanced topics that go beyond the curriculum
- C. Guide participants through activities and discussions to help them develop skills and discover key ideas on their own
- D. Be an expert in the subject and go as in-depth into the subject matter as possible in the time allotted
- E. Test participants to see if they have memorized the facts



# Discussion



*Can you think of a teacher or trainer who particularly impressed you?*

*What do they do well? What makes them stand out?*

*Do you feel capable of doing the same thing?*

# Training Myths & Facts

## **Myth #1 - Trainers need to be subject matter experts**

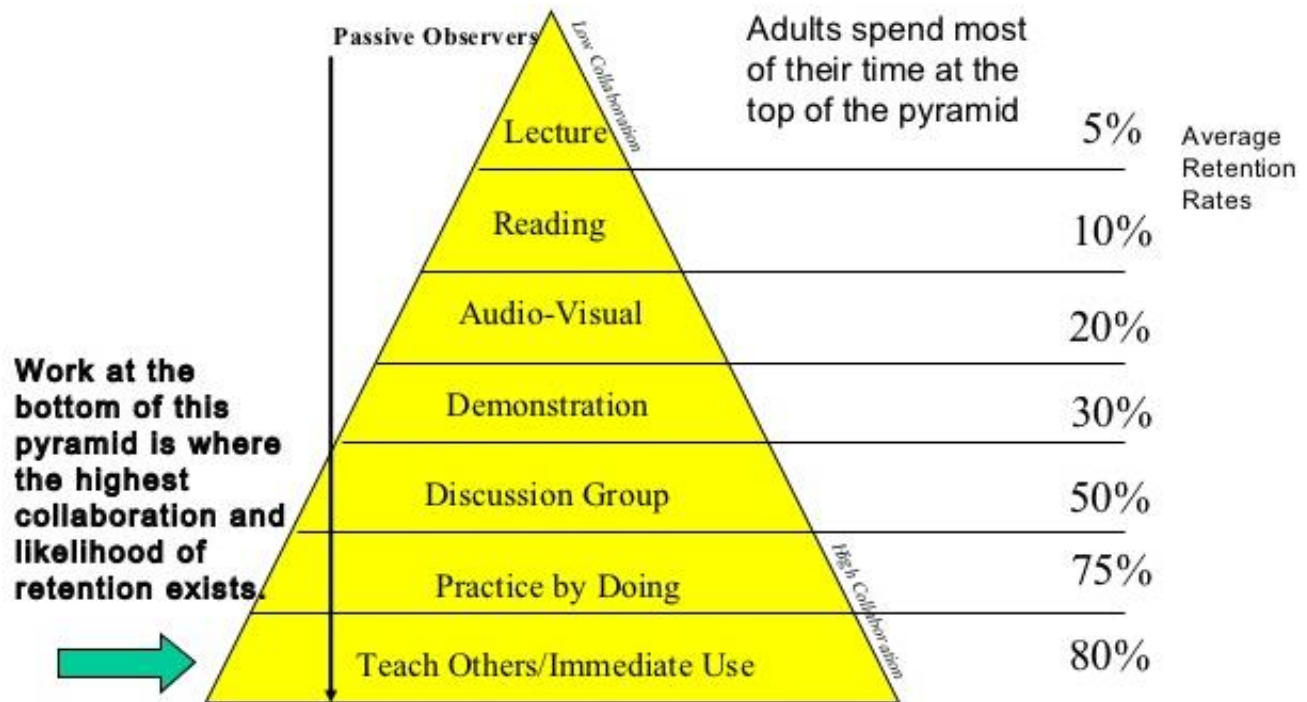
- Trainers need to be well-rehearsed, focus on the learning objectives and know responses to common questions
- Trainers who are also subject matter experts may be tempted to provide too much detail for audience / go off on tangents

## **Myth #2 - Trainers need to be charismatic and entertaining**

- Trainers need to explain the learning objectives clearly, in a way that highlights their relevance to the specific audience
- Charismatic trainers may rely too much on entertaining vs. educating – learners might have fun, but not retain anything

## **Myth #3 - Trainers must convey as much information as possible**

- Trainers need to listen, ask questions and help learners discover key concepts for themselves via activities, discussion
- Only a small percentage of learners can retain information received via lecture – most require active participation



## Discussion and Activities

- The average learner retains only 5% of the information they receive through lecture
- Retention from discussion is 50%
- Retention from application / activities is 75%



## Interactive sessions

Biofortification modules include many opportunities for participant interaction:

- Discussion Questions
- Survey Questions
- Brainstorming Sessions
- Break-out Groups

# Lecture

- Some lecture is inevitable, as much information will be new to learners
- Find opportunities to ask questions / create dialogue
- If responses confirm most participants already comprehend, move ahead quickly
- If responses indicate lack of comprehension, slow down and spend more time







## Using PowerPoints

- Each module includes a PowerPoint slide deck to guide presentation
- PowerPoint slides can be helpful, but over-reliance on slides can reinforce bad presentation habits

# Brainstorming



## PowerPoint Slides

*What are some good things about using PowerPoint slides?*

*What are some bad things instructors sometimes do when using PowerPoint slides?*

# PowerPoint Slides

## Advantages

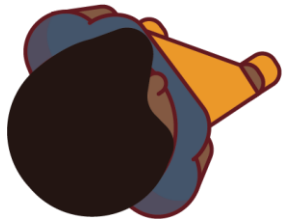
- Serves as an outline for the facilitator to follow
- Helps audience know / remember important points
- Can help facilitator remember details they may have forgotten
- Show helpful charts, graphs and visual aids

## Bad Habits

- Staring at the screen instead of looking at audience
- Reading from slides word-for-word (or telling audience “just read the slide”)
- Not reviewing deck in advance (instructor being surprised by own slides)
- Putting too much text / too many images on slides

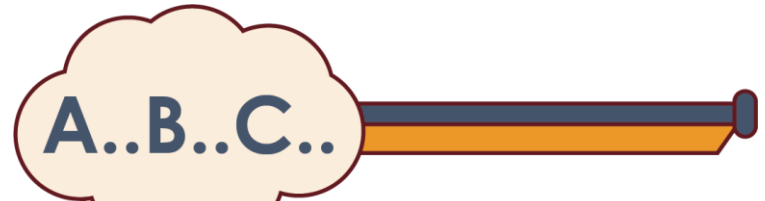
# The “PowerPoint Dance”

1



Scan the  
slide

A..B..C..



Pause to  
think

2

3



Turn, look at  
the audience

4



A..B..C..

Speak

Repeat...

# Activity (Whole Class)



## Using Slides Appropriately

*Ideally, we would be very well-rehearsed in advance and will only need to look briefly at a slide to remember what we need to say.*

*However, sometimes we might forget and need to rely on the slide.*

*Who wants to volunteer to present a slide for the class, remembering the steps of the “PowerPoint Dance”?*





## “Hidden Hunger”

- Because micronutrient deficiency symptoms are less visible/obvious than macronutrient deficiency symptoms, micronutrient deficiency is called the “Hidden Hunger”
- Far more prevalent than calorie deprivation or protein deficiency
- Even mild deficiency, can have serious consequences.



## Iron

- Used throughout body, most critically in blood cells
- Without iron, blood cannot carry oxygen from lungs to other parts of the body
- Deficiency can result in fatigue and even death





## Maize

- #1 crop in the world (production tonnage)
  - 118M ha cultivated
  - 600M metric tons produced
- Consumed in large proportions in many areas where vitamin A deficiency is a health problem
- High yields make maize an important food source as population increases





## Catching Up On Time

- Sometime, despite our best efforts, our presentation falls behind schedule
  - Learn how to shorten your presentation while still conveying important points
  - Skip activities/discussion only as last resort

# Activity (Groups)



## Catching Up

*Split up into groups of 2 or 3*

*Think of the story of your favorite book, film or television program.*

*Summarize it In 30 seconds or less*





## Biofortification

- Biofortification involves breeding new varieties of staple crops with higher micronutrient content
- Some traditional and wild varieties of certain staples have slightly higher micronutrient content
- **Selective breeding** can produce new varieties with significantly higher micronutrient content
- Crops in this course are not genetically modified

# Summary of Presentation Techniques

- Prepare for the training and rehearse
- Scan, but don't read / stare at the slides
- Remember the “PowerPoint Dance”
- Face the audience and maintain appropriate eye contact
- Keep your presentation as short and concise as possible, and elaborate or condense as necessary to

# Interactive Sessions

Discussions, Activities,  
Checks for Understanding








# Brainstorming



## Engaging learners

*What are some things we can do to encourage learners to actively engage in the learning experience, and not just listen passively?*

# Legend

Icon	Description
 Xm	Expected Duration, minutes
	Quick Review/Survey Questions
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# Activity (Groups)



## Labeling

*Volunteer wanted: Run a labeling activity*

*Let's break into three groups. Each group is to design a label to help consumers identify biofortified products.*

*You have 5 minutes in your groups.*

*Each group is going to present and explain their label.*

# Discussion



*What is the advantage of having participants complete activities in small groups?*

*What are some disadvantages or potential risks of having participants complete activities in small groups?*

*What the facilitator do to help participants get the most benefit during group sessions?*

*When should we intervene if participants seem to be doing the activity incorrectly?*

# Purpose of Group Activities

- Learn by trial and error (improves comprehension and retention)
- Apply concepts to real-world situations
- Think critically about the concepts and their practical application
- Share ideas with others



# Best practices for facilitating activities

## Do

- Make sure people understand the instructions, answer any questions
- Re-engage disinterested members
- Observe group discussions closely to make sure they're on track, intervene and clarify if necessary
- Intervene in case of conflicts, find points of agreement
- Be mindful of time

## Don't

- Assume everyone understands the instructions
- Allow one person to dominate the group
- Intervene and 'give answers', complete the activity for the group
- Ignore conflicts
- Allow the groups to continue discussions longer than the allotted time

# Discussion



*What is the benefit of asking learners open-ended discussion questions?*

*What might be some practical concerns about having learners engage in discussions during a training session?*

*What can facilitators do to address those concerns?*





## Discussions

- Discussions can help learners arrive at key points for themselves, and thus retain knowledge longer than receiving from lecture
- Creates engagement
- Requires critical thinking
- Peers share knowledge, experience

# Facilitating Discussions

- Start by asking question from the slide
  - Direct question to specific learner or group of learners, ideally someone who has not participated as much as others
- Ask follow-up questions to clarify answers and gently guide learner towards key points / learning objectives
- If time permits, open up question to input from rest of the class
  - Set expectation that not *everyone* will answer *every* question
- Keep discussion on topic / on schedule
- Help resolve any conflicts that may arise
- Summarize key points before moving on

# Follow-Up Questions

- Follow-up / Probing questions are typically asked after someone has given an answer to another question
  - Clarify answer / solicit more information
  - Gently guide learners to the point of the discussion / learning objective
- Different types:
  - Open-ended questions, to get more general information (“What kinds of things can travelers do to make travel less stressful?”)
  - Closed questions, to clarify or make a specific point (“When was the last time you traveled to Jakarta?”)
  - Prompt for the participant to continue speaking
    - “Tell me more”, “Give an example”
    - Nonverbal cues (remain silent, nod, make quizzical face)

# Activity (Whole Class)



## Follow-Up Questions

- Participants take turns asking the facilitator about the last time the facilitator traveled on holiday
- Goal is to elicit as much information about the facilitator's trip as possible
- If the facilitator goes off-topic and attempts to change the subject to something other than holiday travel, gently guide the conversation back to the topic using questions

# Brainstorming



## Dealing with conflict

*What differentiates healthy debate from conflict/argument?*

*What could you do, as facilitate, to avoid or de-escalate a conflict?*





## Argument vs. Discussion

- **Warning signs:**

- Incivility
- Personal criticisms
- Not listening and simply repeating one's opinion

- **Consequences:**

- Going off topic
- Wasted class time
- Others feel uncomfortable about sharing their views

# Managing Conflict

If conflicts arise:

- Ask questions to clarify each party's position, and guide them towards learning objective / points of agreement
- Invite other participants to share their point of view, without asking them to take sides
- If conflict is over a minor / off-topic issue, say it can be discussed more after session and move on
- If conflict is purely a matter of opinion, point out that people can perceive the same situation differently
- Summarize the debate (favoring the actual learning objectives) and say class needs to move on for time\

# Discussion



*What could be some of the ways to handle participants who dominate the discussions and talk to much?*

# Difficult participants

- Some participants may attempt to dominate conversation, repeatedly instigate conflict
- Make sure less assertive / empowered participants feel that it is safe for them to speak
- If a participant repeatedly tries to dominate conversation, politely but firmly tell them that others need a chance to be heard and direct a question to someone else who has not spoken as much
- If they persist, direct *every* question to specific participants and do not accept interruptions

# Best practices: Facilitating Discussions

## Do

- If participants are unsure how to answer, ask for specific examples from experience
- Invite quieter participants to speak up by addressing the question to them
- Ask guiding questions
- Summarise key points
- Be mindful of time, suggest that off-topic discussions wait until after session

## Don't

- Skip the discussion
- Answer the question yourself if no one speaks up
- Tell participants they are “wrong”
- Tell participants what the answer “should” be
- Allow one or two participants to dominate
- Allow the discussion to go off-topic or run over time



# Activity (Groups)



## Micronutrient deficiencies in your communities

*Volunteer wanted: Run a discussion*

*Are you aware of any specific micronutrient deficiencies that impact public health among the communities you work with?*

# Activity (Groups)



## Fostering demand

*Volunteer wanted: Run a discussion*

*What qualities of crop might be attractive to farmers? What about consumers?*



## Surveys / Review Questions

- Slide decks include multiple choice survey and quiz questions
- Purpose is to “check for understanding”
  - Testing ***facilitator’s ability to communicate concepts***
  - Not “testing” learners

# Activity (Groups)



## Run a survey

*Volunteer wanted: Run through the next several slides and check for understanding and retention.*

# Quick Review



Which of these modules are NOT in Biofortification series:

- A. Biofortification (Introduction)
- B. Calcium Cassava
- C. High Iron Beans
- D. Provitamin A Maize



# Quick Review



What should you NOT be doing when presenting?:

- A. Face the audience and maintain eye contact
- B. Check for understanding
- C. Ask questions and engage audience in discussions
- D. Lecture for extended periods of time
- E. Provide examples to support the concept you're explaining

# Quick Review



What is **NOT** a reason for asking survey questions?

- A. To let the facilitator know if they successfully communicated the key points of the presentation
- B. To offer a quick way for learners to actively participate (versus more time-consuming open-ended discussions)
- C. To break up a lengthy presentation
- D. To test the learners and penalize them for getting answers wrong

# Best Practices for Surveys

## Do

- Go back and explain any concepts that may not have been understood
- Use 'show of hands' or direct questions to specific participants
- Assure participants it's OK to be a bit confused if they get answers wrong.
- Tell dominating participants that we need to hear from others / give others a chance to answer

## Don't

- Skip the questions and assume understanding (or move on without clarifying)
- Allow one participant to dominate
- Use harsh, critical words like "you're wrong"
  - *Instead say "The answer we are looking for..."*
- Answer the question yourself

# Surveys vs. Discussions

- With smaller audiences (fewer than 16), free response discussion questions can greatly improve retention. But you need to be mindful of time.
- For audiences larger than 16 multiple-choice questions could be quicker and allow more people to answer.
- For very large audiences (50+) ask participants to raise their hand rather than shout the correct answer on a multiple-choice question (e.g. Raise your hand if you think the answer is “A”)

# Summary of Best Practices

## Do

- Face the audience and make eye contact
- Engage the audience in dialogue/discussion, ask questions
- Provide specific, relevant examples
- Check for understanding

## Don't

- Stare at the screen and read word-for-word
- Lecture for extended periods
- Allow one or two people to dominate the discussion
- Cover in-depth information that the audience already knows or that isn't relevant
- Assume understanding



# Wrapping up the Training

- Mention any recent developments in the field of biofortification
- Summarize key takeaways from the course
- Refer participants back to the course objectives and any other issues they may have been raised at the beginning of the training and seek feedback on how well the objectives were met
- If appropriate, share your contact details, to allow them to get in touch with you after the training
- Allow at least 15 min for Q&A session at the end
- Collect feedback forms, if appropriate

# Brainstorming

## Collecting Feedback



*What kind of questions could you ask on a feedback form?*

# What to ask for on a feedback form

- Indicate that feedback may be submitted anonymously
- Rate statements on scale of: 5 – strongly agree, 4 – mostly agree, 3 – not sure / mixed feelings, 2 – mostly disagree, 1 – strongly disagree
- Suggested statements:
  - The content of the training was relevant to my work
  - The presentation held my interest and was easy to follow
  - The time and location of the training session were convenient
  - The duration of the training seemed appropriate
  - I feel better prepared to apply the skills and concepts from the training in my work
  - I would recommend this training to others in my position
- Include a comment box to write any additional feedback

# Conclusion

Key Takeaways and Next Steps

# Key Takeaways

- Identify your audience and adjust materials accordingly
- Rehearse the presentation and activities in advance and be mindful of time
- Use slides as an aid, do not just read them
- Interaction is important. Try not to skip activities or discussions. Minimize lecturing.
- Anticipate off-topic discussions and possible conflicts. Have a plan.



# Objectives (Recap)

## You should now be able to:

- Summarize the objectives of the biofortification training
- Outline the contents of the training module(s) and explain the overall structure of the presentation
- Prepare in advance to facilitate a training session and modify presentation materials for your specific audience
- Apply basic presentation best practices when speaking with PowerPoint slides
- Demonstrate how to facilitate the different type of interactive sessions and summarize the instructional purpose/value of each type of activity



# Discussion



*Did you learn anything new, surprising or especially useful during this workshop?*

*Do you feel better prepared to facilitate a training session with these materials? Is there anything you are still concerned about?*

*Any other questions?*



# Building Nutritious Food Baskets

*Combating hidden hunger through nutritious food baskets*

The Building Nutritious Food Baskets: Scaling up Biofortified Crops for Nutrition Security seeks to reduce hidden hunger by catalyzing sustainable investment for the production and utilization of biofortified crops (Orange-fleshed sweetpotato (OFSP); vitamin A (yellow) cassava, vitamin A (orange) maize and high iron/zinc beans) at scale. The project is implemented in Nigeria and Tanzania, to demonstrate how biofortified crops can be scaled up through a multi-crop ("food basket") approach. BNFB draws on complementary expertise for scaling up through a partnership between CGIAR centers and programs, regional organizations and other public and private sector agencies to create a movement that will eventually reach the target populations. BNFB's hypothesis is that scaling up is dependent on supportive policy environment, strong institutional capacities and availability of proven technologies.

