Chapter 3: Facilitation Tools

It is extremely important for facilitators to have a deep understanding of and experience with the technical skills and knowledge associated with Forest Garden Approach. This includes all the technical information needed to plan, grow, plant, and care for trees and other plants in combinations that effectively maximize the productivity, profitability, and sustainability of Forest Gardens in a given location. These skills are covered in the chapters following this one. Before we get into those skills, however, it is every bit as important for facilitators to have strong facilitation skills and an understanding of useful facilitation tools that significantly contribute to effective training that leads to lasting knowledge and application of skills learned by farmers.

This chapter guides facilitators through some of the important facilitation tools and exercises that are introduced in the first training modules in the Forest Garden training program, many of which are repeated in other modules throughout the program. It discusses their purposes as well as how to use them in training to ensure farmers are actively engaged in the activities and grasping the knowledge and skills needed to design and establish their Forest Gardens. Many of the tools and exercises described in this chapter are proven to enhance participant farmers' engagement and understanding of the subject matter. Facilitators should use relevant tools (e.g. songs, dance, stories, and deep-breathing) as needed throughout the program, even when it is not explicitly written into modules' activities, to energize farmers or to help them focus on the lessons.

The table below lists the different facilitation tools covered in this chapter, and where each tool is utilized in the training program's modules.

Tool	Cross-cutting	Specific use
Dream Field		Module 0: Mobilization
Calendars	✓	Module 0: Mobilization Module 5: Forest Garden Review Module 6: Growing Fruit Tree Seedlings Module 8: Gardening for the Market Module 9: Field Optimization Module 13: Advanced Optimization
Top View Mapping		Module 1: Forest Garden Design Module 5: Forest Garden Review Module 9: Field Optimization
Side View Mapping		Module 9: Field Optimization
Storytelling	✓	Module 4: Gardening for the Family Module 11: Gardening for the Future
Learn-and-Teach	✓	Module 3: Planting Agroforestry Seedlings Module 4: Gardening for the Family Module 7: Planting Fruit Tree Seedlings
Action Planning	✓	
Rapid Assessment	✓	Module 5: Forest Garden Review Module 9: Field Optimization

Forest Garden Dream Field

What is it?

The Forest Garden dream field activity is a guided visualization exercise in which farmers are asked to imagine the Forest Garden they would like to grow. As the facilitator, you help members envision how their Forest Garden will meet the needs

of their land and their families, and ultimately provide greater security for their future.

The dream field exercise:

1. **Motivates:** By helping farmers create a powerful mental picture of *their* future Forest Garden, the possibilities and security it could create for their families, and seeding the idea that they *can* get there -- the dream field activity creates commitment towards this long-term goal.
2. **Opens up possibilities:** the questions used as part of the guided visualization - for example, can you feed your family all year long with food from your Forest Garden - can open farmers up to options they had not considered possible before being introduced to the Forest Garden farming model.
3. **Sets expectations:** helps members anticipate and understand that it takes time to grow a Forest Garden, and they may not see many changes before the 2 year mark.

Backed by studies, professional athletes have long used the power of imagery and visualizations to achieve their goals. You can harness this tool to help each farmer build their own vision for their Forest Garden, as you kickstart the training series that will help them get there.

When do I use it?

The dream field activity should be included in the very first training module you facilitate with the farmer group (Module 0).

The activity can also be revisited later in the training if the group is struggling with confidence and motivation. Review the tips section to see how you can adapt the tool if using it for a second or third time with the same group.

How do I use it?

Focusing on steps versus outcomes

Studies show that *mental rehearsal* (imagining doing the steps that lead to a goal) is more effective at improving goal achievement than *positive imagery* (detailed image of a positive outcome). The latter is better at helping reduce anxiety and boost confidence.

As outlined in the introduction, assess the level of confidence, competence, and anxiety or stress about the process that the farmer group is starting out with. For a group feeling:

- *Uncertain and anxious:* spend more time on creating a specific, positive image of the Forest Garden with questions like - what does it look like, what do you

see, how do you feel, who else is there, how is your family feeling, what is your family doing.

- *Confident:* spend more time on how they created the Forest Garden they are imagining with questions like - what all did you do to create the Forest Garden, what got in your way, how did you overcome it, who all helped.

Visualization techniques

Recent neuroscience research indicates that the process of constructing mental pictures of the future uses a network of neural pathways called the Default Network. This network:

- Increases its activity when we are in a state of relaxed concentration. In other words, we are feeling stress-free both mentally and physically; we are contemplating a topic but not focusing on it; we are open to new thoughts as they emerge.
- Is more active when we take a first person perspective, that is imagine the scene as-if we were actually there and experiencing it for ourselves.

You can use this information to help farmers come up with richer images that: (1) they feel more connected to, and (2) ones that offer them more information about the choices they could make.

While there are several ways to facilitate relaxed concentration, we recommend two primary ways you can do this in a training setting:

1. *Cultural songs, dances, and other traditions:* cultures around the world have traditions that can help relax our minds and bodies, while simultaneously creating a deeper sense of community. Identifying a song or dance that resonates with the group can be a great way to get them to relax and will create a playfulness conducive to the visualization exercise.
2. *Deep breathing:* invite members to take in deep breaths, imagining that stressful thoughts and concerns are leaving their body with each exhale. As they breath-in and breath-out, participants should gradually and progressively relax their muscles, starting with their toes all the way to their neck, shoulders and forehead. They can tense each muscle (depending on comfort) with their inhale and relax it with the exhale.

If possible we recommend using both the techniques listed above, starting with a culturally appropriate song-dance that requires some body movement, moving onto deep breathing and transitioning to visualizing the Forest Gardens. Creating a state of relaxed concentration for a new group can take more work - participants might feel like they are entering a new challenge and can be hesitant to let their guard down. Successfully practicing these techniques ahead of time will give you the confidence you need, as their facilitator, to guide the group through this.

Optional: Capturing the visualization

You can choose whether you want group members to capture their Forest Garden visualization using mechanisms like:

- Simple drawings.
- Bringing magazines with relevant images (trees, plants, farming scenes) that farmers can use to cut-out, paste, and create their dream field.

Here are some things to consider when making this decision:

- ***Advantages:*** farmers can take their dream field home, share it with their families, and work with them to further build out shared goals for their Forest Garden. In addition, inviting them to put it up in their houses can serve as a reminder of what they are building, and an initial goal-benchmark to compare against as they make progress.
- ***Disadvantages:*** primary disadvantage is the time it might take to do this. Depending on the time available to you for the initial session, the overall expectations of the group, and urgency of other topics on the agenda - you can determine the feasibility of spending time on capturing the visualization.

Facilitating insight and action

Step 1 - Preparation. Prior to the session identify a culturally appropriate song and dance. It should resonate with the group, be easy to do, and relaxing for the participants. In addition, practice the visualization technique you plan to use so you feel confident in guiding participants through it.

Step 2 - Create small groups, conduct guided visualization. Here are sample instructions - *At this time let us form groups of three. You can go sit or stand with your group members, but stay with the larger group for now. Next I will walk us through a few exercises that will help us relax and get creative as we prepare to visualize and picture what our dream Forest Garden looks like.*

Use the techniques described in the 'Visualization Techniques' section (above) at this time.

As you transition from deep breathing to the visualization, you can use the following sample script that walks you through the stages in the visualization process. Make sure to use a slow, calming tone and pace of voice. Provide plenty of pauses after each question to give participants room to picture their dream field.

1. **Setting the scene**: *let's keep our eyes closed. Imagine a morning on a beautiful day a few years from now. You are walking into your rich and thriving Forest Garden. Breathe in the fragrance of the plants and trees you are growing. Start to notice what's around you, how does the soil feel beneath your feet.*

2. **Focusing on outcomes**: *what all do you see? What plants, trees, or crops are growing? How do you feel? What do you smell? What do you hear? Are others there? What are they doing? Are there animals or livestock?*
3. **Focusing on steps**: *as you hold the image of this dream field in your mind, what steps do you see yourself taking to make this a reality? What all did you do to make this dream a reality? What's the biggest obstacle you faced? Now let's go back to that image, the picture of the thriving Forest Garden - how did you overcome these obstacles to accomplish this? Who helped you? What helped you persevere?*
4. **Closing**: *continue to hold this image in your mind, make a note of what all feels important to you. Now let's take another deep breath and open our eyes.*

Step 3 - Small group discussions. At this time invite members to find a spot with their assigned small groups. Members should take turns sharing their dream field with others, what obstacles they identified, and how they imagined overcoming them. Ask the farmers to think through the following factors and see if they want to add to or further build-out their dream field:

- **Variety of plants and crops:** Would you grow one item? Would you grow many?
- **Type of plants and crops:**
  - Would you choose items that would make you money?
  - Would you choose items that would feed your family?
  - Would you choose items that would protect or support the soil on your land?
  - Would you grow trees? Why?
  - Would you grow garden crops? Why?
  - Would you grow field crops? Why?
- **Animals:** Would you incorporate animals? Why? How?
- **Year long food and income:**
  - Can you feed your family all year-long with the food products from your design? (not from buying food with garden product sales revenue)
  - Will your design produce food harvests high in vitamins and nutrients?
  - How often throughout the year would your crops be planted and cultivated?
  - How many times would you harvest from your design each year?
- **Soil and land protection:**
  - When cultivating your design on the same piece of land year after year, does the quality of the land improve or degrade?
  - Is it easy to protect your design? What can destroy your designed field? How would you protect your designed field?
- **Timeline:** What is the work timeline for your design?

Step 4 - Capture (optional) and Share. Time permitting, pick from one of the options identified earlier and ask farmers to record or capture their dreamfields. Next invite 3-5 farmers to share their fields with the large group, including what crops, plants, and trees they included, and other insights they had as they worked through the exercise.

Tips

Slow pace, match words and tones to be conducive to the visualization
For re-use:

- Are they tracking behind?
- Are they tracking ahead?

Calendars

What is it?

Calendars are an analysis and planning tool. They help farmers anticipate how things change across seasons and times of the year. Calendars help participants think long term and avoid decisions that are based simply on what is happening right now (or happened last season).

An effective calendar includes 3 elements: a time unit (e.g., months of the year) mapped across columns, a relevant variable (e.g., food availability, crop harvests) mapped in each row, and data collected in the cells of the calendar (e.g., checkmarks).

When do I use it?

In the context of Forest Gardens, you can use Calendars for two primary purposes:

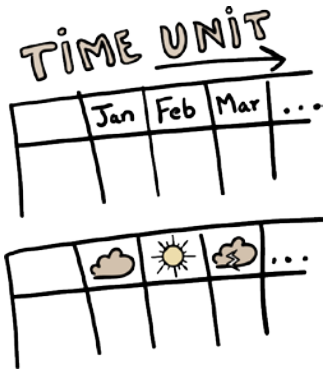
- **Generating data and insights**: helping farmers analyze patterns that reveal critical information for the design of the Forest Garden. Examples include mapping:
  - Months when food is scarce.
  - Months in which their field does not yield harvests.
  - Seasonal changes in the sales price of their crops.
  - Effort and labor needed for a given activity at any one time in the year.
- **Planning**: helping farmers map out when they should be undertaking specific activities to implement their Forest Garden design.

Equipped with this information farmers can start optimizing what they get from their fields (e.g., food for consumption, produce for sales, market price for products) and what they put in (e.g., effort, methods of pest control, seeds).

How do I use it?

Basic components of a calendar

1 - Columns



The horizontal axis of a calendar, or the columns, represent time.

As a first step, work with the farmer group and understand the unit of time they use in their day-to-day lives. This could be the western 12-month calendar unit, seasonal calendars, or other religious calendars.

Calendars can start at different times of the year. For example, you can choose to start a calendar mapping food security at harvest time, or start a crop planning calendar with the rainy season. We recommend using the same month (or other equivalent) so farmers can compare calendars across sessions and build on their understanding.

2 - Rows

The rows of the calendar include the variables you need to map. Let's look at two commonly used calendars to understand the differences between a *single variable* and *multiple variable* calendar.

Single Variable Calendar: Seasonal Market Analysis

The figure below provides an example of a calendar that maps the market prices of different vegetables being grown by a farmer. The purpose of this calendar is to generate data and insights that will help farmers identify:

- Months during which they could get higher prices for their produce.
- Ways to store or harvest produce to sell during those months.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Bean Prices												
Sorghum Prices												

Figure 1: Seasonal market analysis. This can be done by month or by season. You can use vegetable names or cutouts of pictures.

Since we are mapping the same type of information - prices for vegetables - this is an example of a single variable calendar.

Multiple Variable Calendar: Seasonal Farming Analysis
The seasonal analysis compares the inputs and outputs farmers get from their fields, along with nutrition and food needs of their families. It helps them identify:

- Family needs: lean months when their family needs more food and nutrition than available.
- Outputs: all harvests they get from their fields across food crops, vegetables, fuelwood and fodder.
- Input: the amount of effort they are expending on their fields at any given time of the year.

This analysis can help farmers move from cropping methods that require intensive effort during specific months, are at greater risk of crop failure, and associated with inconsistent food availability -- to perennial cropping that distributes both effort and produce more consistently across the year.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
												
Availability of food for family												
Harvests												
Farming Effort												

Figure 2: Seasonal farming analysis. This can be done by month or by season. You can write crop and produce names or use picture cutouts in the cells, or list them in separate rows and use checkmarks to indicate harvests across the year.

Since the calendar maps three different types of variables - food availability, harvests, and effort - this is an example of a multiple variable calendar.

3 - Cells
The cells in the calendar capture the data you need for each item listed in the corresponding row. Here are the four ***types of information*** you can capture, along with ideas on how to capture this data:

- ***Lists.*** example includes names of produce listed or drawn within cells (illustrated in Figure 2).

- *Presence or absence.* example includes checkmarks used to indicate months in which farmers get harvests from their fields.
- *Categories.* example includes 3 types of smiley faces to indicate high, medium, or low prices for vegetables (illustrated in Figure 1).
- *Quantity.* example includes dots or bars to indicate volume of overall effort expended on the farm (illustrated in Figure 2).

Facilitating insight and action

Step 1: Clarify goals. For each calendar activity provide a clear checklist of what needs to happen by the end of the calendar exercise.

Step 2: Provide instructions and draw a sample. Draw a sample calendar clearly illustrating the columns or time unit, the rows (e.g., food scarcity, crops, effort), and the type of data needed for each (e.g., check boxes, smiley faces, bars). Provide materials needed to complete the activity.

Step 3: Facilitate group completion of the calendar tool. When working with a large group, create subgroups of 4-5 members. Each group should then complete the calendar exercise as per the instructions and sample shared with them. Let the groups know the amount of time they have to complete their calendars, and provide a 2 minute reminder before the time is up to help them wrap-up their discussions.

Step 4: Ask follow-up questions that facilitate learning. Provide an opportunity for calendars to be shared across subgroups, draw out insights and conclusions that help the farmers protect, diversify, and optimize their crops.
Using the two sample calendars we covered earlier in the 'Basic Components of a Calendar' section, here are examples of follow-up questions you can ask for each:

- *Market Analysis* - when are prices high, what makes them high? When are they low, what makes them low? Which months would you like to sell in? What could you do to sell more in those months?
- *Seasonal Farming Analysis* - What time of year does the Forest Garden produce the most? What time of year does the Forest Garden produce the least? Who among you has plants in your Forest Garden that you harvest during the lean months? Which plants yield something of value in the lean season, and how do you harvest them? What plants can you add to your Forest Garden to have something to harvest during the lean months? What are the top three gaps to fill to improve the use of time in the Forest Garden?

Tips
Add links to intro skills: create inclusive space, resolve conflict.

Top View Mapping

What is it?

Top view mapping (also called horizontal mapping) helps create a diagrammatic representation of the group member's farm. The map is drawn to approximate scale, and can be used to estimate the actual land area and border lengths. It includes: (1) farm boundaries, (2) key physical features within the farm, (3) neighboring features relevant to farming, and (4) an arrow to indicate North that helps orient the map.

Forest gardens are strategically designed to cultivate plants that fill space both horizontally (across the ground) and vertically (from belowground to the top of trees' canopies). The top view mapping tool equips the farmer with the perspective and information they need to fully utilize the horizontal land area available to them.

When do I use it?

Top view maps should be used to:

1. Inform the initial design of the Forest garden.
2. Inform decisions about which trees, plants, and crops will best diversify the Forest Garden.
3. Periodically evaluate and assess opportunities to better utilize and optimize the Forest Garden.

How do I use it?

Materials

The ability to erase and redraw with ease is essential when drawing maps. Materials most conducive to easily drawing maps include A4 paper sheets (tip: grid paper, if available, makes it easy to approximate scaled distances on paper), pencils, and erasers. Alternate, and more easily available materials can include chalk and boards/cardboards that are easy to carry but allow participants to make corrections as needed.

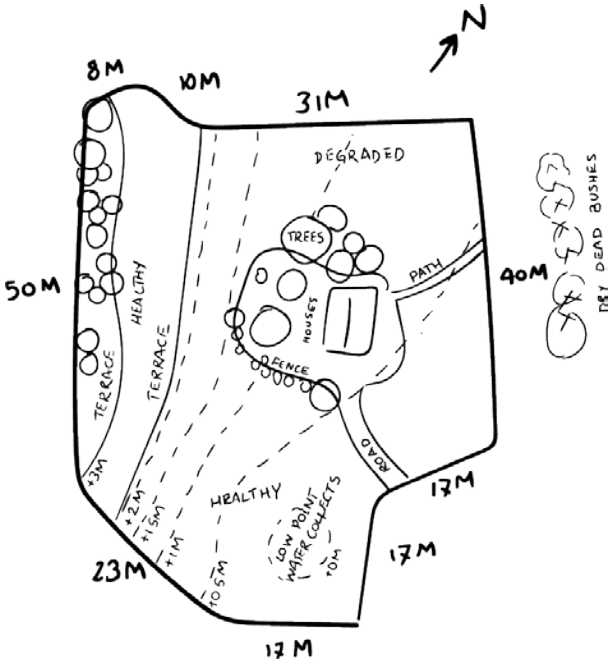
Scale

In order for the maps to help farmers make decisions about usage of space (e.g., how many trees of a certain span they can plant and what distance apart), it is important that the lines on the map represent the distance on the ground. If available, farmers can use a measuring tape to capture the length of the border and determine an approximate scale (e.g., 10 meter on land equals 1 cm on paper).
For the purposes of the Forest Gardens, it is adequate if farmers use their steps to measure distances, and equate one step to 1 meter of distance.

Key Components

1. Boundaries.

When drawing the map of the farm, the boundary is the first feature to be defined. Spending time upfront to create an accurate border - shape of the farm is clearly defined and length of lines represent distances on the ground - makes it easy to complete the remaining map by simply adding in key physical features.



There should be no dispute regarding the boundary being drawn. The first step in the Forest Garden process is to plant a fence made of trees, a *green wall,* to secure the land. The trees provide protection and future income to the farmers, and could be at risk if planted on a disputed border.

2. Cardinal Directions.

Outside the boundary of the farm drawn on the paper, the map should include an arrow that indicates North. This allows participants to draw the map to best fit the paper (or surface) they are drawing on, while including directional information that can be used to orient the map to its surroundings.

3. Key Physical Features.

Maps should include key physical features. The following checklist can help participants observe and capture more complete information:

1. Immovable manmade structures (houses, storage rooms, latrines, sheds)
2. Water sources (taps, wells, rivers, streams, springs)
3. Erosion and flooding impact (swamps, seasonally flooded areas, gullies)
4. Immovable physical features (terraces, bunds, termite mounds)
5. Major variations in slope, identifying high points and low points
6. Soil type and quality (e.g. very healthy, healthy, degraded, very degraded)
7. Current vegetation (e.g., agroforestry trees, fruit trees, vegetable garden)

4. Neighboring Area.

The map includes things that can be easily seen outside the immediate boundary of the farm and can affect the farm. Examples include:

- Neighbors who are rearing bees.
- Dead trees or brush piles next to the field that may attract pests or fire.
- Other fields where pesticides are sprayed.

Facilitating insight and action

Step 1 - Preparation. Familiarize yourself with the lead farmer's field that you will use to demonstrate top view mapping. In addition, get permission from one of the lead farmer's neighbours for their farm to be used by participants to practice mapping on the own. Make sure relevant map-drawing materials are available.

Step 2 - Demonstration. Show the group how to develop top view maps.

- Boundaries: Start in one corner of the farm and walk the entire border, using your steps to estimate the length of each side of the field. Each time you arrive at the end of a straight line, draw an equivalent line on paper with the number of steps written next to it. When you make a turn, reflect the angle of the turn or curvature in the line you draw on the paper. Continue this process till you have completed the farm perimeter on the map.
- Cardinal Directions: Add an arrow outside this border to indicate North.
- Key Physical Features: Next add in key physical features within the field itself.
- Neighboring Area: Finally add any neighboring features that could impact the farm.

Step 3 - Members practice in small groups. Divide the large group into sub-groups and have each group map a neighboring farm using the steps you demonstrated.

Step 4 - Large group discussion. Bring the entire group together and provide an opportunity for each sub-group to share their maps, and share what they learned about creating effective maps. If you notice key variations in the maps presented, ask questions to draw out unique perspectives that may have contributed to the group including certain land features - what are key differences? How does our perspectives influence the features we include or miss? How can we create more complete representations?

As the groups present their maps, make a note on a flipchart of all the crops, plants, and trees they list as currently growing on the farm. You will use this Growing Potential table when helping the group design their Forest Gardens.

What we grow	What we want to grow
Maize	Maize
Tomatos	Mangos
Onions	

Example of *Growing Potential* Table to draw on flip chart, wall, or floor. Use words or pictures depending on literacy of the group.

Finally invite the group to vote and pick a map that looks most like the field.

Tips

The use of the top view map aligns with the three key phases of Forest Garden establishment, described Chapter 2. Your role as a facilitator in generating action based on the top view map will evolve and change in each phase.

Phase I (Protect). Top view mapping is the very first activity you will undertake with members in module 1 of the Forest Garden training. In this module you will be combining the vision the farmers have for their dream fields with the reality of the current farms as reflected in the maps they create.

Creating a flourishing Forest Garden takes time, and depending on the gap between their farms today and what they want, the results of the maps can make the group (and the lead farmer) feel overwhelmed. As a facilitator:

- Pay attention to *how the group members are feeling* in addition to what they are saying.
- Use open ended questions to *help the group share their concerns* - what are you excited about? What are you concerned about? What would keep you from moving forward towards your goals?
- *Share stories of success, and celebrate accomplishments* - including the group signing up to create their Forest Gardens, and starting the process of *dreaming, mapping, and designing* these.

Phase II (Diversify and Optimize). When you use top view mapping in the subsequent phases, farmers should be seeing changes and progress in their fields. This includes the start of a functioning green wall, fruit trees, a more diverse vegetable garden, and improved soil quality.

If the group is not seeing these benefits - use the Structured Dialogue method described in the introduction to uncover blockers and help the group make progress. For a group that is beginning to see benefits of this new farming approach, your goal as a facilitator evolves to encouraging more analytical and critical thinking:

- Use questions to draw attention to aspects they can fine tune (e.g., plant sizes, light requirements, sun directions, soil requirements and impact, effect on pests), gaps they can fill, and plant interactions that will help create thriving plant guilds.

Advanced Skills

As participants gain deeper understanding of the Forest Garden approach and techniques, you can begin to include the following advanced skills when using Top View Mapping:

- How to identify slopes, and measure slope elevation.
- How to draw top view maps that show tree and plant circumference, and planting patterns

(Not covered in the tool).

- Helps the group draw advanced top view maps that show tree and plant circumference, and can be used to plan patterns and groups of plants that complement each other.

Side View Mapping

What is it?

A side view map (also called a vertical map) is a hand drawn picture of the different layers and heights of plants that grow on a farm. This information in turn can be used to identify gaps that can be filled with new and complementary plant species.

Forest gardens are strategically designed to cultivate plants that fill space both horizontally (across the ground) and vertically (from belowground to the top of trees' canopies). Creating tightly knit plants and tree groups that optimize the use of the vertical space available can substantially improve yields even from farm units that are smaller in size.

When do I use it?

Side view maps should be used to:

1. Inform decisions about which trees, plants, and crops will best diversify the Forest Garden.
2. Periodically evaluate and assess opportunities to better utilize and optimize the Forest Garden.

Not recommended in the Protect Phase (Phase I, typically year 1-2)
In the first 1-2 years of the Forest Garden training, farmers are focused on better protecting their farms by planting and growing agroforestry and fruit trees. At this stage there is not enough diversity in plant and crop types for side view mapping to be a productive assessment activity.

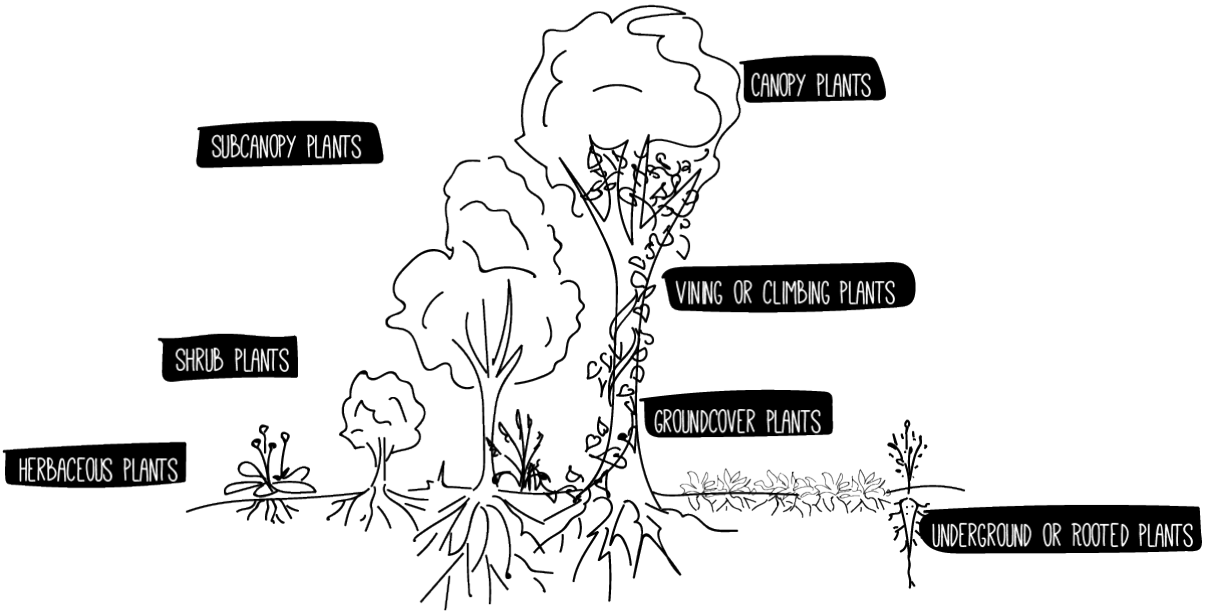
Recommended in Diversify and Optimize Phases (Phase II & III, typically year 3 - 4)
Once members have a functioning green wall and have fruit trees growing on their farms, side view mapping helps identify spaces where they can introduce new species to diversify and optimize their fields.

How do I use it?

The typical Forest Garden can be divided into seven layers, here is a quick summary of each:

1. **Canopy plants:** which can be fully grown fruit or nut trees, timber species, or pioneer species that grow quickly and produce shade. This is the tallest layer, averaging over 25 m in height.

2. **Subcanopy plants:** lower plants utilizing some shade of the canopy plants, including coffee plants or small trees such as banana.
3. **Shrub plants**: large bushes or tall annual crops.
4. **Herbaceous plants**: often edible and medicinal plants.
5. **Vining or climbing plants**: plants that climb their way up subcanopy and canopy plants.
6. **Groundcover plants**: shade the soil conserving moisture and prevent soil loss, can be nitrogen fixing.
7. **Underground or rooted plants**: become nutrient pumps for the surrounding soil enhancing its fertility, these often include root vegetables such as potatoes, carrots, tubers, onions, etc.



Vertical layers of Forest Gardens (side view)

Based on your knowledge and through talking with experts in your area you can identify specific species that fit in each of these layers. To make the best decision about which new plants will work well, evaluate the following:

1. Branching structure and height
2. Overall circumference
3. Root structure
4. Soil characteristics and the plant's interactions with the soil (nitrogen-fixing, weed suppression, moisture retention)
5. Sunlight and water requirements

Understanding a Transect Walk

When creating side view maps, we use a method called a *transect walk* - often used in participatory research and learning efforts. A transect walk involves working with community members to systematically identify and walk along a predefined path. The goal of the transect walk is to generate relevant information using observation and open ended questions.

A transect is a path that runs through a farm and creates a representative cross-section of the plants and trees that are growing on it.

The very first step when facilitating the side view mapping activity is to identify the transect you will use during the exercise. The goal is to get a true snapshot of the different layers growing on the farm. Consider the variations in planting patterns (or areas) on a farm, and make sure they are all represented in the path you identify.

Focus on generating information

During side view mapping, farmers are asked to draw out the trees, shrubs, and plants that are growing on a farm. Make sure the group members feel comfortable undertaking this task. Emphasize that the goal is not drawing detailed sketches of the plants; the goal is to quickly generate information on vertical gaps and places where new species can be added. Rough, simplistic drawings are ideal and the sample you share with the group should illustrate that.

Facilitating insight and action

Here are the key steps when facilitating the side view mapping activity:
Step 1 - Preparation. Before the session:

- Draw an example of a side view map on a flip chart paper. Base the sample on a Forest Garden that members have visited, this helps them visualize how they would translate various trees and crops to a simple drawing.
- Identify the transect or path that will be used for the session - most likely on the lead farmer's field.
- Review the Technical Guide to identify multiple options for perennial plants that the group can grow to fill in the vertical layers of their Forest Gardens.
- Secure materials - roll of flipchart paper, tape, and markers.

Step 2 - Instructions and sample. Provide a simple explanation to the group on what a side view map is - "*just like the top view map shows us what the farm looks like when we look down on the land from above, the side view map shows the different layers of plants in the garden as we see them while walking along a path through the Forest Garden, called a transect walk*".

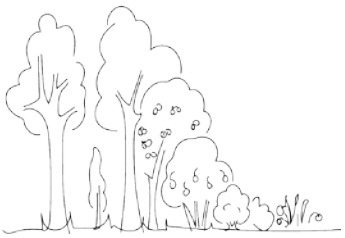
Show the group a sample of a side view map from a field they have visited as part of the project:

- Ask the group what layers they observe in the sample. Use questions and discussion to help them identify the seven layers of the Forest Garden.
- Next, ask them what plants and trees could fill those gaps. This will help orient the group towards the end goal of the activity.

Step 3 - Small groups create side view maps of the host farmer's Forest Garden. Form small groups of 4 - 5 people and have them collect materials. Ask each group to take the transect walk and complete the map. This takes approximately 30 minutes.

Step 4 - Small groups present side view maps and select best ones. Have small groups present their maps and have the group select one map that best represents the vertical diversity of plant species on the farm.

Step 5 - Discuss and identify gaps from the side view map
Use a flipchart, wall, or an open ground area to create the following table. You can use chalks for floors or walls, or a stick when working on a dirt floor to draw out the chart. Simply place the side view maps at the top as shown below.

		?
	What we grow	**What we want to grow**
Canopy plants		
Subcanopy plants		
Shrub plants		
Herbaceous plants		
Vining or climbing plants		
Groundcover plants		
Underground or rooted plants		

Example of *Growing Potential* Table to draw on flip chart, wall, or floor. Use words or pictures depending on literacy of the group.

Based on the map, list out the plants that are currently growing on the farm. Ask the group:

- What are the top three gaps to fill to improve the use of vertical space in the Forest Garden?
- Which trees and plants can best fill these gaps?
- Once the group has identified ideas for new plants that can be added, help them think through the following criteria for each to assess fit:
    - Will its branching structure and height fit with existing plants?
    - When fully grown, will its circumference work with the existing plant groups?
    - Will its root structure work with existing plant groups?
    - Will the plant's soil nutrient contributions and needs work with the current soil?
    - What are the sunlight and water requirements? Do they work with what will be available?

Tips

- When combining side view mapping with other assessment activities (e.g., seasonal calendars, top view mapping) simplify Step 5 to simply brainstorming ideas for trees and plants that could fill vertical gaps. Evaluating whether the identified species are a good fit for the farm given nutrient, water, height, and root considerations can be done after you have completed all the assessment activities.
- Transect walks represent a point-in-time snapshot. For example, the vertical diversity in plant species might look different depending on the season during which the activity is conducted. When listing out plants and trees currently growing on the field, ask the host farmer to share names of seasonal plants that the group cannot currently observe on the field.

Storytelling

What is it?

Stories are a powerful learning tool. When used effectively stories can:

1. further cooperation and trust within a group by highlighting shared challenges.
2. help farmers better understand and remember key information.
3. shift strongly held beliefs and behaviors.

A well-constructed story includes an aspirational goal, a 'plot twist' or obstacle, a struggle that reaches a tipping point, and an ultimate resolution. By weaving information into dialogue, and using the intrigue and ultimate joy of overcoming obstacles, stories can provide us the motivation we need for changing our attitudes and behaviors.

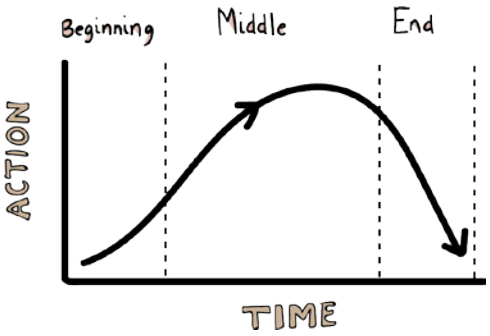
When do I use it?

Stories are a highly adaptable tool. Here are just some scenarios in which you can use stories to improve group learning:

- Illustrate how the Forest Garden can solve a key challenge for the farmers.
- Inspire commitment by asking farmers to share Forest Garden success stories.

How do I use it?

Constructing your story

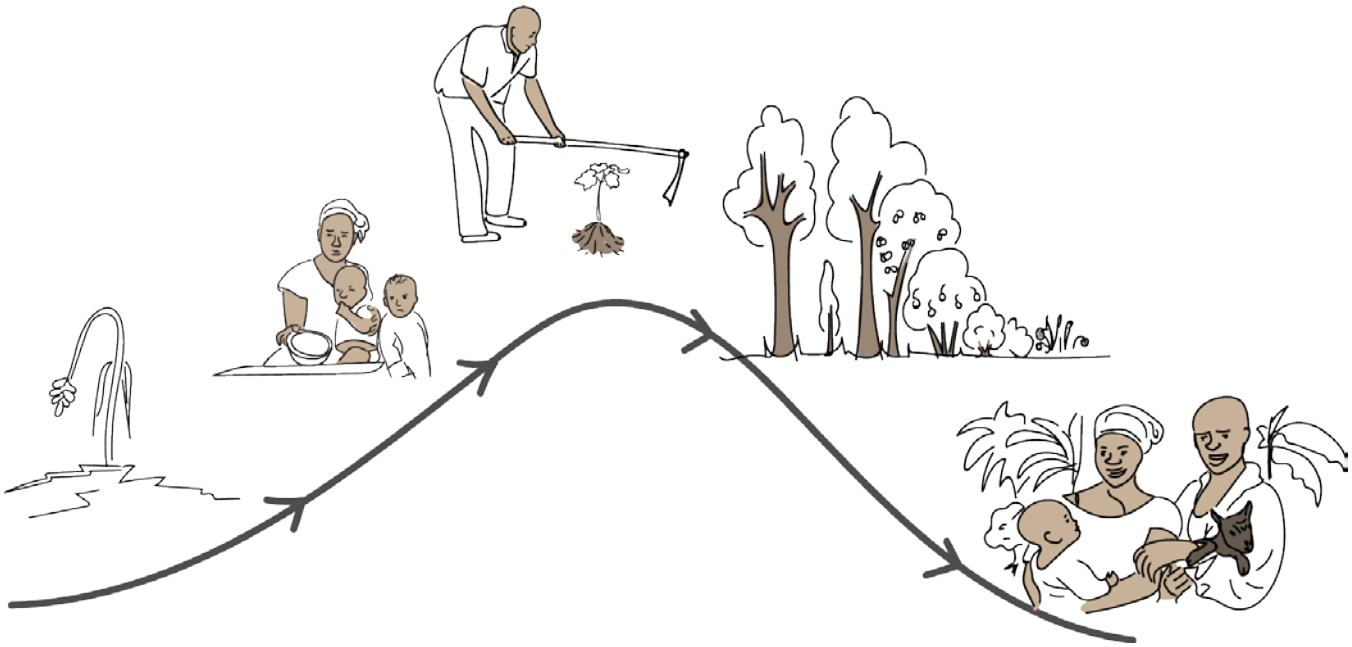


A story is built with a series of events and elements outlined below. In addition, a story has a rhythm and a structure - a beginning, middle, and end. With the middle typically being longer than the beginning and the end. The action, or pace of the story, builds to a climax as characters struggle with and ultimately resolve a crisis by creating a path to a 'big' aspirational goal.

Relatable characters. When setting the stage for your story, introduce your participants to characters that evoke empathy and understanding. In a story designed for learning, participants should be able to identify with the main characters - so learners can see themselves applying the lessons illustrated in the narrative.
Including both men and women as primary actors can help engage a broader audience as the story unfolds.

A 'big' goal. A story revolves around a goal that gets our attention. Think of a relevant shared goal, and then look at the big underlying challenge it relates to. For example, a story on good nutrition could choose to focus on one balanced meal. Instead, introducing the opportunity to provide good food to one's family through drought and flood is a much more compelling and aspirational goal.

An obstacle. Once you have set the stage with the characters, you introduce an obstacle through a twist or unexpected problem. An obstacle instantly connects us to the challenge at hand, and keeps us wanting to know more.



Climax and a path to resolution. Next, the characters struggle with the obstacle as the problem builds up to a climax, but ultimately resolve it by finding a way to overcome the problem and achieve the big goal. We remember emotions more clearly than information - highlight the joy and hopefulness that comes with the close of the story for a good ending.

As the storyteller you can make some choices here. In a story designed to:

- shift behavior or challenge attitude it's best to focus on one big idea and limit details.
- teach a new way of doing something, you will want to weave in important information related to the topic.

Delivering stories effectively

Keep your story as short as possible and ideally no longer than 7 minutes of narrative. How you deliver a story -- raising and lowering your voice, changing the speed and pace of the words, enacting emotions, matching your body language to what is happening in the plot -- can make the difference between learners that are engaged and a bored audience.

Narrating vs playacting. The first choice you make as a facilitator is deciding whether you will narrate the story or invite members of your farmer group to play out the characters in the plot.

- When the story is short, is being used as a quick illustration, or transition to-or-from a topic - and the goal is to keep the group moving through a sequence - you can narrate the story yourself.
- When the goal is to introduce a new concept, help the group reflect on and absorb the narrative, and change underlying behavior - invite members of

your farmer group to playact the story. We recommend this method of delivery since it empowers farmers to own the learning process. Your story should be written as dialogues between characters for this method of delivery.

Practice and feedback: In order to make sure the story and its delivery is effective, practice before delivering it to the larger group. Practicing a story ahead of time helps you:

- make sure the delivery is effective and does not distract from the main content of the story.
- get feedback and test the story: does it get the point across? Is it appropriate for the culture? Could changes in length, language and delivery make it better?

You can invite families of the farmers helping with the playacting to provide feedback as you practice. Make the feedback process safe by asking them to share one thing they liked about the story and one thing they wished was different or better. And then practice again.

When others are the storyteller

When farmers share stories directly with one another, these are grounded in hard earned experience and carry more weight. They can teach, inspire, and connect all at the same time.

It also carries a risk - *what if the story goes against a fundamental Forest Garden principle?* For instance, a farmer could share a story that relies on pesticides as a preferred solution, or use an approach that places an undue burden on the women of the family.

Instead of disagreeing or stepping in to provide the answer, validate the shared challenge and use questions to broaden the conversation and draw other experiences from the group: “It is terrible to lose a whole crop of vegetables to pests. We have all experienced this challenge. Has anyone here used crops like marigold or onions as pest control? Can you share your experience with the group?”

In rare instances, where someone shares a story illustrating a common and widely-held practice that is harmful to the soil and long-term health of the Forest Gardens (for example, burning crop residues to clear fields) - it is appropriate to step-in respectfully and share information that will help the group reach their goals via more sustainable farming practices.

Facilitating insight and action

Follow-up each story with open ended questions that help the group identify key lessons: what are you feeling and thinking after hearing the story? What’s the main

challenge the family faces? What do they do to overcome this challenge? What do you want to do differently after hearing the story?

Tips

The most common mistake when using stories is taking too long to get to the 'hook' or twist that engages the listener. Try writing out your story and then cut out details to see if the story still works. Only add back what is absolutely needed for the story to work.

AP Notes: update tips - use stories to build timelines for conflicts, or understanding issues, or when participants feel stuck

Learn-and-Teach

What is it?

Learn-and-teach is a training technique that helps farmers better recall what they learned during the Forest Garden training sessions and apply it in their farming practices.

In its simplest form it involves three steps: (1) an expert, someone with previous knowledge or experience of the skill, ***teaches*** a group member a farming technique, (2) the group member ***practices*** what they learned, (3) and in-turn teaches the technique to another group member.

Learn-and-teach leverages two principles of effective learning transfer:

1. ***We learn by doing.*** We are more likely to retain and transfer new skills to our life when the process of learning involves doing the task as opposed to listening or reading about it.
2. ***Active learning is more effective.*** Methods that require us to mentally organize, make sense of, and share what we learned result in better recall of materials. One recent study found that with two groups of learners - one expecting a test and the other expecting to teach a skill - the group expecting to teach had better recall of the materials.

When do I use it?

Learn-and-teach can be used any time farmers are mastering an *unfamiliar* farming or gardening technique that they will get a *chance to practice* during the session.

Learn-and-teach allows the facilitator to make better use of time for activities that are:

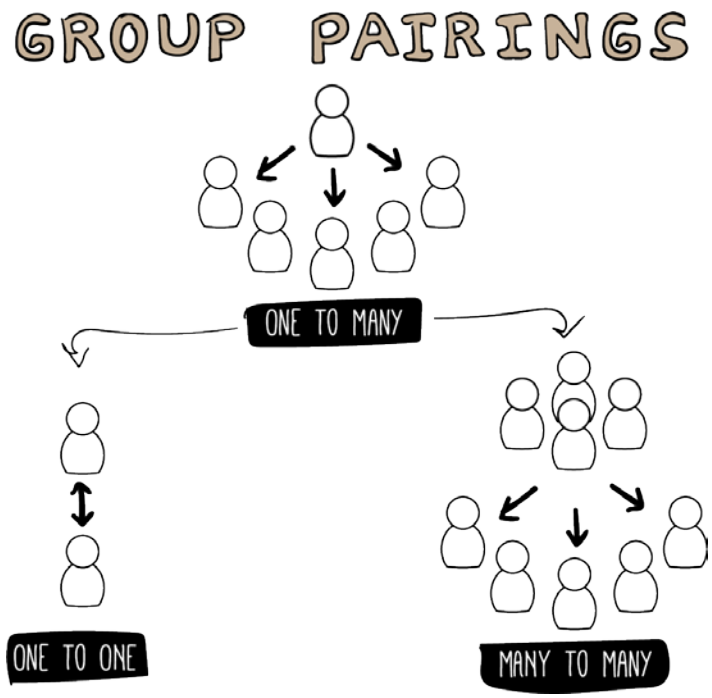
- ***Sequential***: a skill that involves mastering a sequence of steps (e.g., steps involved in outplanting fruit seedlings) or
- ***Parallel***: a skill that involves key variations depending on the subject at hand (e.g., best practices in planting various vegetable types).

For ***stand-alone tasks***, like pruning a fruit tree, it is more time effective for the facilitator to work directly with the large group - leveraging demonstrations and discovery (learning guided by open ended questions and experimentation).

How do I use it?

Understand group pairing

As the facilitator you must determine what will be the most effective group setup and pairing for the learn-and-teach activity. For each pairing you need to have at least one person who has previous experience or knowledge of the task at hand (expert).



- ***One-to-many:*** one person teaches a group a skillset and then each learner gets a chance to practice what they learned. This is the default pairing when you have only a few people who have experience or knowledge of the task at hand. It is often used as the first step in the learn-and-teach process.
- ***One-to-one:*** members teach each other a skill in a one-to-one pairing and then practice what they learned. This pairing allows for every member of the group to experience both teaching and practicing a skill. This works especially well in situations where you can pair group members and each has something they can teach the other.
- ***Many-to-many:*** a sub-group teaches a skill to a larger group, and then volunteers from the larger group practice or demonstrate what they learned. This pairing minimizes the time needed for both the teaching and practicing aspects of the activity. The downside is that not every member of the group will get a chance to teach and practice the skill.

In most instances you will use a combination of these pairings. Typically you will start with one person teaching a group, and then depending on the time available end with either a *one-to-one* or *many-to-many* pairing in order to give most members a chance to teach what they learned.

Determine set-up

Depending on *the activity type* (sequential vs. parallel), *the ratio of experts and learners*, and *the time available* you can have several variations of how you set-up the Learn-and-Teach activity. Let us review an example to see how you can adapt the tool to your needs.

Sequential - outplanting Fruit Trees

Outplanting fruit trees consists of three sequential steps: (1) dig holes with proper spacing and prepare soil, (2) properly extract and transport seedlings, and (3) planting the seedling. The facilitator selects the second and more complex step as suited for the learn-and-teach approach.

Step 1 of the sequence:

- For the first step, the facilitator works directly with the large group and uses open ended questions to help them learn about proper spacing, depth, and preparation of holes for the seedlings.

Step 2 of the sequence using learn-and-teach:

- As the large group practices digging holes, the facilitator takes 5 members to the nursery and teaches them how to properly extract seedlings (*learn-and-teach, one-to-many pairing*), using questions to facilitate understanding around technique variations for different types of fruit trees.
- These 5 members practice and extract one seedling each.
- Next, these 5 members bring a new group of 5 members and work one-on-one with them (*learn-and-teach, one-to-one pairing*) to transfer what they learned. The new group practices and extracts one seedling each.
- This learn-and-teach cascade continues till every member in the group has had a chance to extract a fruit seedling.

Step 3 of the sequence:

- The members who get done extracting seedlings move on to the third and final step of planting these. With farmers supporting each other through extraction of the seedlings, the facilitator is available to provide support to those ready to plant.

Facilitating Insight and Actions

Minimize your role as a teacher. As the facilitator your primary focus is creating a safe place, inviting members to share their knowledge, and helping them discover and learn new information through open ended questions and hands-on practice. Depending on the competence and confidence level of the group you may be called

upon to teach specific farming techniques that are unfamiliar to the group, and are key to the success of their Forest Gardens. A few things to keep in mind here:

- Do not assume you are the only one who has expertise on the topic. Before you set-up the exercise ask farmers to share what they know so you can truly leverage the experts from the group.
- Do not underestimate the ability learners have to teach themselves a new skill, especially when given access to relevant information. To the extent possible use open ended questions to spark thinking before you provide answers even as you play the role of a teacher.
- For tasks where you are starting out as the teacher or expert, shift to farmers teaching each other once you have completed an initial demonstration.

When others are the teachers. When the learn-and-teach setup involves group members teaching other group members, set them up for success:

- Prepare for the sessions by identifying which members will be starting the teaching process before the the activity begins.
- Walk these group members through a list of key questions that can serve as a guide when they are helping others learn the skill.
- Provide an opportunity for them to ask for additional information or support so they feel confident in their roles.
- Participate in the teaching sessions being facilitated by others. You can circulate between sub-groups if needed. If you think a group is missing an important aspect of the technique being taught, watch for a natural opening in the conversation to directly share the relevant information. You can also use the 'what if' feedback technique to spark a conversation that will help the group discover how to do do the task effectively.

Tips

AP Note: links to following sections from intro: role of the facilitator; giving and providing feedback.

Action Planning

What is it?

Action Planning is an activity that helps farmers take ownership of their learning, identify personalized goals that fit their needs, and create a timeline or list based plan for the exact steps they will take to apply and implement their Forest Garden training.

The primary benefit of an action plan is identifying a sequence of actions that will help farmers achieve their Forest Garden goal.

In addition, a thoughtfully conducted action planning exercise can help farmers:

1. Assess their level of confidence in implementing what they learned during a training session.
2. Anticipate obstacles and challenges they might face when applying their learning to their own Forest Garden.
3. Identify ideas and options to overcome these challenges, including helping one another as a community.

Setting goals that encourage learning, anticipating the details of when and how the goal will be implemented, and creating support systems - all bridge the gap between learning and application.

When do I use it?

Action planning should be used at junctures when farmers are about to plan and implement a series of actions over a period of time. Successfully planting green walls, setting up a perennial vegetable garden, identifying and planting fruit trees are examples of activities that typically happen over a span of several months and require a specific activity sequence in order for the end goal to be met.

How do I use it?

Adapting action plans

At the most basic level an action plan is a list of actions that will be taken to achieve a goal. You can adapt this tool and add details (when a task will be done, who will do it, what resources are needed, etc.) or adapt it to a visual format to make the tool more useful to your audience.

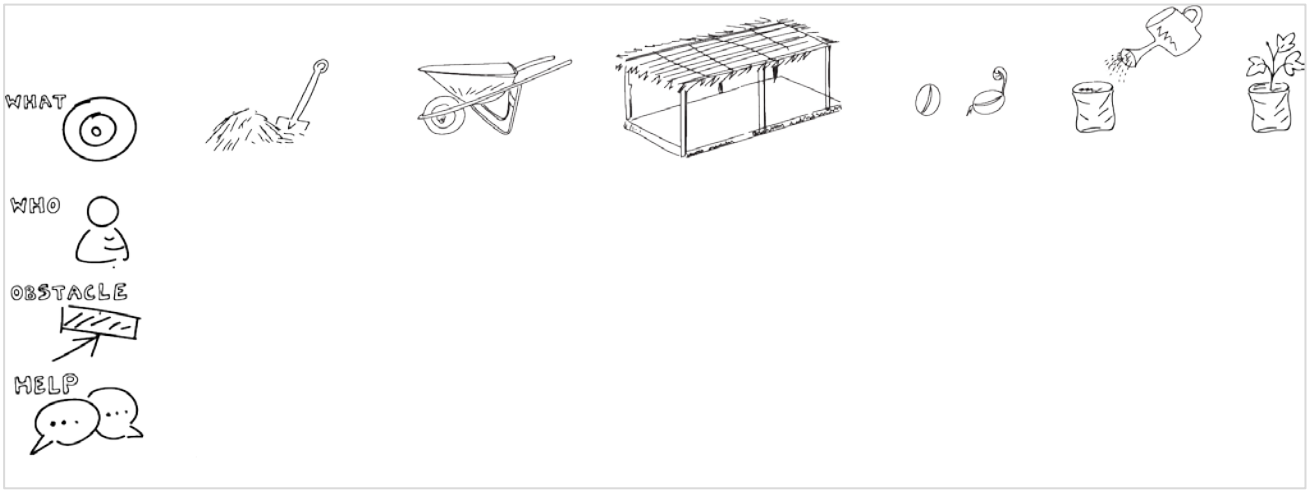
Here are some samples you can adapt and use:

Sequential. This is best used when working with groups that have a basic level of literacy. Activities should be listed in sequential order in the first (*what* or *task*) column.

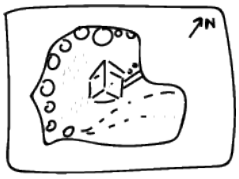
What	When	Who	Challenges	Resources and support
Prepare potting medium				
Level ground and clear bushes to create room for a nursery			Will need more help to move the extra soil	Partnering with neighbour to help one another
Build a tree nursery site				

Prepare seeds				Lead farmer will bring seeds
Sow seeds				
Water, weed, and thin seedlings				

Pictorial timeline. This is a pictorial version of the sequential action plan. As the name implies, it is visual and well-suited to groups that would prefer to work with symbols and drawings. We recommend you agree upon common symbols for obstacles, support or resources, and goal achievement in order to facilitate mutual understanding when members share their plans with one another.



Calendar. This is an adaption of the Calendar Tool. You can use both words, and symbols or drawings when working with this tool. It is best used for long term planning (e.g., 4 month plan to prepare and outplant tree seedlings), as opposed to mapping out the details of a task (e.g., treating seeds, preparing nursery beds, and planting seeds). When starting out with the Forest Garden training, we recommend planning for only 3-5 months at a time. This makes sure that farmers do not feel overwhelmed and can focus on the immediate task at hand.

Mar	Apr	May	Jun
			
			

Facilitating insight and action

Step 1 - Preparation. Based on your understanding of the group's capabilities and level of confidence, identify the Action Plan type that will be a good fit. Create or hand draw a sample that focuses on the specific activity you will be using it for (e.g., establishing a tree nursery.)

Step 2 - Introduce the Action Planning activity. Focus your instructions on the specific goal you want the group members to achieve. Here is a sample of what you could say - "Let us take the next 30 minutes to plan how we are going to establish our own [insert task] (eg. tree nurseries). I will ask all of you to discuss these questions in small groups. Please make sure each member gets a chance to share their answers, and provide support to one-another when thinking through challenges and obstacles."

Step 3 - Small group discussion. Divide the large group into sub-groups of 3-4, and provide them with paper sheets and pencils/pens for each farmer.
Have the group discuss and complete their personal Action Plan:

1. **Initial Action Plan:** Let's take 5 minutes to complete/draw-out our Action Plan.
2. **Confidence:** Select how you feel about creating your own [insert goal] (e.g., tree nursery):
    a. I don't think I can do this
    b. I think I can do this but need more help
    c. I feel confident that I can do this

3. **Obstacles:** What might get in the way of me doing this (obstacles, challenges, issues)?
4. **Options:** What ideas and options could help me overcome these obstacles?
5. **Support:** What kind of additional support, if any, might I need to do this? Could we help each other in providing this additional support?
6. **Complete Action Plans:** Let's take a few minutes to make adjustments and additions to our Action Plan based on our discussion.

Step 4 - Large group discussion. Bring the large group together, and discuss each item in the checklist, documenting each new/unique response on a flipchart:

1. **Confidence:** *how did your group generally feel about completing this task?* Record this for each group to get an overall idea of how confident members are feeling. You can record each option as a smiling, thinking, or sad face to keep it visual.
2. **Obstacles:** *what were some obstacles and challenges you identified in your groups?*
   Add new and unique responses to the flipchart. For responses that are repeated, add an 'x' next to the obstacle each time it is listed to identify the most common issues.
3. **Options:** *what ideas and solutions did you come up with to overcome the obstacles? What other options can we come up with?*
4. **Support:** *In addition to the solutions we discussed, is there any additional support that would help you do this? Were you able to identify ways in which you could help each other get this support?*
   Where appropriate you can make a mental note of farmers who might need one-on-one follow-up support from either you or the lead farmer.
5. **Action Plan:** ask a few farmers to share their action plans with the larger group, and have the group celebrate the commitments they have built towards their goal in a culturally appropriate way at the end of the activity.

Tips

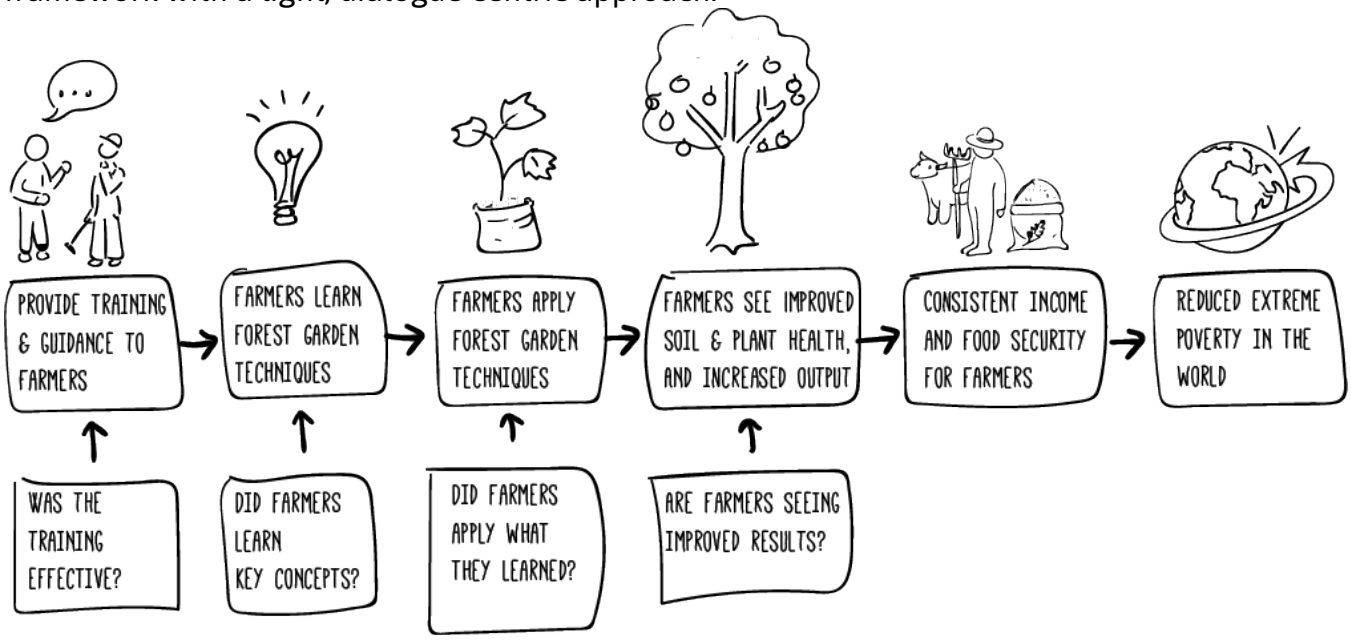
AP Note: need to think thru what would be useful here

Rapid Participatory Assessment

What is it?

A rapid participatory assessment allows you to quickly evaluate if the Forest Garden training is meeting its objectives. It is a simple, yet powerful set of tools that creates room for critical reflection and enables you and the farmer group to identify what is going well, where there is room for improvement, and collectively make adjustments.

Fundamentally, the Forest Garden program is based on the following logic and assumptions. The Rapid Participatory Assessment tools allow you to test this framework with a light, dialogue centric approach.



As shown in the graphic above, as the facilitator, you can do a rapid participatory assessment at four levels:

1. Was the **training effective**
2. Did the farmers **learn** key concepts
3. Did the farmers **apply** what they learned
4. Are farmers seeing improved **results**

As the name implies, the rapid assessments are intended to be participatory exercises. You, as the facilitator, are not judging or assessing the group separately. The assessments are conducted jointly by the entire group, with the goal of facilitating insight and identifying actions that further the overall goals of the farmer group.
Rapid assessments create greater ownership for both learning and action and can be a powerful tool for leading change. By enabling the farmer group to adjust and adapt to their realities, these assessments produce improved results, and ensure the growth of Forest Gardens that are uniquely suited to the specific local contexts.

When do I use it?

As the facilitator, you can determine how you weave the assessments into your training sessions. For each level of assessment, keep the following recommendations in mind when determining the frequency and timing of conducting them:

1. **Was the training effective:** in conducting this assessment you need to provide enough time for participants to fully experience the Forest Garden training

and its methodology. On the other hand, you do not want to wait too long and run training sessions that are not meeting the needs of the group. At a minimum, we recommend assessing training effectiveness after conducting two sessions with the group; and then re-assessing every 2-3 sessions.

2. **Did the farmers learn key concepts:** research shows us that repetition boosts learning retention. Using a quick activity (like the Ball Toss discussed later) to capture learning is a great way to reiterate key concepts and solidify knowledge transfer for the group. You can use this single-question learning assessment to both close the day, and kick-off the following training session to maximize learning.
3. **Did the farmers apply what they learned:** as part of the Forest Garden training, lead farmers are required to do an on-site visit for each member. These combined with one-on-one visits by the facilitator are the primary mechanism to assess the degree to which farmers are applying Forest Garden techniques on their own farms. In addition, you can weave in dialogue based assessment and reflection at key junctures like the start of a new year or end of a topic series.
4. **Are farmers seeing improved results:** Since it takes approximately two years for farmers to start seeing improved results from their Forest Garden, we recommend assessing results and outcomes in year 3 & 4.

How do I use it?

Method 1 - Ball Toss

The Ball Toss activity is a great way to assess learning and progress, especially when you have limited time during the session to commit towards assessment.

To prepare for the activity:

- Procure a small ball that will be easy to toss from person to person.
- Determine the assessment level (training effectiveness, learning, application, results) and the specific topic or training sessions you will focus on (e.g., nurseries, vegetable gardens, pruning etc.) Here are samples you can adapt for each assessment level:
    - **Was the training effective:** For the Forest Garden training and support being provided to you - share one thing you like, and one thing you wish could be improved.
    - **Did the farmers learn key concepts:** Share what we learned in the last Forest Garden session.
    - **Did the farmers apply what they learned:** Share the Forest Garden techniques you are applying in your farms, and lessons you are learning.

- **Are farmers seeing improved results:** Share the successes and challenges you have experienced with your Forest Gardens so far.

To conduct the activity, invite everyone to stand in a large circle. Start the activity by sharing your response to the focus question, and toss the ball to someone who has not spoken. Continue the activity till everyone has had a chance to share their response.

Method 2: Structured Dialogue

The Structured Dialogue (covered in-depth in Section II: Core Facilitation Skills - Enable Group Problem Solving) is especially well suited to assessing the first three assessment levels: effectiveness of training, learning and retention, and application of techniques. Please review the Structured Dialogue chapter to get a deeper understanding of the method and its underlying thinking and approach.

Here are sample questions you can use to adapt the tool to conduct a Rapid Participatory Assessment:

Stages	Was the training effective?	Did farmers learn key concepts	Did farmers apply what they learned
Experience	What training methods did we use? What did we do together? What did you observe me doing? What materials did I provide?	What did we learn? What was critical in the information we covered? What all do you remember about the information we covered?	What are you doing differently in your fields? What techniques have you implemented? What are you seeing and observing?
Feel	How do you feel about the training? What did you like most? What did you struggle with?	How do you feel about what you are learning? What has surprised you? What has been hard?	What are you excited about? What are you struggling with? How do you feel about the steps you have taken?
Think	In what ways is the training meeting your needs? How could you get more value from it?	Of the things we learned, what can have most impact for you? Of the things you struggled with - what about it was hard?	What are you learning as you apply these techniques in your field? What impact will it have on you and your family? Of the things that are challenging - what is getting in the way?
Do	What are 1-2 things we can test during the next training sessions to make these more effective?	What is one thing you could try to improve your learning from these sessions? What could we try as a group?	What is the most common thing that is getting in our way? What are possible solutions? Which ones could we test and try?

Before the activity:

- Determine the assessment level (training effectiveness, learning, application) and the specific topic or training sessions you will focus on (e.g., nurseries, vegetable gardens, pruning etc.)
- Finalize the questions you will use for each stage in the Structured Dialogue (adapted from sample above).
- Set-up flip charts on the wall for each of the four Structured Dialogue stages.

When facilitating the activity:

- Provide instructions to the group, here is sample language you can adapt: "*We are going to spend the next 30 minutes assessing how effectively we are applying the techniques we have learned for establishing vegetable gardens. I will ask a series of questions focused on the techniques we are applying and what we are observing, how we feel about our progress, evaluate what we think about how we are doing, and finally identify what we could be doing differently or better."*
- As you ask the questions, use keywords or short phrases to capture the responses the farmers provide to the questions.
- At the end, go around the room and have each person share what they will personally be doing differently based on their insights from the dialogue. Model accountability by sharing what you will be doing differently to provide better support in the current context.
- If the group agrees on collective actions or decisions, clearly call this out at the end. Outline what the action is, who all are accountable for it, what it is going to look like, and how or when it will happen.

Method 3: Checklists

For the last level of the assessment - evaluating improved results and outputs - a checklist of questions can provide a more complete picture of what is working and what needs improvement. The open ended rapid assessment techniques we discussed above (i.e., structured dialogue, ball toss) can miss components that are critical to the overall success of a Forest Garden.

Step 1: Finalize what you want to assess.

Using a checklist to assess the results farmers are seeing from their Forest Gardens can be an intense activity and can take more time than the other methods described here. Make sure you select components that have already been covered with the group and allow enough time to pass for the group to start seeing results from specific techniques (e.g., a minimum of two years for Green Walls, Windbreaks, Contour Planting, Fruit Trees).

You can adapt this checklist and pick components that are most relevant for the group at that specific point-in-time:

Forest Garden components	Focus	Successes	Challenges	Possible solutions
Green Walls	Overall health, gaps and need of additional trees, pruning, shaping & harvesting			
Soil Health	Changes, organic matter, beneficial insects, water retention, soil supplements			
Water	Movement of water and soil through the field especially with heavy rains, use of contour planting, berms and swales			
Wind	Movement of wind through the tree			
Fire	Protection from fires in the dry season			
Pests and disease	Protecting vegetables, trees, and crops from pests and diseases			
Outside factors	Drought, flood, etc.			
Food for consumption	Ability to meet family food needs from farm produce			
Produce for sale	Ability to maximize profits by selling at higher prices, more consistent output throughout the year			
Vegetable Gardens	Overall health, seeds, nurseries, transplanting, rotating soil givers and takers, plants to limit pests and disease, mulching			
Animals	Incorporating and meeting needs of livestock from Forest Garden, cut-and-carry techniques, fodder management			
Fruit and timber trees	Overall health and output, seed selection, nurseries, outplanting, pruning & harvesting, cuvettes			
Variety and health of plants (guilds)	Overall plant health and output, variety of products, use of horizontal & vertical space			

For 4-5 checklist topics, facilitate a gallery walk.

1. Set up a flip chart for each component on the checklist, using words or symbols depending on the literacy level of the group.
2. Create as many sub-groups as charts on the wall, for example create 4 subgroups if you are assessing four components. Assign 4-6 members per sub-group.
3. At the start of the activity assign a chart (component) to each sub-group.
4. Give the group 5-7 minutes to discuss successes, challenges, and possible solutions for their assigned topic. Ask them to add their insights to the chart with words or symbols.
5. At the end of the 7 minutes, rotate the sub-groups to the next chart or component. Repeat this till each group is back at their original chart.
6. Ask each group to report out their insights, inviting members from the larger group to add to the dialogue for each topic being discussed.
7. Help identify and call out any concrete actions or next steps identified by the group.

Use voting for rapid assessment of more than 5 components, and do a deep dive on the most challenging area.

If you are conducting a Rapid Participatory Assessment for more than 5 components at the same time, utilize voting to identify overall successes and pain points.

1. Draw out the checklist on flipcharts, or on a wall or floor area.
2. Provide members with 3 green and 3 red stickers each when working with flipcharts.
   If stickers are not available, you can instruct members to draw checks and x's - restricting themselves to no more than 3 of each. You can also use different colored leaves if working with a table made on the floor.
3. Members are instructed to put the green dots (or their equivalent) in the successes column, and red ones in the challenges column. They can choose to spend all of their 3 dots on one component- to indicate intensity of their success or struggles - or distribute the dots across different components.
4. Once members are done voting, the group should be able to clearly identify components working well and areas where members are struggling.

As the next steps:

- Identify the area with the most green dots and conduct a Ball Toss to share success stories.
- Identify the area with the most red dots and conduct a Structured Dialogue to identify underlying issues and next steps for resolving the challenges.

Tips

- When discussing training effectiveness - stay impartial, receptive, and objective. It is natural to feel judged or reactive towards constructive

feedback and comments that focus on you as the trainer and facilitator. Acknowledge the feedback, paraphrase and reflect back what you heard. Resist the urge to justify or offer explanations, simply listening to what is being shared and allow the group the space to navigate the dialogue, as you would with any other topic.

- For more involved challenges, you can follow this up with action planning to implement the ideas generated by the group.