How to Observe (Step 1 of the Permagarden Process)

WHAT IS IT?

Observation is the first step in the four step process used to develop a permagarden. Program staff often teach the observation process during a participatory training focused on unearthing local knowledge.

The observation process includes the following steps (outlined in more detail below):

1. Community dialogue
2. Resource identification
3. Site assessment
4. Mapping the compound

Two additional activities to support those facilitating the observation process in the field are also suggested below:

- Sponge demonstration
- Basic needs discussion

WHY DO WE DO IT?

Taking time to observe before creating a permagarden will help identify the opportunities and challenges for production present on the site, as well as all the local resources available for use. Observation also supports the development of a garden design that works with the specific environmental context of the compound.

TERMS USED

Slow, spread and sink: A principle used in the Permagarden Approach to prevent erosion and bank water in the soil for future use. Water is slowed down through the use of water harvesting structures and allowed to spread out evenly over an area so it can sink deep into the soil.

METHOD

Before starting the observation process, take time to ensure the trainings implemented meet the "Community-led" Minimum Standard (more information about the Minimum Standards can be found in the Permagarden Technical Checklist Guidance). The trainings should cultivate a sense of ownership within the community for the gardens and promote a community-led design process.

Use a community consultation process to select training participants and a household compound and plot where the training and permagarden demonstration can take place. When selecting a training and demonstration site, emphasize the importance of choosing a site that is representative of the land and resources typically available to community members, or even a site that is considered poor or undesirable by community members. If a permagarden is successfully implemented on such a site, it demonstrates that permagardens can be implemented successfully anywhere.

How to Observe

1 COMMUNITY DIALOGUE | 2 RESOURCE IDENTIFICATION | 3 SITE ASSESSMENT | 4 MAPPING THE COMPOUND

The first step in the observation process is an open dialogue between the community and program staff members.

During this community dialogue, the following questions are discussed:

- *How has the landscape changed over time and how has this affected the community?*
- *What are the shocks and stresses currently faced by the community?*
- *What are the community's future goals and aspirations?*
- *What are the hosting household's specific goals and any information that is important to understand about their context and the challenges they face?*

It is important that the dialogue is participatory and involves all community members, including those with quieter voices or members who may be more marginalized. After concluding the community dialogue, consider doing a Sponge Demonstration with the group.

SPONGE DEMONSTRATION

A practical way to explain the Permagarden Approach

The sponge demonstration is a great activity to use after the Community Dialogue to help participants understand the basics of the Permagarden Approach and get them excited with what they can achieve.

STEP 1

- Choose an area with bare land on a slight slope where you can draw two side by side 1m x 1m squares.
- Explain to participants that these squares represent two plots, one 'improved' and one 'unimproved'.
- Assign one participant to represent the improved plot and one staff member to represent the unimproved plot.
- Starting with the improved plot, add different examples of water harvesting strategies and explain that you are creating a 'sponge' in the soil:
  - » Create micro swales using a hoe or a stick (be sure to close or cap the ends of the swale by mounding the soil up)
  - » Create mini check dams using small rocks
  - » Add lots of mulch to the whole plot
- For the unimproved plot, ask participants what local practices are used to prepare fields and mimic these on the soil surface. For example, you may add some manure on the surface, burn plant material, or dig shallowly.
- To make it more participatory and engaging, involve participants in creating the two plots (see image to right).

STEP 2

- Ask one participant to take a watering can and pour water over each plot to mimic the first rainfall of the year (see image to the left).
- Ask the other participants what they see happening on each plot. How are they different? Encourage participants to come and feel the soil under the mulch on the improved plot.
- Discuss with the group what they observed and why.
- Encourage participants to continue to observe the sponge demonstration site throughout the day and keep checking on the difference between how the two plots react to the sun.

The resource identification process consists of two activities: a resource walk and a discussion. To orient the group before beginning the resource walk, consider introducing the topic with a Basic Needs Discussion.

Basic Needs Discussion

An easy way to explain the basic resources needed for a garden.

The Basic Needs discussion is a great introduction to the resource identification process. It helps participants think through the basic resources needed to grow healthy plants and introduces them to the concept of providing care for their plants, much in the same way they would their children.

STEP 1

Ask participants what a baby needs to be healthy. If one of the participants in the group has a baby with them, use that baby as an example. Encourage as many participants as possible to speak.

STEP 2

Ask participants what a plant needs to be healthy. Draw out how the needs of the plants are the same as for a baby: clean water, air, food and nutrition, shelter or protection, and care and attention.

NOTE

The basic needs discussion is also a great place to start introducing some key soil health concepts in the Permagarden Approach. For example, just like a child needs a diversity of foods to be healthy, soil also needs to be fed with a diversity of nutrients (different manures, fertility plants, diversity of plants and mulches). Just like a child needs protection from the sun, soils need protection in the form of mulches.

2.1 Resource Walk

Invite participants to walk around the demonstration compound and the surrounding area to identify resources that can be useful for the permagarden.

This includes:

- water sources
- plants that could be used in the permagarden
- materials for mulching
- composting and fencing materials
- planting material or seeds

Encourage participants to also look for useful 'waste materials' that can be used in the garden, for example:

- Wastewater
- Organic waste
- Crop residue
- Animal manures
- Wood ash

2.2 Resource Discussion

After the resource walk, gather participants together to share information about the resources they have collected and how they are useful to the garden. To encourage all voices to be heard, first ask a woman to share and then a man and keep alternating.

Once all community members have shared, encourage them to also identify social resources such as help with labor from neighboring farmers.

The site assessment consists of two activities: a site observation and discussion followed by a 'walking the water' activity.

3.1 Observation and Discussion

Together with participants, take a walk around the compound to observe certain characteristics of the site. The site observation can be combined with the resource walk if needed. Take note of the following:

- Main structures
- Existing vegetation, including trees
- Pathways
- Water points

Discuss:

- How do external influences on the site such as sun, wind, slope, animals and humans affect the site?

Ask participants questions, such as:

- *Where does the sun rise and where does it set?*
- *What parts of the compound are exposed to the hot afternoon sun? How could this impact plants growing at this site?*
- *What direction do strong winds typically come from? How could this impact the plants growing at this site?*
- *Is there a slope on the land? Can you see any signs of erosion or flooding or areas where water is concentrating?*
- *Are there any places where plants are growing really well?*
- *Is there protection from harsh elements such as wind, sun and strong rains for plants on this site?*
- *Is there protection from damage by livestock, wild animals and potential theft?*

3.2 Walking the Water

Full description of the 'Walking the Water' activity can be found in the guidance "How To: Walk the Water", available in the supplemental materials on the Permagarden course webpage.

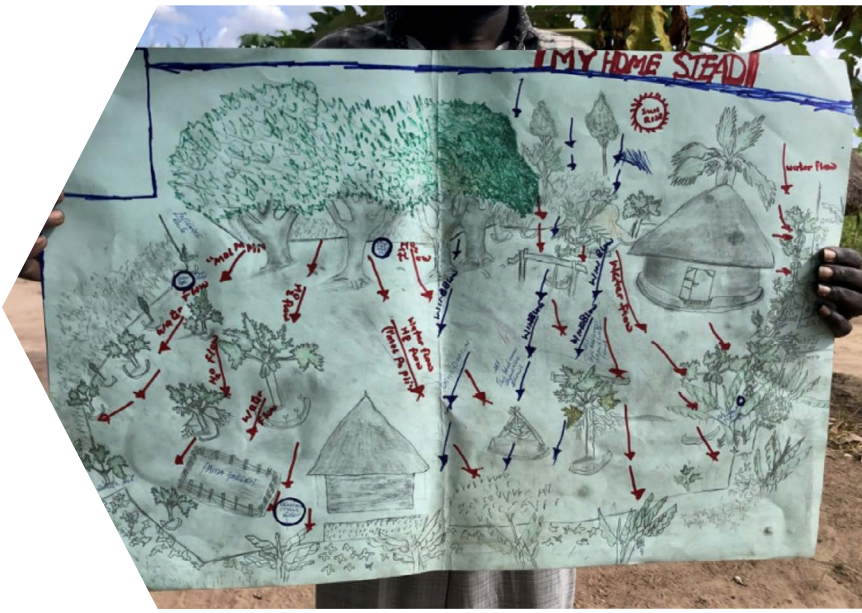
- *What path would the water follow? Are there signs of erosion there?*
- *Where is water collecting? Why is it collecting there?*
- *Where are plants growing well and where are they struggling? Why might this be the case?*

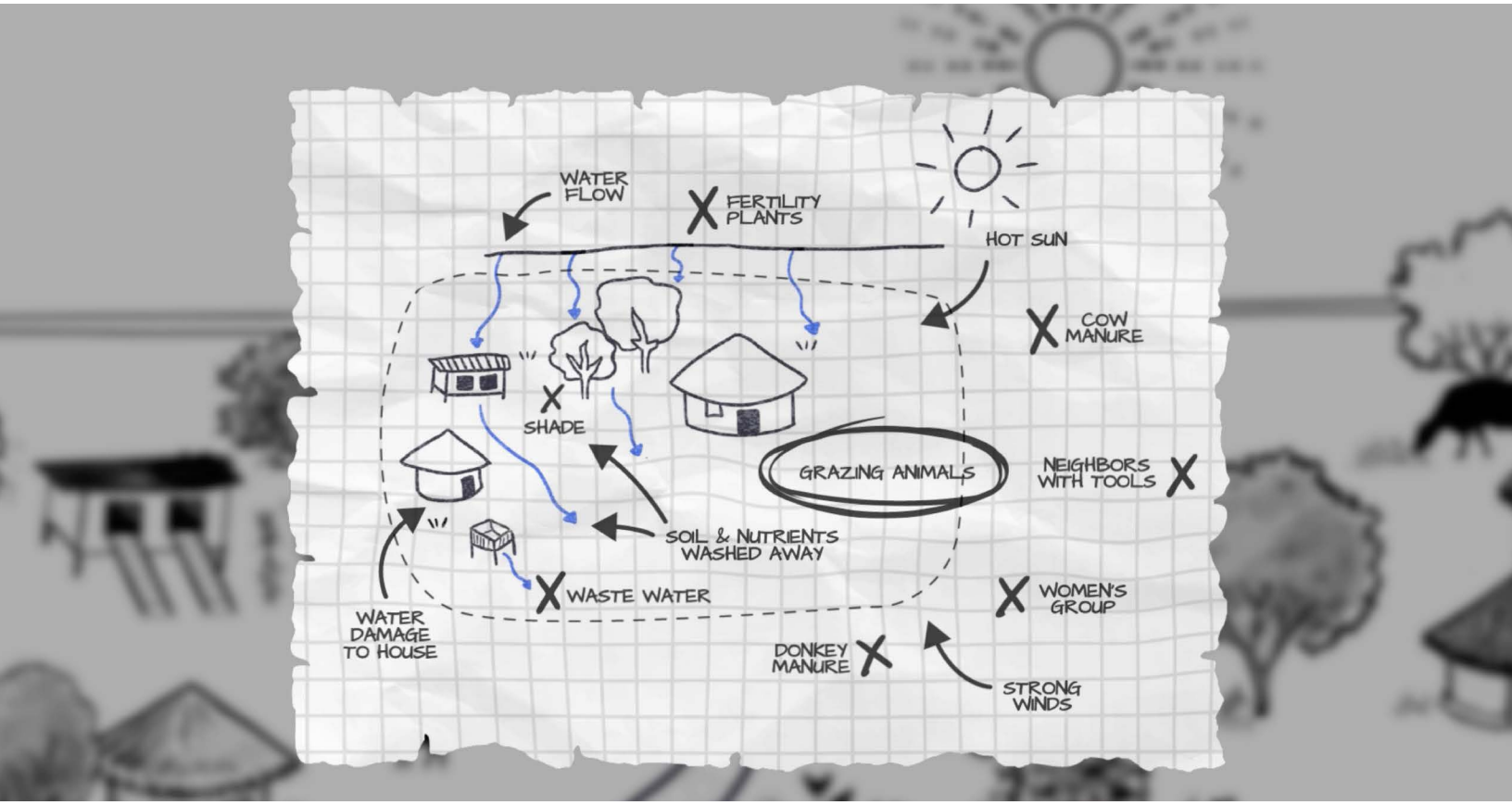
Gather participants together after the groups have finished and do the walk again together while discussing their findings. Trace the pathway of the water lightly in the soil with a stick, shovel, or hoe.

Provide participants with pens and paper to draw a map of the compound. The map should include the following key information:

- Main structures
- Water points
- Contours identified
- External influences
  - » Sun and wind direction
  - » Slope direction and water flow
- Available resources identified

If paper is not available, the map can be drawn on the ground with a stick and key structures, such as houses and trees, can be represented by stones and twigs.





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