



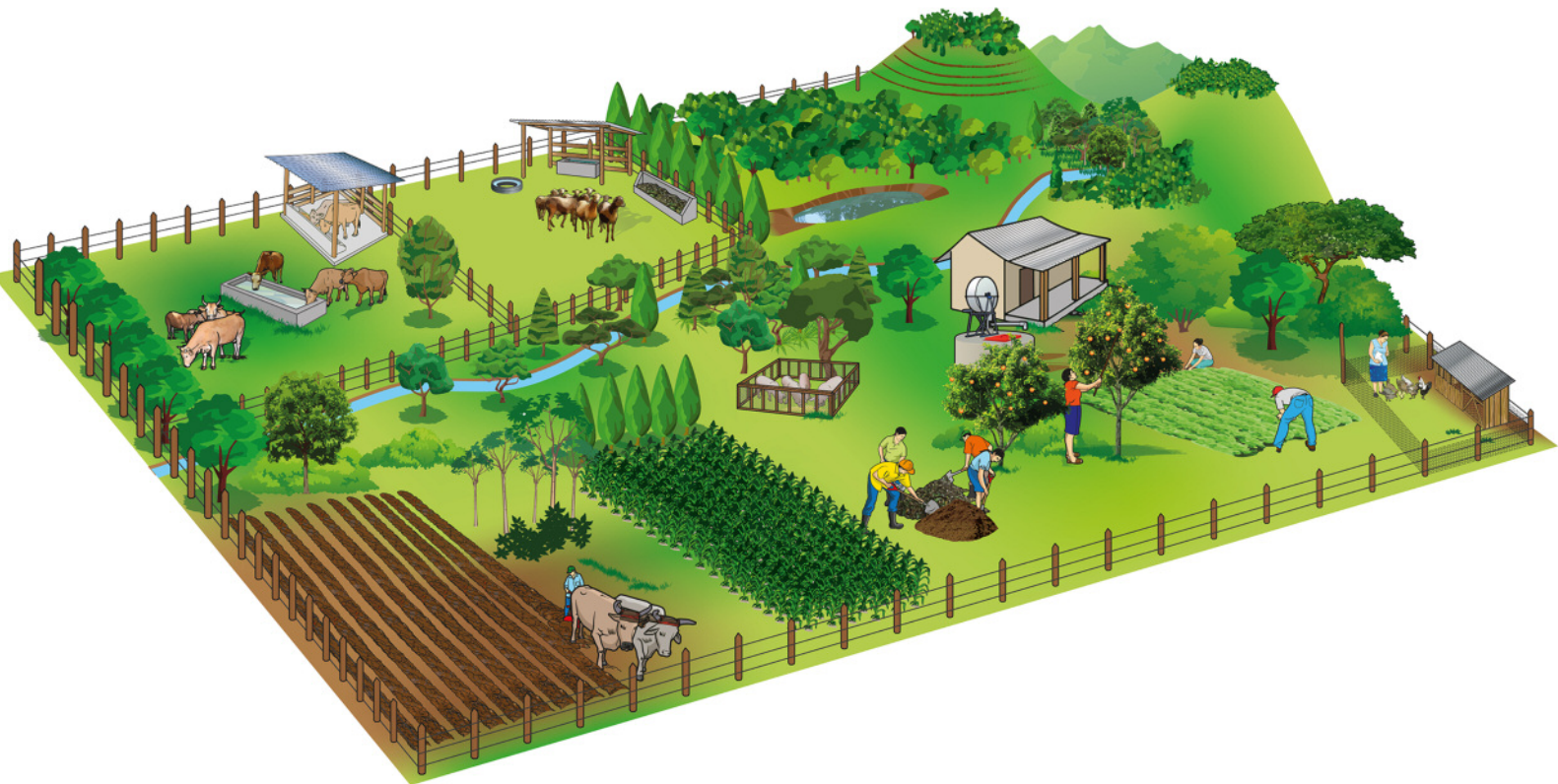
FARM MAPS

Based on the reality and needs of the family



Farm maps:

Based on the reality
and needs of the family



Oscar Roberto Henríquez Escobar is from the Rosario Tablón community, but his farm is located a kilometre from his home, in the Ajuluco canton (Municipality of Tenancingo, Department of Cuscatlán, El Salvador), which means “place of hearts”. He tells his story of how over time he improved his farm map, and how useful it has been:

“The size of my plot is five manzanas (3.5 ha.). My family bought it with the compensation money I was given when I was laid off my job, since I was a civil

servant. It was just a barren, deteriorated field. Not even weeds grew, the entire land was just dead. But I liked the location because it’s right on the banks of the Tizapa river.

In the year 2000, the family got together and we decided to transform the plot into a farm. We started to work using traditional methods because I didn’t know about agroecology and soil conservation works.



The first thing we did was to fence in the whole plot with barbed wire. We allocated the first part to planting some citrus and other fruit trees that we got thanks to the government's intervention through the El Salvador Environmental Program (PAES). In addition to giving me fruit trees, they taught me how to build conservation works like individual terraces and infiltration ditches...

Since the terrain was very irregular, with some parts having more than a 40% slope, it was urgent to make a map of the farm to see where was best to plant fruit trees, roots and tubers, marrow, plantain, sugarcane, how to protect the

riverbank... and stop spraying so much poison. That's how I got involved with one of the groups run by the Salvadorian Centre for Appropriate Technology (CESTA Friends of the Earth)..."

Purpose of making a farm map

Mapping a farm with a climate change adaptation approach is the first phase of transforming a conventional field into a well-planned farm. When planning with the whole family, it becomes a tool to identify the farm's resources,

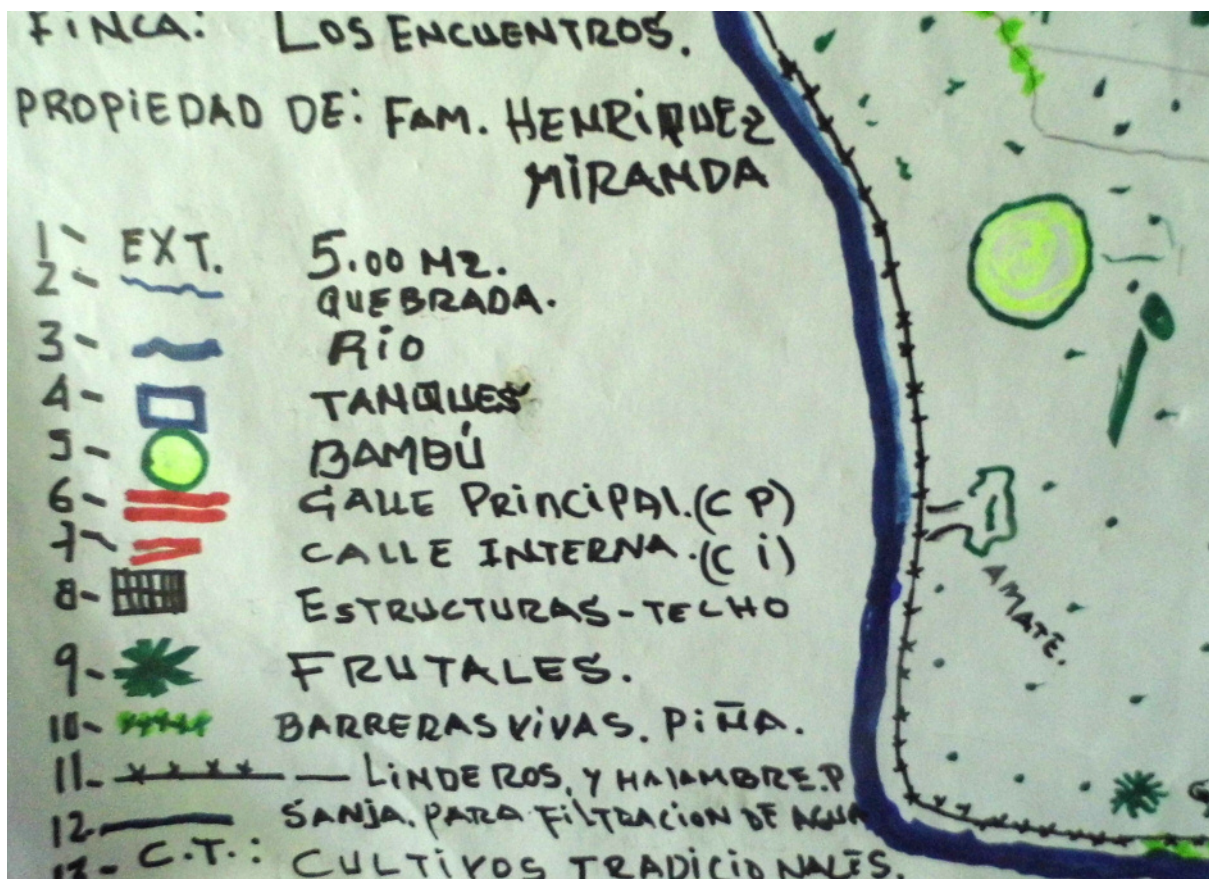
potentials and limitations and respond to several key questions:

What is the goal for the farm? How does the family see itself in the future? Where do you want to start? What resources can you count on? Where do you get your income? Do you have available manpower? And, how do you see yourself in the future?

Planning a farm helps to analyse crops and their yields: what was produced, what was spent, and what was earned, even when it comes to animal husbandry. Everything that generates some kind of income is taken into account to make decisions and plan for the future of the farm and the family on a short and long term. Where does the family plan to obtain their food?

Based on this analysis the family can then make decisions because they can now clearly see the priorities and what steps need to be taken to create a plan of action. This plan of action is very useful for getting organised, managing work better, and self-evaluation. It's like a requirement guide for the family itself. It's even easier to get a loan because you know what you want to do!

Creating a farm plan makes it easy to clearly identify the need for training on how to manage different crops, and it gives the confidence to undertake financing activities and plan what to sell and when. Everything is based on the individual reality and needs of the farming family.



Step by step: Farm mapping

When making a map of the farm, the current state of the farm must be clear, with all the invested labour, including the cultivated varieties, the location of the house, conservation works, barriers, and trees. All the components of the farm must be drawn in detail, including pathways and streams.

Record-keeping helps to be aware of spending in all activities, variety by variety, so that in the end you can know how much you invested, and compare it to what you made in sales. This is how you know whether you make a profit or a loss, and how much income is

generated by each activity. This way you can plan what to invest in, and, more importantly, plan where the family's food is going to come from. Basic grains, vegetables, fruit trees... all these can be used for feeding the family.

1. Educate each family on the importance of having a farm plan. Planning means clearly identifying what improvements you want to implement in the short and long term, knowing your capacities and deficiencies in resources or manpower, and what technical capabilities you'll require.



Labour used during the experiment

Names and family relation	Age	Occupation	How much time do they devote to the farm?	Training received

2. Take a tour of the whole farm to understand its situation; in other words, to make a diagnosis. It's best for the family to draw this map together because each person has different perspectives and ideas on how to improve. Then, notebook and pencil in hand, identify the following components:

- ✓ What is there on the farm or plot?
- ✓ What types of trees are there?
- ✓ Do the crops seem to be developing well?
- ✓ What is the condition of the soil in

- terms of erosion, organic material, and humidity? What are the most common types of weeds?
- ✓ What are the conditions and differences of the terrain? Where does water run-off, and where does it pool and flood?
- ✓ What are the available water sources, and how are they being used?
- ✓ What will be done with the produce?
- ✓ What improvements does the family need to make?



An agroecological diagnosis is the starting point for farm diversification. That's why it's important to record relevant information, such as location,

socio-economic and agricultural situation, etc., in order to make the best decisions.

Farm location information

Date of diagnosis	
Name and location of the farm	
Department	
Municipality	
Homestead	
Community	
Distance from the capital	
Metres above sea level	
Georeference:	Latitude: Longitude:

Information on soil management at three different sites of the farm

Criteria	Notes on site 1	Notes on site 2	Notes on site 3
Slope			
Erosion			
Soil texture			
Rockiness			
Topsoil depth			
Fertility of the soil			
Flood risk			
Drought risk			
Winds			
Land use			

Land use

Less than 25% used by:	Between 25% and 50% used by:
Between 50 and 75% used by:	Between 75% and 100% used by:

3. Make a map of the farm

Draw the current map using this information, and make another one of how you want the farm to be in the future, for example in two or three years' time. This will help you locate the needed improvements in each part of the farm. Following are some suggestions on how to do this, taking the following criteria into account:

- ✓ Record the activities the family has planned, and organise them by priority.
- ✓ Analyse the proposals and see if they're appropriate for the soil and climate conditions.
- ✓ Estimate what resources you'll need to carry out the improvements.
- ✓ Plan the improvements for the first year.
- ✓ Prioritise short and long-term solutions in a logical order according to the season, available labour, and resources required, whether they need to be purchased or can be found on the farm.
- ✓ Outline an annual work plan for each activity and agreed-upon changes, along with their costs. Make a timeline for when they will be carried out, who is responsible, and what resources are needed to achieve them.

✓ Hang the map in a visible place so people can check how things are going:

- Planting of the family vegetable garden
- Planting of fruit and forest trees
- Care and handling of farm animals such as fowls, pigs, and goats.
- Building soil and water conservation works

4. Follow-up on activities according to the timeline

It must be flexible because unexpected events can cause set-backs that the family cannot control. For example: floods, droughts, pests, diseases, and even family problems.



Budget per activity or crop

Activity				
Inputs	Unit	Quantity	Unit cost	Total cost

Materials needed to make a farm map

- ✓ Notebook
- ✓ Pencil
- ✓ Crayons or coloured pencils
- ✓ Paper and cardboard
- ✓ Machete
- ✓ Trench shovel
- ✓ Thumbtacks
- ✓ Calculator
- ✓ GPS (optional)

Costs and difficulties

- ✓ Costs depend on the activities you want to do. For example, starting a 10 x 20-metre family vegetable garden costs about \$45.00 USD.
- ✓ Planting 100 orange trees costs about \$200.00 USD including labour.
- ✓ In nurseries, each fruit tree plant costs somewhere between \$3.00 USD and \$7.00 USD.
- ✓ A drip irrigation system costs \$780.00 USD.





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