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# **Eight steps for developing local tree value chains**

A short guide with lessons on starting profitable and sustainable tree product businesses

Sammy Carsan, Grace Koech, Kai Mausch, Judith Oduol, Djalal Arinloye-Ademonla and Mieke Bourne

### Introduction

Tree resources can provide a range of economic, social, and environmental benefits to local communities ranging from timber to non-timber products and services. Timber resources are well known for providing diverse wood products used for furniture, construction materials and sources of energy. For instance, sawn wood, poles, wood fuel, woodchips and other wood products offer interesting high-return investments. Non-timber products, such as fruits and nuts, seeds, gums and resins, medicines, honey, and mushrooms, as well as recreational services can also be offered for sale. Products based on locally available tree resources can offer great opportunities for investments by communities, the private sector and development partners to improve livelihoods and the local environment if managed sustainably. This guide provides practical strategies factoring value chain assessments, prioritization, support, and finance elements that need to be in mind in order to develop profitable enterprises that can be scaled (Figure 1). A stepwise approach on selecting and starting local tree-based businesses with local communities while balancing the need to improve supply of tree resources is shown in Figure 2.



Figure 1. Summarised value chain development plan.

## Eight steps and lessons on how to identify and prioritize local tree value chains for development.

To develop profitable and sustainable value chain options, this guide provides information on eight steps to follow to help value chain developers consider crucial elements in their own local environments and circumstances. These steps are illustrated in Figure 1 and further detailed in this guide.



Figure 2. Eight steps on how to identify and prioritize tree value chains for development.

Step 1 Conduct background and feasibility checks

Conduct literature reviews and relevant expert consultations to clearly understand the environment in which the value chain or business can thrive. This covers:

- Geographical characteristics of the area to identify feasible value chain options.
- Local population social-economic and demographic characteristics to better target value chain activities and benefits ensuring consideration for women and youth.
- Main livelihood options by the community, existing opportunities and challenges, and possible ways to address them.
- Available infrastructure to determine if the value chain can be supported.
- Local demand and supply patterns for relevant commodities

# How to search for information on value chains for tree products from existing literature

- Develop a list of keywords and paste each independently into your search engine; these could include, benefits of trees, tree products, tree product market, sources of tree products, uses of different parts of the tree, trees of economic importance.
- Evaluate the available materials and narrow down the topic. For illustration purposes, this guide will use the shea product value chain from West Africa.
- Organize all the materials that relate to the shea product value chain in one folder.
- Critically review the materials, generate relevant subtopics, and document key messages under each topic and subtopic from the review.

**Lesson:** Before embarking on a value chain establishment or development initiative, it is important to be aware that these are not 'simple'. Value chains exist or do not exist for various reasons, and you may not be able to influence these. In addition, the skills required for implementation are highly specialized and you should be sure to have them in place.

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#### Box 1. Example of how to conduct a literature review : Example on the shea value chain.

#### List of sub-topics to search from available knowledge resources.

#### 1. Sources of shea nuts (establish the supply chain)

- · Establish the distribution of shea trees and their abundance.
- Identify sources of seedlings/vegetative propagation materials for establishing new sources of the resource (shea resources are finite and overharvesting leads to degradation)
- Identify actors that collect/aggregate shea nuts.

#### 2. Processing of shea nuts

- Identify what equipment is needed, and the type and quantity of labour input and production volumes.
- Identify which individuals/firms are processing shea. Where are they? How far are they from the production site?
- Find out if there are any warehouses available where you could store surplus materials.
- Calculate the cost of processing and packaging.

#### 3. Product lines

- Understand the different products that can be obtained from shea trees such as shea nuts, kernel, shea butter and shea oil.
- · Identify how the different products are used and what consumers prefer.
- Find out what volumes are needed to meet demand and give economic returns.

#### 4. Markets for shea products

- Identify the market systems. Determine the flow of information about the shea value chain and find out who controls the prices of shea products.
- · Identify the level at which the market will operate local, regional, national, or international.
- Establish the market potential of the shea value chain.

**Note**: Knowledge of the market helps to determine the investment that needs to be made regarding processing, packaging, and product line focus.

#### 5. Opportunities in the shea value chain

- Find out what the growth potential of the shea products value chain is.
- · Identify the government departments that support the shea value chain.
- · Determine whether any institutions are already working on the shea value chain.
- Identify shea parklands, woodlots and other support structures that strengthen the operation of the shea value chain.
- Identify any available infrastructure to support the shea value chain.

#### 6. Challenges affecting the growth of shea value chains.

- Ascertain what is limiting the potential of the shea value chain, such as the supply of shea nuts, the lack of processing equipment or a poor marketing system.
- Determine who/what is needed to address the barriers and what will be their/its roles.

Consult target communities where tree product value chain(s) or businesses can emerge.

Once information on the preferred tree product value chain is gathered and sources of the resource established, facilitate meetings with communities in the area with the resource to establish the following:

• Prioritize tree products that are of interest to the community.

Step 2

- Map existing tree-related business lines, their strengths, and weaknesses.
- · Identify new business lines that could be developed.
- Map actors and their roles for both the existing and new business lines.
- Understand gender and youth roles around existing and new business lines.
- Come up with a value chain map showing the products and their sources.
- Visualize the opportunities and challenges for developing the value chain.

Pertinent information from communities can for instance be gathered through focus group discussions (FGDs) (a maximum of 12 participants per group).

- Conduct separate discussions with women, men, youth, people with special needs and other groups.
- Prepare guiding questions/checklists to help you gather information of interest.
   A simple tool for identifying tree product business potential is shown in Table 1.



Figure 3. Example of a value chain map, list of tree products and structures to support the value chain documented by the community during a workshop in Ethiopia.



Figure 4. Communities in Yarani village, Tominian, Commune, supported by Sahel Eco develop a vision on priority value chains. Photo credit: Jean Martin Coulibaly/Oxfam/Mali.

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Identifying common trees in the locality	Tree products harvested	Gender roles	Accessibility to markets
<ul> <li>List common tree species in the area</li> <li>Highlight the most important species and give reasons why they are important.</li> <li>Establish the social, economic, and environmental benefits of each tree.</li> </ul>	<ul> <li>List all the products harvested from each tree species.</li> <li>List all the possible priority product lines that could be generated from available tree resources.</li> </ul>	<ul> <li>Determine who makes decisions on what trees to plant/regenerate.</li> <li>Determine what informs the decision (household consumption, sale, or both).</li> <li>Determine who is involved in the collection, processing, packaging, marketing, and selling of the tree products.</li> <li>Determine who collects the money on the sale of the products.</li> </ul>	<ul> <li>Identify what the market situation is like for the products.</li> <li>Identify all the markets.</li> <li>Map out the challenges associated with marketing each product (gather information on the entire chain from production to consumption/sale).</li> <li>Readiness</li> <li>Find out whether the community has received any material support or training in production, processing, marketing, and citizations for the production to the production.</li> </ul>
		<ul> <li>Determine who decides on how to spend the money.</li> </ul>	<ul> <li>Find out who trained the community.</li> <li>Find out what support the</li> </ul>

#### Table 1. Example of a tool for engaging local communities in identifying tree product business potential.

**Lesson:** Group-based prioritization and feedback exercises are prone to various biases and the exclusion of sub-populations based on institutional, social, or political customs and regulations. When designing tools, you can mitigate the effects by ensuring that participation and meaningful engagement is achieved through different settings (e.g., separate male and female groups, targeted integration of youth).

community received.

#### Step 3 Engage knowledgeable experts and partners on setting up tree product value chains.

Involving experts will provide useful opinions on developing economically viable value chains. The experts should provide technical information on:

- The stakeholders working on the tree product value chain.
- The main tree products and value chains in the area.
- · Gaps in the value chain nodes where the project can intervene.
- · Potential approaches to address the gaps in the value chain.

**Lesson:** Independent experts are less prone to vested interests – however, there might be biases or gaps in their assessments too. Make sure you try to find a broad range of experts from different fields – from business, social science, and biological science, to name a few.

Aside from experts, it is also important to engage with other institutions working on tree-based enterprises to gather more information on investments that can be leveraged. Figure 5 shows an illustration of Shea butter production unit serving several group members in the rural Municipality of M'Pessoba, Cercle de Koutiala, Mali. Use some of these guide questions to learn more from the institutions:

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- · What tree products are harvested in the area?
- · What products are you working on and where within the value chain do you operate?
- What support do you offer the local communities?
- What challenges do you experience in the product value chain development?
- Who else is involved in the value chain?
- What can be done to address the challenges?

**Lesson:** One key issue to be aware of and reflect on is that many stakeholders in the business world have vested interests. These interests could potentially affect your ability to meaningfully integrate rural populations into profitable value chains to a significant extent. Negative unintended consequences can emerge when dependencies are created. In addition, if you are thinking of establishing a totally new value chain, you will face the problem of finding locally relevant information about the functioning of these chains. When using different locations to gain insights, a careful assessment of the applicability of the information to your target location is very important.

#### Step 4 Analyse data/information gathered on potential tree value chains.

Data collected in each of the preceding steps should be analysed to gain a deeper understanding of the different issues of interest when developing value chains. From each analysis, establish:

- What tree product are prioritized and by which groups?
- Who are the main actors e.g. producers, processors, middlemen, transporters, in the prioritized value chain?
- What challenges and opportunities exist in the product value chains?
- Who are the potential stakeholders e.g. government, financiers, research in each of the product value chains?

**Lesson:** There are always multiple ways to look at data and your background may make data look more favourable than the same data looks to others. It is typically good to have a look at the evidence from a 'devil's advocate' perspective and to ensure that it stands up to scrutiny. It is also useful to look at data with a diverse group of people from different backgrounds e.g. science, development, markets, finance, extension and others.



Figure 5. Shea butter production unit in the rural Municipality of M'Pessoba, Cercle de Koutiala, Mali. The kit is composed of a mill crusher–grinder, a gas roaster and a 500 Kg scale. Photo: Aboubacar Diarra/OXFAM/Mali.

#### Step 5 Prioritize and re-prioritize value chains applying sustainability criteria checks.

Tree resources are limited, and unsustainable harvesting can result in resource degradation or depletion. It is therefore necessary to have a restoration plan for all products harvested from trees. Business developers should therefore develop a sustainability plan for their products (Table 2). Some key assessments to make:

- · Establish whether product has government support.
- Find out if there is private sector interest in the enterprise.
- · Determine the gender needs of all the stakeholders.
- · Identify the growth potential of the enterprise.
- Find out whether the enterprise can attract a larger market share.
- · Ensure there are no negative consequences for any other groups.

**Lesson:** This is an important step to help look at the bigger picture and make sure that the project is viable and contributing to set out goals.

#### Table 2. Example of sustainability screening on timber and fodder value chains by Ethiopia's Regreening Africa project:

Product	Criteria for scoring	Score	Reason
<b>Timbe</b> r	Government support	3	Policies inhibit timber marketing. Focus on forest products and not agroforestry
	Market potential	5	High demand for construction materials
	Gender factor	2	Huge demand for manual labour suited to men
	Sustainability/competitiveness	2	Land and raw materials shortage, long maturity cycles
	Partnership opportunities	5	There are private sector interests
	Potential environmental impacts	4	Can contribute to deforestation
	Financial opportunities	2	Unavailable finance and microfinancing on timber value chain
	Growth potential	5	Timber has high demand
Total	score	28	
Fodder	Public support	4	Supporting policies & institutions, e.g. Veterinary Department
	Market potential	5	High demand, market readily available
	Gender factor	3	Moderate gender participation
	Sustainability/competitiveness	5	High production and high demand
	Partnership opportunities	4	Potential to attract private sector, e.g. dairy processors
	Potential environmental impacts	3	Can negatively affect the environment if harvested unsustainably
	Financial opportunities	4	High financial opportunities from non-governmental organizations, government
	Growth potential	4	Increasing product demand and market expansion
Total	score	32	

Score: 5 = very high, 4 = high, 3 = moderate, 2 = low, 1 = very low, 0 = poor. Value chain products with the highest score are ranked the best for selection.

After collating results from the preliminary screening exercise, **re-prioritize** the product of interest and decide where to invest based on available resources, technical feasibility, infrastructure and economic viability.

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#### Step 6 Develop business plans for selected product(s)

Determine whether additional information is needed for the prioritized value chains prior to designing interventions to strengthen value chains and then develop a strategy to obtain the information. Guide the business developers to adress some of the following questions:

- · Do you know how to produce the tree product?
- · Are there any restrictions to accessing/utilizing the product?
- · Do have the equipment needed to produce the product?
- What is the cost of the production and are you able to pay for all the costs?
- Are the raw materials easily accessible?
- · Do you have a resource sustainability plan?
- Who else will work on the tree product?
- Do you know the product sale calendar and the markets?
- Who are the competitors? What are their quality and prices?
- Who will manage the enterprise?

Once you can answer all the above questions, engage an expert to develop a business plan for the prioritized value chains. An example of a business plan on a honey value chain generated during a training session for participants in Ethiopia is shown here.

#### Example: Honey value chain business plan, Mizan farmers' group, AsgedeTsimbila, North-western Tigray

Enterprise name: Mizan Honey-producing Farmers Enterprise.

Contact address: AsgedeTsimbila 013 KA/Shiferu Gote.

#### Location: Northwest of Tigray.

*Executive Summary:* Landless youth group established to supply quality honey from the communal land under Regreening Africa project through Farmer Managed Natural Regeneration (FMNR) practices.

**Motive:** Farmers in the intervention area have the potential to produce honey. The Mizan group intends to conserve an enclosure area and at the same time produce honey that is environmentally friendly and a viable income-generating activity.

**Product description**: The product can be collected from communal lands conserved through FMNR, and through the planting of indigenous tree species such as tebeb and gerbia.

Product type: Organic honey.

**Production and sale targets:** During the first season, the enterprise aims to produce 1500 kg of honey packed in 0.5 kg containers. The targeted sale value is 344,250 birrs (US\$7819.41). In year two, targets will be doubled in terms of production and profit.

*Expected profit:* The net profit for year one was 120,487.5 birr (USD\$ 2727).

Target markets: Refugee camp, hotels, export.

Capacity: 2000 kg/year (harvesting twice per year).

*Investment plan:* from the profits earned, 35% of it will be reinvested into expanding local livelihoods to ease pressure on the environment.

Management team: Leaders, committees, members.

# **Box 2.** Examples of value chain intervention in Ethiopia

#### Example of a value chain intervention in Ethiopia

Farmers in Sire Woreda established Eucalyptus woodlots for poles and timber production. During community consultation meetings, it was established that producers are exploited by brokers who control the prices of the timber and poles harvested from the Eucalyptus trees, Farmers therefore receive very low returns on investment. To ameliorate this situation, the Regreening Africa project linked producers directly to the market, leading to higher margins. In addition, training sessions on Eucalyptus tree management improved the pole quality so that higher prices were received.

#### Step 7 Identify various areas in which to intervene.

Having gathered all the information needed to implement value chain development, actors can embark on the following:

- Reviewing challenges associated with the product value chain.
- Assessing institutional capacity to support the value chain.
- Establishing the vertical and horizontal linkages necessary for effective tree-based value chains.

Lesson: When assessing where you could intervene/support the value chain, you should also assess if you have the power levers and resources required to make your intervention meaningful. There are strong institutional norms and individual behaviours that often determine how value chains work, and it may not always be possible to change these very easily.



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#### Step 8 Implement the tree-product value chain business plan and build on monitoring and reflection learnings.

After prioritizing a tree product business and mapping value chain actors develop an implementation plan, to start the intervention support. Feedback mechanisms should be promoted at each planning stage to fill needed information gaps and allow for adaptive management.

**Lesson:** Often, negative consequences only emerge after the initial phase of a project has started as the interventions may trigger a series of changes that are not always easily anticipated. It is therefore important to include potential negative effects into your feedback plan to be able to react to these as early as possible and to ensure they are mitigated.



Figure 7: Mrs Patouma Dabou, a member of the Parisin group, Sadien village, shows local innovation to package shea butter. Photo credit: Jean Martin Coulibaly/Oxfam/Mali.

# Further reading

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#### **Captions and Photo Credits**

Front Cover (from left to right): Mrs Noéllie DAKOUO, member of the Seniwe group Touba village, washes Parkia biglobosa seeds to produc soumbala. Photo credit: Adama Dena Fine grinding of crushed and roasted shea, in Bana village in Mali. Photo credit: Aboubacar Diarra/OXFAM/Mali

Back Cover: Charcoal production near Chiana, Kassena Nankana District - Ghana. Photo credit: Axel Fassio/CIFOR





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