FARE

Farmer Agency for Rural Economies

5 Sub-sector analysis and value chain development

Introduction to sub-sector and value chain analysis

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Introduction

The next sections take you through the following subjects:

1. Introduction to value chains and sub-sectors
2. Importance for agricultural producers and their organisations
3. Mapping a value chain: actors, operations and transactions
4. Sub-sector and value chain analysis: six perspectives

What are value chains?

We all know chains, as 'a series of linked metal rings used for fastening or securing something or for pulling loads' or as 'a sequence of items of the same type forming a line' (cf. www.lexico.com/en/definition/chain). Common knowledge is that chains have to be strong enough to pull the load and that chains are as strong as the weakest link.

In agriculture (including livestock, horticulture, fisheries, aquaculture, forestry and arboriculture), the concept of a chain applies to a sequence of related productive and commercial activities, undertaken by different actors, from local production to final consumption. This includes all intermediary steps, e.g. local trade, processing and storage, marketing and transport, wholesale and retail.

In the agricultural sector, different, interchangeable terms are used for chains: production chains, value chains, marketing chains, supply chains, distribution chains. The two most commonly used are 'value chain' and 'supply chain'.

A supply chain perspective concentrates on how a product moves from suppliers to buyers, which is most appropriate for sourcing traders or companies.

A value chain perspective focuses on activities that create value as the product moves towards the end consumer. This is most appropriate for a farmer empowerment perspective and purpose.

From field to fork, from grass to glass and from fish to dish

Value chains and supply chains are always from the producer to the end consumer.

- For field crops we can say that the product goes from the field (of the producer) to the fork (of the consumer).
- For the dairy sector we can say that the product goes from the grass (eaten by the milk-producing animal) to the glass (of milk of the consumer).
- For fisheries and aquaculture we can say that the chain goes from the (wild or farmed) fish to the dish (of the consumer).

Sectors and sub-sectors

In the primary production sector (generally called the 'agricultural sector'), there are different sectors which are all composed of sub-sectors.

- Field crop sector, of which maize, taro, cassava, rice and others are sub-sectors
- Horticulture sector, of which tomatoes, oranges, breadfruit and others are sub-sectors
- Livestock sector, of which dairy, poultry, sheep and goats are sub-sectors
- Fisheries sector, of which wild catch fisheries (on seas, rivers and lakes), cage or pond fish farming are sub-sectors.

In this guide we consider all to be part of the primary production or agricultural sector.

It is very important to realize that every sub-sector is comprised of many different value chains. We cannot stress enough that it is important to be specific when talking about 'value chains'.

To get an idea of the many different value chains that are possible, consider the following:

- Product diversity. Products can be very diverse: primary produce, graded primary produce (for instance grade A, B and C), processed products, packed products (different sizes), by-products. The same primary produce can thus be transformed in a wide array of products. This will lead to different value chains.

- Value chains can have different lengths: from very short (home consumption; farmers consuming their own production) to very long (international market). Between these extremes there are village markets, local weekly markets, provincial, national and regional markets. The same product could thus reach several market locations, each with different buyers and consumers. These are all different value chains.
- For all these products and markets, the end consumers can have different profiles, ranging from poor consumers (most interested in low prices) to middle class consumers and to rich consumers (most interested in quality and convenience). These consumer groups often buy different products and quality grades and go for shopping at different market outlets (open air markets, weekly markets, supermarkets, …).

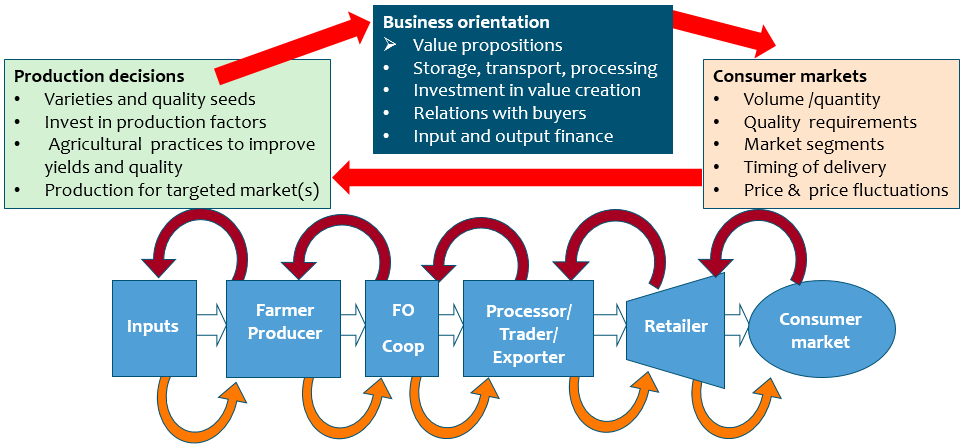
Each specific path from primary producers to end consumers is a specific value chain. The shortest value chains are those where the producers consume their own products (home consumption). Many value chains are short (for instance local markets for unprocessed products). while others are longer (up to international market). Some value chains are not so complex and value adding mainly consists of storage, transport and trading, while others are more complex, due to the value adding operations (such as grading, sorting, processing, packaging, branding and labelling) that are done before reaching the end consumer.

If you combine these different parameters, there is a great diversity of value chains. If you would have three distinct products, which are sold at three market levels to two distinct consumer groups, the number of combinations is already 18 (3x3x2).

Importance for agricultural producers and their organisations

Reasoning back from market demand

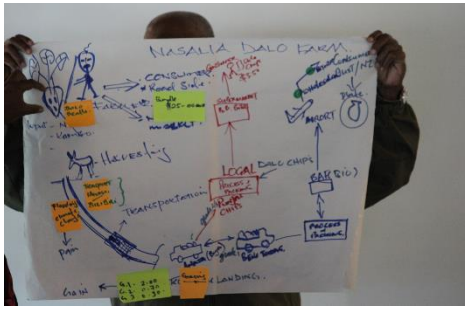
Farmers invest in improved agricultural practices and value adding activities if there are good prospects for benefits. However, farmers are often not sure of selling their products well, which is a major reason why they refrain from investing in production improvement or in post-harvest operations for value addition. Low production and low quality are in turn the reason why they have difficulties to reach markets. The challenge is how to break out of this vicious cycle by connecting market demand to production decisions and (new) business orientations:

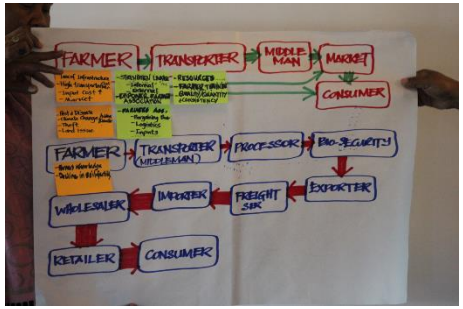


Why value chain analysis (VCA) is so important for producers and their organisations

1. VCA for market prospection. The mapping out of value chains, showing how the primary produce of farmers moves and changes until finally reaching consumers provides insights that support farmers to reason from market demand to production decisions. This is a first step towards empowerment. Often, farmers only look at markets when they have a surplus to sell.
2. VCA for market access and market power. The understanding of market mechanisms, opportunities, consumer preferences, traders' and processors' requirements, prices and price fluctuations is a condition for (small) farmers' profitable market integration and improves their negotiation and bargaining position.
3. VCA for improved operational management. The understanding of markets, consumers, prices and quality requirements enhances the attention of farmers for increasing production efficiency, reducing the production cost price, increasing quality and timeliness of supply. This improved operational performance is essential for farmers' competitive position vis-à-vis competitors.
4. VCA for collaboration and coordination of chain activities. The understanding of value chains and the sub-sector at large induces farmers to think (more) about how best to relate to other actors. The knowledge and understanding of markets and value chains also prepares farmers better for lobbying, advocating and negotiating for a better policy environment and business climate.

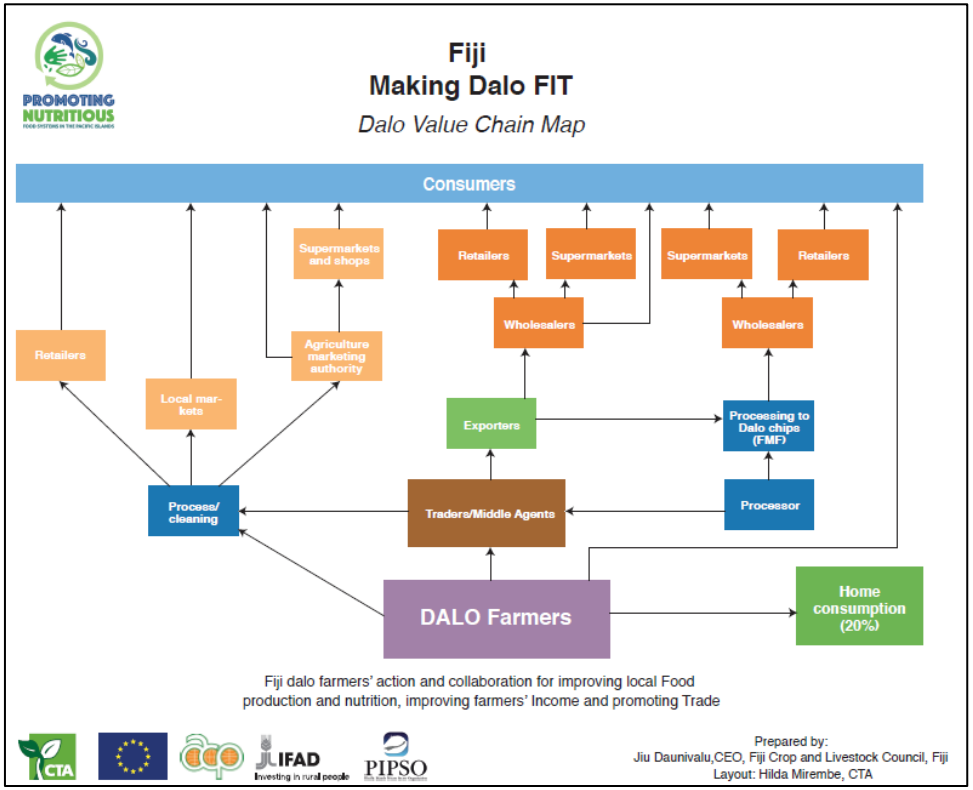
Farmers can map a sub-sector with value chains





The two pictures above show sub-sector and value chain maps prepared by farmer-members of two national federations in Fiji (dalo and ginger; May 2019).

The figure to the right shows how it looks like when the farmers' maps is digitalised. Both farmer and digital maps can be very well used in strategic documents on agricultural sector development.



Sub-sector and value chain analysis are thus important, especially for commodity-oriented producers' organisations. In a short film of the Pacific Islands Farmers' Organisations Network (PIFON), farmers and several other actors reflect on the importance of value chain training and analysis. Link: https://www.youtube.com/watch?v=ogRZKdR9Aps.

Participatory value chain analysis for farmer empowerment

Participatory value chain analysis can importantly contribute to farmer empowerment. The goals of sub-sector and value chain mapping and analysis - with and for farmers – are the following: to characterize, describe and understand sub-sectors in all their complexity; to identify constraints and opportunities for farmers and to develop strategies and actions to improve their performance.

Mapping a value chain: actors, operations and transactions

This section concentrates on the drawing a value chain. **Please note that any sub-sector has many different value chains, as a value chain is a specific combination of actors and activities, from (certain) producers to (certain) consumers**. For any sub-sector, the drawing of a value chain can be done in three steps: identifying the actors, specifying the operations and indicating the transactions and prices.

Actors on the value chain: value chain operators

Value chains always go from the primary producers to the end consumers. To get a product from the farmer to the consumer, there may be several intermediate actors, such as local traders, processors, wholesalers and retailers. We call these actors 'value chain operators': they undertake value adding activities and they own the product at some stage of the chain. Farmers' organisations that buy produce from their members and then own it are also value chain operators.

The first step for drawing a value chain is to identify the value chain operators and to visualise their sequence along the value chain. This can look like this:

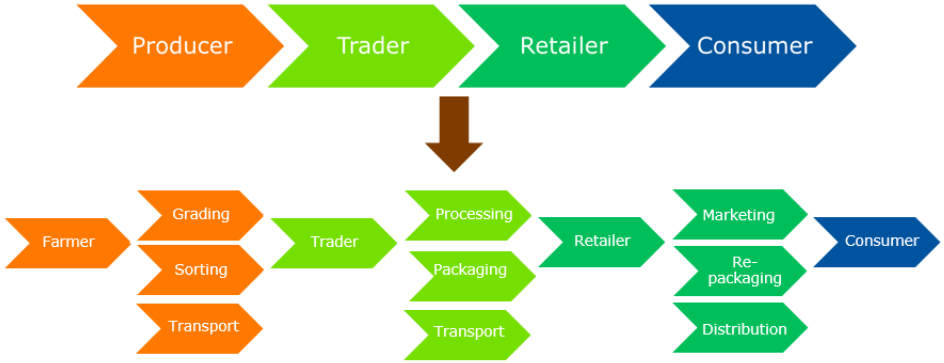
When preparing sub-sector and value chain mapping, it is important to think of all possible product-market-consumer combinations and the diversity of value chains that exists. This is the subject of the first part of the manual (Product-Market-Consumer combinations).

Operations: value adding activities

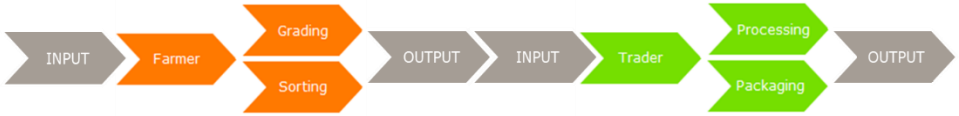
As the (agricultural) product moves along the value chain, the costs increase, because each actor is doing something to make the product more attractive for the next actor on the chain. This creates additional value and the value and price of the product increase.

There are many options and possibilities to create value in the agricultural sector, these include drying, sorting and grading, processing, storage and conservation, transport, distribution, packaging and branding (to mention some operations; list is not exhaustive).

The next step for drawing a value chain is therefore to show the value adding activities of the identified value chain operators. To clearly show which actor is doing what, it is recommended to use the same colours for the actors and their value adding activities.

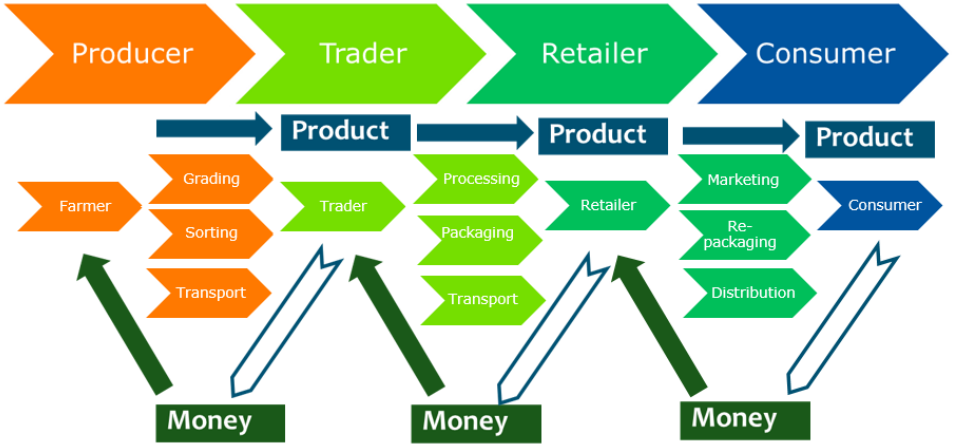


The output of one value chain operator is input for the next one. This is how the operators on the value chain are connected:



Transactions and price transmissions

Along value chains there are transactions: goods are sold from one value chain operator to another. With a transaction, the ownership of the product changes from one operator to another in exchange for money. This can also be shown when drawing a value chain.



Important questions are: how much is paid at each level?; what are the costs of the activities done by the different actors? The difference between the costs of the value adding activities and the additional value that is generated is the net value that is created.

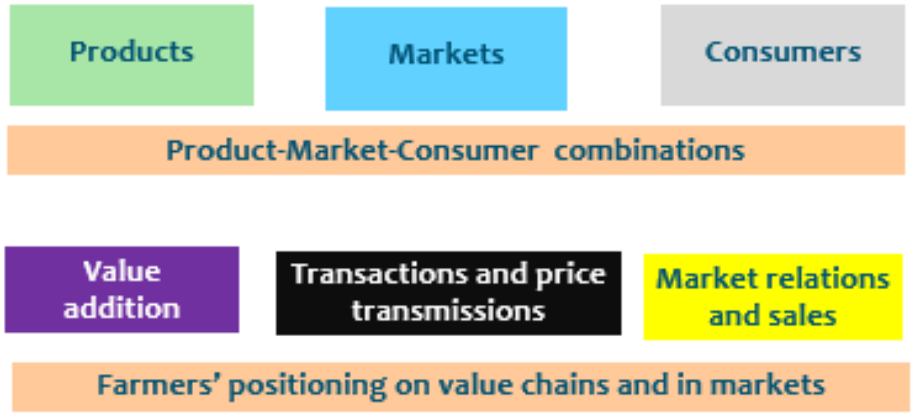
The mapping of a value chain thus follows the logic that:

1. along a value chain there are different actors;
2. who undertake certain value adding activities, and
3. who supply and source from each other via transactions and price transmissions.

Sub-sector and value chain analysis: six perspectives

We suggest six different perspectives to look at sub-sectors and value chains.

These perspectives help to look at the farmers' business case from different angles and to identify options for action.



The first three perspectives are:

1. **Products** – thinking about diversity of products and options for product development
2. **Markets** – thinking about different market locations
3. **Consumers:** thinking about consumer demand and profiles

These perspectives allow to identify different Product-Market-Consumer combinations. For more details, please refer to the manual on 'Product-Market-Consumer combinations' (guide and related do-it-yourself worksheet)

The next three perspectives allow to critically look at value chain operations and relations and to reflect on farmers' positioning in markets and along value chains:

4. **Value addition –** thinking about current and potential post-harvest value adding activities
5. **Transactions and price transmissions** –prices that are paid along the value chain
6. **Market relations**- current and potential market relations

For more details, please refer to the manual 'Farmers' positioning in markets and along value chains' (guide and related do-it-yourself worksheet

After the analyses with six different perspectives, farmers and facilitators are ready for sub-sector and value chain mapping and action planning.

As always in the FARE approach, the aim is to identify options for action. Preferably, analysis, mapping and action planning is done in close collaboration with farmers, their organisations and business partners. This can enhance their competitive intelligence.

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