Chapter: one

THE VALUE CHAIN APPROACH: Definition, Importance and Principles

Introduction

The vision of Ethiopia is to become a middle income agro-industrialized country in 2025. To achieve this, the agriculture sector must grow. However, Ethiopia's agriculture has low competitiveness both in the domestic and export markets and this must be addressed.

In an era of globalized trade and rapidly changing consumer preferences and behavior, every nation must take advantage of its strengths and opportunities in the global market while minimizing its weaknesses and threats.

Agricultural commodities present Ethiopia with the opportunities to reach the set target (middle income country by 2025) and reduce rural poverty. Agricultural production and marketing strongly depend upon knowledge, human capital and competitiveness in maintaining and expanding markets. This can be made possible when all the highly fragmented production and marketing relations are identified and linkages established. Hence, the need to adopt the value chain development approaches in our practical agricultural activities is not a choice. This will help all the players improve access to services, information and inputs; balance the skewed information and power distribution and build trust among value chain stakeholders. In addition, it will help to reduce the high transaction costs, reduce levels of wastage and assure products quality till it gets to the consumers. Finally it will create an environment for changing attitudes and give incentives for investing in necessary innovations and thus increase value addition and income at every step of the value chain.

1.1. Definition of Value Chain

Dear learner before we define what a value chain is, let's first define what commonly used terminology under this course are?

Commonly used Terminologies

Actor: a corporate person, a natural person or other entity, that is able to influence its direct surroundings. Actors are usually defined trough their input-output transformations and inter-actor transactions. The concept can be nested, i.e. a chain or network can also be considered as an actor within a larger network.

Chain: a number of actors who have a sequential exchange relationship to each other. Usually, goods flow is the guiding principle for defining what is considered to be a chain.

Exchange relationship: regular exchange of goods, money, information or relational signals, as part of the primary process of two actors involved. The unity of exchange is the transaction.

Value: the money worth of an asset or product. Early economists such as Adam Smith and David Ricardo suggested that the value of an asset or product depended upon the amount of labour needed to produce it, while later economists like William Jevons emphasized that the utility of a product to a consumer determined its value. Nowadays economists accept that both supply and demand factors are important in determining the value of a product, by establishing a market price for it.

Value chain can be defined as an alliance of enterprises collaborating vertically to achieve a more rewarding position in the marketplace. Through working together, suppliers (producers and processors) invest in the relationship with the retail or food service customer, to provide a better understanding of the consumers' needs. A successful value chain will strengthen this strategic relationship with the goal of helping the relationship become a valuable and integral asset. This asset provides a competitive advantage that is difficult for competitors to copy or substitute.

Add Value: Value should be added to the product at each link of the chain. Value does not necessarily include dollar value only. There could be value in information exchange, in building networks and in learning new processes. Examine what value you and your potential value chain partners add to the product. Identify any businesses in the chain that are not adding value and question if they need to be part of the value chain.

What Is a Value Chain?

The term '**Value Chain'** was used by Michael Porter in his book "Competitive Advantage: Creating and Sustaining superior Performance" (1985). "Value chain" refers to all the activities and services that bring a product (or a service) from conception to end use in a particular industry—from input supply to production, processing, wholesale and finally, retail. It is so called because value is being added to the product or service at each step.

By definition: a value chain comprises of interlinked value-adding activities that convert inputs into outputs which, in turn, add to the bottom line and help create competitive advantage. This means that businesses within the value chain are involved in handling and adding direct value or consuming the product and also the service network indirectly involved in the production (eg. quality control, ICT, financial partners (banks, insurance, and training and research).

A value chain is a business model that describes the full range of activities needed to create a product or service. For companies that produce goods, a value chain comprises the steps that involve bringing a product from conception to distribution, and everything in between—such as procuring raw materials, manufacturing functions, and marketing activities.

A company conducts a value-chain analysis by evaluating the detailed procedures involved in each step of its business. The purpose of value-chain analyses is to increase production efficiency so that a company may deliver maximum value for the least possible cost.

A value chain is a connected string of companies, groups and other players working together to satisfy market demands for a particular product or group of products.

A value chain links the steps a product takes from the farmer to the consumer. It includes research and development, input suppliers and finance. The farmer combines these resources with land, labor and capital to produce commodities.

1.2. Dimensions of Value Chain

The value chain concept has several dimensions. The first is its flow, also called its *input-output structure.* In this sense, a chain is a set of products and services linked together in a sequence of value-adding economic activities. A value chain has another, *less visible structure*. This is made up of the *flow of knowledge* and *expertise* necessary for the physical input-output structure to function. The flow of knowledge generally parallels the material flows, but its intensity may differ. For example, the knowledge inputs at a product's design stage may be much greater than the material inputs; production, on the other hand, needs large quantities of materials, but in many cases requires only standard or routine knowledge.

The second dimension of a value chain has to do with its *geographic spread*. Some chains are truly global, with activities taking place in many countries on different continents. Others are more limited, involving only a few locations in different parts of the world. A UK retailer may, for example, contract with an Ethiopia fabric supplier to deliver cloth to a garment producer in Sri Lanka. The finished goods will then be shipped directly to the UK retailer. It is also possible to identify national, regional, or local value chains. These operate in the same way as the global chains, but their geographic 'reach' is more limited.

The third dimension of the value chain is the *control* that different actors can exert over the activities making up the chain. The actors in a chain directly control their own activities and are directly or indirectly controlled by other actors. A retailer, for example, controls the way he sells, but may be limited (indirectly controlled) by the range of goods available from wholesalers and producers. A home worker may find that almost every aspect of her work is controlled by a distant retailer who has specified the design, quantity, and quality of the garments she is producing. The pattern of direct and indirect control in a value chain is called its *governance*.

1.3. Different Types of Value:

Most corporate initiatives are really about developing appreciation and awareness of customer needs and values, and then organizing the firm's activities around efficiently providing for those needs – quickly, accurately, and at minimum cost. This is because value tries to express how customer needs are satisfied through an exchange of products and/or services for some form of payment. The degree to which the needs that are met exceed the price paid in the exchange is one

objective way that value can be measured. That is why paying $1,000 for a gallon of water in the desert when dying of thirst might seem reasonable if there were no other alternatives.
A key distinction in defining value is whether the exchange that generates value is between firms – i.e., Business to Business (B2B) – or between a firm and a consumer – i.e., Business to Consumer (B2C).

There are three forms of value that occur in B2B commercial transactions:

1. Technical (Resource Value);
2. Organizational (Business Context); and
3. Personal (Career and Idiosyncratic).

Technical value - intrinsic to the resource being provided and occurs in virtually all exchanges. For the thirsty man, the water has a technical value regardless of the source or any other consideration. The water will have technical value regardless of some aspects such as: the type of cup used or even dirty or the man providing it is a criminal.

Organizational value- It is value built upon the context of the exchange, and may derive from a range of factors such as ethical standards, prestige, reliability, and association. Brand image may build organizational value, as well as company reputation. When at a fine dining establishment, the label on the water bottle generates value far in excess of the bottle's content.

Personal value is derived from the personal experiences and relationships involved in the exchange of resources and the benefits provided. While technical and organizational values accrue to the firms involved in a commercial exchange, personal value accrues to the individual. Manager motivation, preferences, feelings of comfort and trust create value for individuals that engage in trading relationships on behalf of firms, and can be extremely influential in the determination of successful exchange.

Measuring Value

What makes something desirable?

Things that make something desirable could be price, e.g. cheap or high value; Appearance, e.g. looks; Experience, e.g. taste; Ease of use, e.g. fresh-cut and washed; Availability, e.g. year round like Coca Cola. ***Above all consumers determine value.***

Things that make something desirable could be price (cheap or high value); Appearance (looks); Experience (taste); Ease of use (fresh-cut and washed); Availability (year round like Coca Cola). In all the attributes which make things desirable, consumer is the basis. In other words consumers are the basis to determine value.

Value to Customer involves branding (good feel, quality, image….), Product (quality, technical specification, usability…), service (availability, customization, friendliness…) and other factors. These will set what the consumers are willing to pay for that particular good or service.

Value to producer (Cost) involves costs for promotion (Advertisement…), operations (manufacturing, logistics,), Management (human resource, organization structure, finance…) and other factors. These all together set the cost of supplying a particular good or service.
Measuring the net value for both producers and consumers will give us consumer premium for consumers (difference between willingness to pay and actual product price) and profit for producers (difference between selling price and cost of production).

The diagram below illustrates what the different actors in chain value regarding a product or service provision. It also shows how the values develop along the chain.

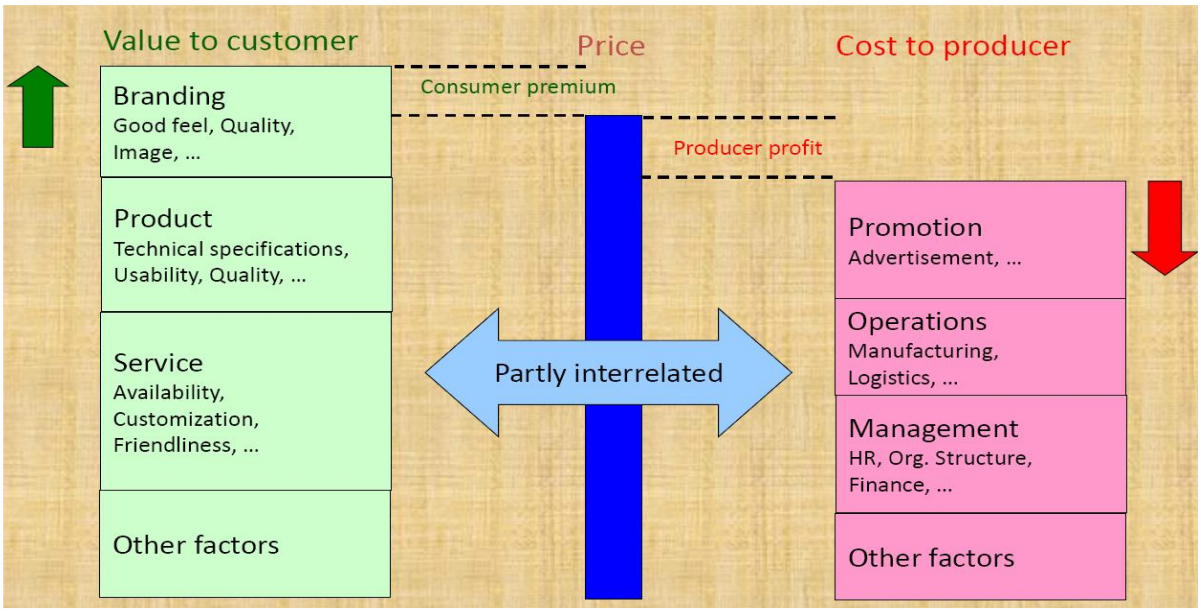
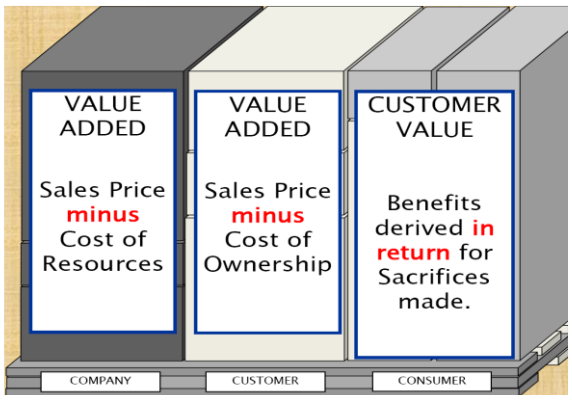


Figure 1: Measuring Value

In the diagram to measure value to customers, the value is increasing from mere product and service to branding. Similarly cost for producers adds as one moves from manufacturing to promotion activities to sell the product. There are series of activities undertaken by different actors at different levels in chain. In the concept of value chain, it is important to know what value added by each of these chain actors. So it is important to have concept to measure the value added at each level. The diagram below illustrates how the value added builds up along the chain (to chain actors).



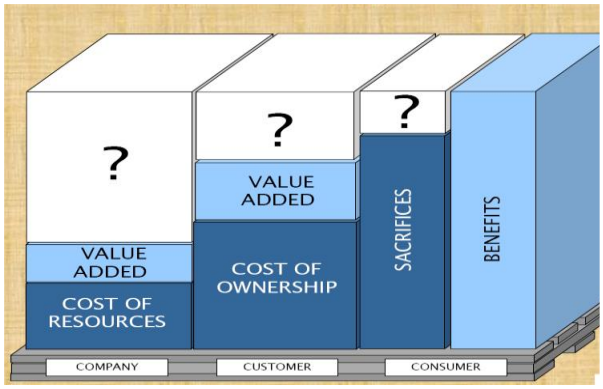


Figure 2: Measuring Value Added

Value added for a product is accruing to the company (producer), customer, and consumer in both diagrams indicated above. The value added at each level is the result of efforts by chain actors in all the processes to get the product to the end user. The value added to each chain actor can be determined as the difference between value of the product for current actor and value of the product for next chain actor. In the second diagram value added to each actor is clearly indicated. For instance the value added for various actors is given as follows:

- Company- sales minus cost of resources
- Customer- sales minus cost of ownership
- Consumer- benefits derived in return for sacrifices made

1.4. The Value Chain Concept

The value chain describes the full range of activities which are required to bring a product or service from conception, through the different phases of production (involving a combination of physical transformation and the input of various producer services), delivery to final consumers, and final disposal after use. Considered in its general form, it takes the shape as described in Figure 3.

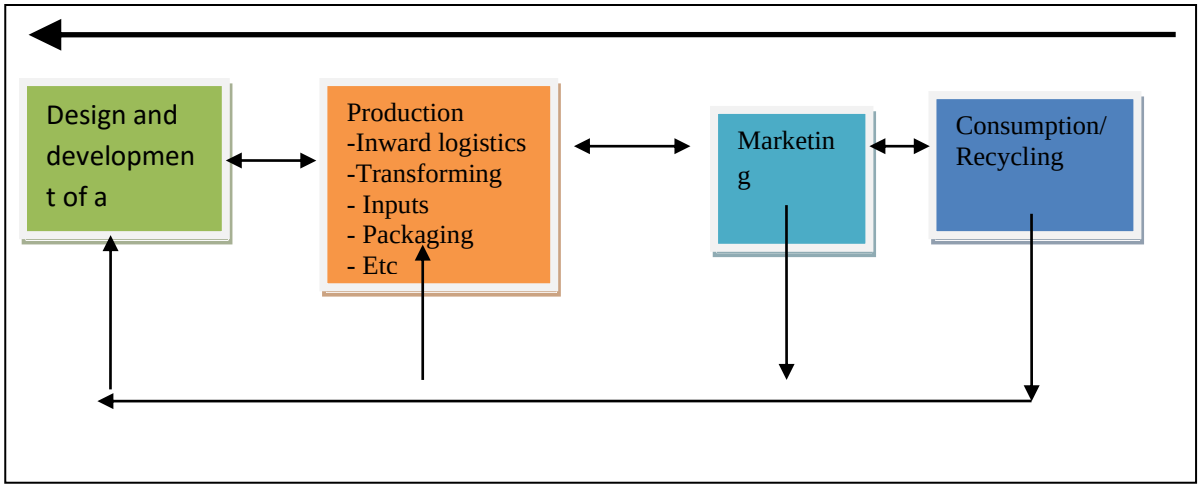


Figure 3: Four links in a simple value chain

As can be seen from this, production by itself is only one of a number of value added links. Moreover, there are ranges of activities within each link of the chain. Although often depicted as a vertical chain, intra-chain linkages are most often of a two-way nature – for example,

specialized design agencies not only influence the nature of the production process and marketing, but are in turn influenced by the constraints in these downstream links in the chain. In the real world, of course, value chains are much more complex than this. There tend to be many more links in the chain.

In addition to the various links in a value chain, typically intermediary producers in a particular value chain may feed into a number of different value chains. In some cases, these alternative value chains may absorb only a small share of their output; in other cases, there may be an equal spread of customers. But the share of sales at a particular point in time may not capture the full story – the dynamics of a particular market or technology may mean that a relatively small (or large) customer/supplier may become a relatively large (small) customer/supplier in the future. Furthermore the share of sales may obscure the crucial role that a particular supplier controlling a key core technology or input (which may be a relatively small part of its output) has on the rest of the value chain.

A value chain is a network of strategic alliances between independent companies that together manage the flow of goods and services along the entire value-added chain. “Strategic” implies that the partnership is entered into deliberately by groups of people who jointly undertake activities they could not undertake themselves. The result is “competitive intelligence,” and win-win strategy whereby information that could not be accessed independently is gathered and shared.

The idea of the value chain is based on the process view of organisations, the idea of seeing a manufacturing (or service) organisation as a system, made up of subsystems each with inputs, transformation processes and outputs. Inputs, transformation processes, and outputs involve the acquisition and consumption of resources - money, labour, materials, equipment, buildings, land administration and management. How value chain activities are carried out determines costs and affects profits. Most organisations engage in hundreds, even thousands, of activities in the process of converting inputs to outputs. [According to Porter (1985) these] activities can be classified generally as either primary or support activities that all businesses must undertake in some form.”

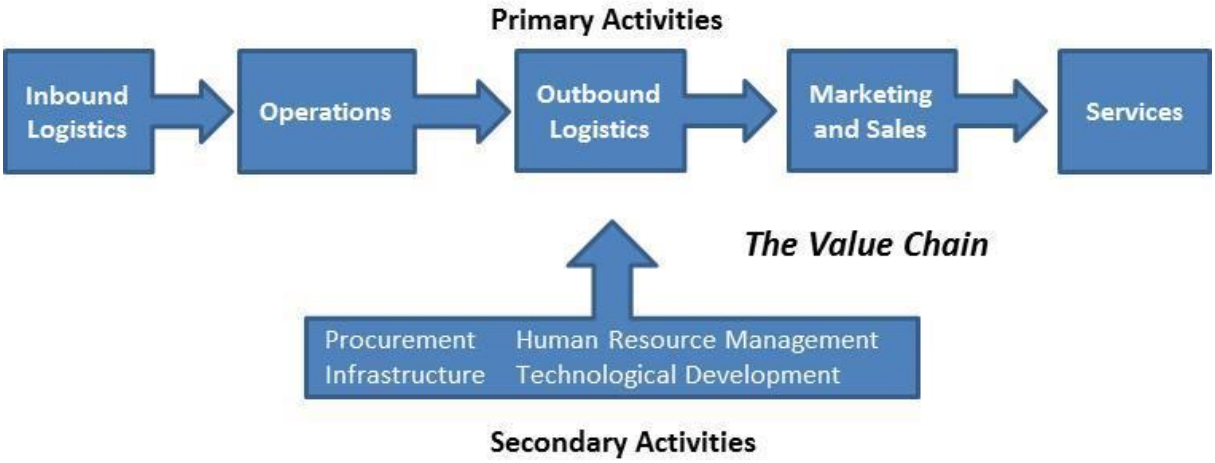
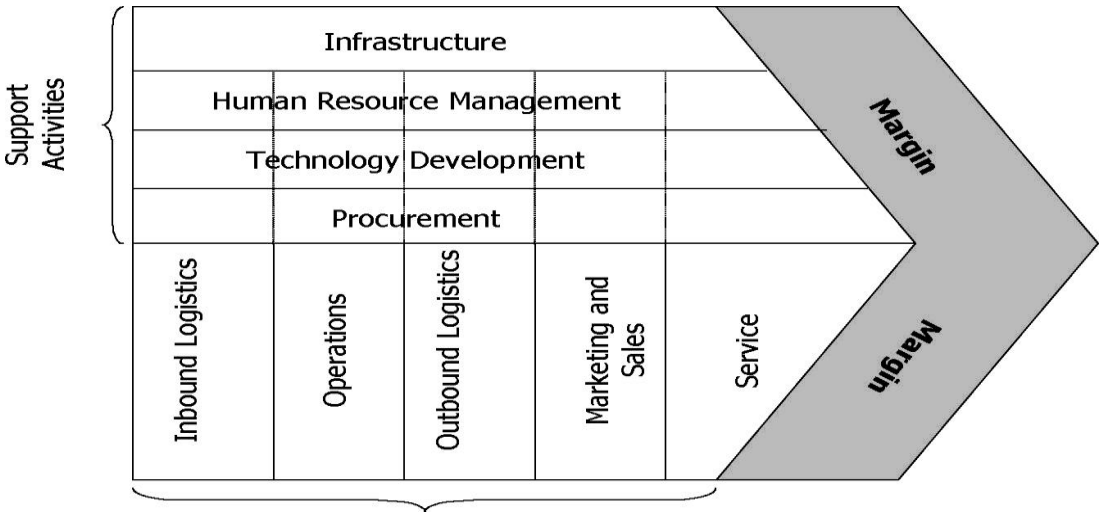


Figure 4: different activities in the value chain

Porter distinguishes between primary activities and support activities. Primary activities are directly concerned with the creation or delivery of a product or service. They can be grouped into five main areas: inbound logistics, operations, outbound logistics, marketing and sales, and service. Each of these primary activities is linked to support activities which help to improve their effectiveness or efficiency. There are four main areas of support activities: procurement, technology development (including R&D), human resource management, and infrastructure (systems for planning, finance, quality, information management etc.).

The basic model of Porters Value Chain is as follows:



Primary Activities

The term margin' implies that organizations realize a profit margin that depends on their ability to manage the linkages between all activities in the value chain. In other words, the organization is able to deliver a product / service for which the customer is willing to pay more than the sum of the costs of all activities in the value chain.

Value Chain Actors

A value chain is made up of a series of actors (or stakeholders) from input (e.g. seed) suppliers, producers and processors, to exporters and buyers engaged in the activities required to bring product from its conception to its end use (consumption). Value chain stage defines the various chain actors and their roles for the functioning of the entire chain. Accordingly, the various actors in the value chain can be grouped under three levels or stages based on the roles they play.

They are:

1. ***Value chain core actors***: This is chain of actors who directly deal with the products. **Activities of value chain main actors** regarding a specific product or group of products involves producing, processing, trade and owning the produces. Actors in a value chain may include input suppliers, producers, itinerant collectors (small and mobile traders who visit villages and rural markets), assembly traders (also called primary wholesalers who normally buy from farmers and other itinerant collectors and sell to wholesalers), wholesalers (who

deal with larger volumes than collectors and assemblers and often perform important storage functions), retailers (who distribute products to consumers), and processors (firms and individuals involved in the transformation of a product).

2. ***Value chain supporters***: these are services providing various actors who never directly deal with the product, but whose services add value to the product. Closely related to the **concept of value chains** is the concept **of business development services** or **value chain supporters**. These are services that play supporting role to enhance the operation of the different stages of the value chain and the chain as a whole. In order for farmers to engage effectively in markets, they need to develop marketing skills and receive support from service providers who have better understanding of the markets, whether domestic or international. Local business support services are, therefore, essential for the development and efficient performance of value chains. **The business development services** can be grouped into infrastructural services; production and storage services; marketing and business services; and financial services.

Basic infrastructural services include market place development, roads and transportation, communications, energy supply, and water supply.

Production and storage services in value chain include input supply, genetic and production material from research, farm machinery services and supply, extension services, weather forecast and storage infrastructure.

Marketing and business support services include market information services, market intelligence which tells a company about its environment in the market (Supply and demand for its products, drivers that influence demand, who the buyers and suppliers are, overall economic outlook for the product), technical and business training services, facilitation of linkages of producers with buyers, organization and support for collective marketing.

Financial services include credit and saving services, banking services, risk insurance services, and futures markets.

Despite these facts, roles of the business development services have mostly been neglected. The neglect was a result of the mistaken assumption that profitable business development services will emerge as value chains develop or that the public will provide business development services where they are needed and when markets are insufficient to provide profitable niches for competitive services to develop.

3. ***Value chain influencers (enabling environment)***: These are the third group of chain actors. These include the regulatory framework, policies, etc. Specific policy and regulatory service elements influencing value chain performance include land tenure security, market and trade regulations, investment incentives, legal services, and taxation.

Value chain approach

The Value Chain Approach is a means for examining the development of competitive advantage which is achieved when an organization links its activities in its value chain more cheaply or more expertly than its competitors. The chain consists of a series of activities that create and build value.

1.5. Origin and Evolution the Value Chain Approach

A) Origin and Evolution of the value chain approach

Michael Porter of the Harvard Business School established the concept of value chain in 1980. This was during an era of intense competition where strategic management became important for the survival of businesses. Porter saw the entire production system as a series of activities with value addition to each activity resulting in the improvement of quality and the reduction of cost.

The value chain was originally defined as how a business receives raw materials as input, adds value to the raw materials through various processes in the middle of the chain and sells the finished products to consumers. Example is coffee that finds its way as raw beans from the field,

through brokers who add value by finding buyers, past warehouse that add value by preventing spoilage, into processing plants that add flavorings and packaging, and on to the wholesalers who also add value by reducing distribution costs, and finally to the grocery store, which adds value through the presentation of the product on the shelf. Throughout the chain, value is added.

Mid 1980s	**1990s**	**2002/2003**	**Mid-2005s**
Porter Develops "cluster Approach"	Policies/ Programs for SMEs Clusters in DCs	Concept Development for Value Chain for Value Chain Development in DCs	Implementation of Value chain Development Programs in DCs

Figure 4: Evolution of Value Chain

1.6. Underlying Assumptions of Value Chain Approach

There are a number of basic assumptions underpinning the Value Chain Approach. These include:

- Clearly stated policy statement indicating the expected role of agriculture in the socio-economic development of the country.
- Understanding of the gap between agricultural potential and actual performance.
- An assessment of the strength and weaknesses, opportunities and threats (SWOT analysis) in the agricultural sector.
- Clear identification of the various value chains and market opportunities
- All chain actors and facilitators understand and assume their roles with dedication and purpose.
- Certain actors or change agents are willing and able to motivate others to follow.
- Operators/actors act in their individual and collective interest and assume responsibility from the start.
- All actors benefit from upgrading
- Both positive and negative experiences are taken as basis for progress.
- Timely availability of critical information

1.7. Importance of Value chain

There is public interest in developing value chains since they involve activities not just of smallholder farmers, but also of agribusinesses that must be promoted because of their role in economic development. Economic growth—through the mobilization of industry participants, the value chain approach can be used to increase the competitiveness of industries and the sustainability of donor interventions in support of economic growth. This can be effected by:

- Increases market access for smallholder farmers and agribusinesses.
- Increases profitability of optimal-sized investments in agro-processing as markets expand.
- Keeps jobs and agro-processing industries.
- Ensures dynamic efficiency of agricultural commodities and high-value exports.
- Financial services—value chain analysis can identify mechanisms for financial service delivery embedded in market transactions and assist lending institutions with expanding their definition of creditworthiness.
- Natural resources management—the value chain approach can be used to strengthen the competitiveness of natural resource-based industries and to develop competitiveness strategies that are beneficial both to the environment and to local business development.
- Health—value chain tools can be used to mobilize industry participants to identify and address health-related constraints to competitiveness and can be used to increase the effectiveness of service delivery in the health industry itself.
- Conflict mitigation and management—value chain analysis can prioritize industry constraints and opportunities in post-conflict situations and value chain tools can bring together diverse, even antagonistic, stakeholders to work towards a common economic vision.

The importance of the value chain to the various actors are:

Enables the Producer to do the following:

i. Bring about product differentiation
ii. Retain his/her customers
iii. Improve the quality of his/her produce
iv. Increase quantity of his/her produce
v. Produce at minimum cost
vi. Stay competitive in the market
vii. Increase his/her income
viii. Remain sustainable (employed)
ix. Develop customer and consumer confidence
x. Ability to project market supply

Enables the Processor to ensure the following:

i. Reliable supply of raw materials
ii. Quality supply of raw materials.
iii. Optimum supply of raw materials (Just-In-Time)
iv. Production of finished products
v. Reduced cost of raw materials
vi. Reliable employment opportunities
vii. Reliable supply of finished goods

Enables the Consumer to enjoy the following:

i. Quality products assured
ii. All year availability of products
iii. Quality products at reasonable prices
iv. Wider range of goods to choose from
v. Healthier life

1.8.Characteristics of Value Chain Approach

A value chain is characterized by:

- ✓ Production line consists of series of chains
- ✓ Each chain consists of activities
- ✓ Value added to an activity affects all other activities (link)

- ✓ Works when there is free and timely flow of information among the operators/actors
- ✓ Each of the operators of the activities monitors and evaluates along the chain
- ✓ All the operator/actors benefit when value is added
- ✓ A sequence of production processes (also known as linkages) from the provision of specific inputs for production, transformation, marketing and to the final consumption.
- ✓ The quality of linkages and coordination between producers, processors, traders and distributors of a particular product development determine the success of the value chain.

Value chain operators understand that they can access markets if they succeed to supply competitive products in a joint effort. Thus the actors, (input suppliers, farmers, brokers and processors) have to apply appropriate production and handling technologies, become business-oriented and understand each other as partners in the value chain for success.

Value chain is competitive and its competitiveness depends on trust, cooperation and communication among actors. The performance of every single partner in the chain determines the strength of the entire value chain. The weakest link in the value chain also determines the competitiveness of the final product. Certain actors or change agents are willing and able to motivate others to follow

Operators act in their individual and collective interest and assume responsibility from the start.

- ✓ All actors benefit from upgrading
- ✓ Both positive and negative experiences are taken as a basis for progress
- ✓ Timely availability of critical information.

1.9.Traditional Marketing Systems Versus Value Chain Marketing System

Traditional Marketing Systems

In the traditional marketing system, farmers produce commodities that are "pushed" into the market place. Farmers are generally isolated from a majority of end-consumer and have little control over input costs or process received for their goods. The primary exception is where local

farmers sell produce in local markets and where there is a direct link from farmer to consumer. In most traditional selling systems formers/producers tend to receive minimal profit. Any integration up or down the value chain can help to increase the profit.

In this marketing system, marketing is market “Push”. This tends to be based on independent transactions at each step, or between each node. Products may often be sold into a crowded and competitive market. The farmers are largely isolated from the consumer, and from the demands and preferences of consumers

Research and Development is focused on production and on reducing costs of production, and may not take account of other steps, links, or dependencies in the chain (e.g. environmental or social costs).

Value Chain Marketing Systems

In a Value Chain marketing system, farmers are linked to the needs of consumers, working closely with suppliers and processors to produce the specific goods required by consumers. Similarly, through flows of information and products, consumers are linked to the needs of farmers. Using this approach, and through continuous innovation and feedback between different stages along the value chain, the farmer's market power and profitability can be enhanced.

Rather than focusing profits on one or two links, players at all levels of the value chain will benefit. Well functioning value chains are said to be more efficient in bringing products to consumers and therefore all actors, including small-scale producers and poor consumers, should benefit from value chain development.

Here the system is market “Pull”. This is based on integrated transactions and information. Consumers purchase products that are produced according to their preferences. The farmer becomes the core link in producing the products that the consumers desire.

Research and development, whilst including techniques targeted at increased production, is also focused on consumer needs, and attempts to take account of all of the links, and dependencies in the value chain, e.g. processing, environmental and social costs or considerations, as well factors such as health impacts, education and learning.

Communication is in both directions. It is important that both consumers and processors are made aware of factors limiting production, just as much as farmers and other producers are made aware of consumer requirements.

In order to generate improvements in the supply or quality of any product, one needs to consider all aspects of the range of steps in the chain of events from production to consumption, including both opportunities and constraints, and the demand and supply of necessary products and services.

An integral component of the value chain is the agricultural supply chain, and in the literature these terms value chain and supply chain may at times be used interchangeably, or are at least closely related. However, there is difference in the two concepts. Let's learn what the difference is between value chain and supply chain.

1.10. Value Chain Versus Supply Chain

All actors with direct or indirect involvement in the production and selling of products like tomato, meat, milk etc. are part of the value chain. It includes the end-consumers and the organizations handling the waste (by-products). By definition, a value/supply chain comprises of interlinked value-adding activities that convert inputs into outputs which, in turn, add to the bottom line and help create competitive advantage.

Value Chain

A value chain is the full range of activities required to bring a product from conception, through the different phases of production and transformation. Flow of seed to farmers and grain or tubers to the market occurs along the chains. These can be referred to as value chains because as the product moves from chain actor to chain actor e.g. from producer to intermediary to consumer it gains value. So, the starting point of the value chains is market intelligence and they are **demand driven.** Such issues are addressed by asking questions like what are the needs in the market (consumer, export market, major clients like retailer or food industry).

Value chain players organize/align the work among themselves based on market signals and based on their capabilities. They are always on the look-out to build new and complimentary capabilities (e.g., aggregators and traders focus to build primary processing, packaging and other

value added capabilities). This implies that value chains can be competitive only when they innovate and not by maintaining the status-quo. With innovation a larger pie is created which provides greater incentives to share which in turn fosters further innovation (as a result new and higher value products would come out of the chain). This will result in innovatively processed products such as fresh fruits juices, smoothies… coming out of the fresh produce value chain.

The innovation drives the chain facilitates. There is a need to deliver quality (as desired by the market), continuous improvement and setting and upgrading the standards continuously. The operational elements like forecasting, inventory, production planning and everything else are still very important. However, they are designed based on market-demand and not on capacities. Under specific circumstances, depending on the type of product and available seasons, an optimal push-pull combination is used (e.g., raw material productions could be push-based because of seasonality, but value addition better be pull based). A competitive value chain identifies and works towards achieving the right trade-offs in push/pull based production plans. The value chains survive and prosper on work alignment and incentive alignment. In essence, the value chains are by definition innovative, value & market-driven and follow an optimal push-pull mechanism.

In summary value chain:

- Works aligned with consumers or end users- consumer and demand driven
- Value chains are concerned with what the market will pay for- market driven. Hence, the focus is to make what you can sell profitably
- The main objectives of value chain management are to deliver quality as desired by the customers/consumers
- Focus is on Pie-Growing, Coordination, Continuous Improvement & Innovation
- A chain in which all partners create added value and share value

Supply Chain

Supply Chain Management (SCM) emerged in the 1980s as a new, integrative philosophy to manage the total flow of goods from suppliers to the ultimate user and evolved to consider a broad integration of business processes along the chain of supply (Martha et.al. 1997).Supply chain is a term now commonly used internationally – to encompass every effort involved in

producing and delivering a final product or service, from the supplier's supplier to the customer's customer. As the name implies, the primary focus in supply chains is on the costs and efficiencies of supply, and the flow of materials from their various sources to their final destinations.

To differentiate concept of supply chain from that value chain, let's see some of the drivers for the development of the so called modern supply chains. These drivers underlying the supply chain development include:

- Increasing trend in the number of consumers residing in the cities due to rural-urban migration. This Rural-Urban migration is/will create a need for effective and efficient food supply chains. Therefore, feeding cities is/will be a huge challenge.
- The need for the reduction of import and to achieve a higher level of self-sufficiency at a national level.
- The growing middle class population with more money to spend. There is a direct link between more money to spend and the need for more animal proteins, higher added value product's like juices, ready to eat meals, one stop shopping (retail) etc. This type of consumption patterns demands not only a higher added value but also a higher level of quality.
- Growing population- To feed the increasing population the first step is to improve productions and also to reduce the post-harvest losses especially in fresh products. This requires focusing on logistics (transport and warehousing) and information (what is available, where is it available and the information on volumes and transparency in pricing along the food chain

Such analysis helps us to set the departing point of supply chain from value chain. The supply chain concepts are **supply driven** and are not completely **value/demand driven**. In a supply driven approach every company looks to maximize its capacity utilization and pass the products to the next downstream player within the chain instead of focusing on the main objective which is to maximize the satisfaction of the end user. The core operational elements like forecasting, inventory, production planning are designed with an objective to maximize capacity utilization. Such approach can lead to huge inventories along the entire chain, higher risk of obsolescence

(outdated products) and all other challenges associated with inventories. The risk of post-harvest losses is also quite huge in this case.

Mostly, the supply chain approach doesn't take into consideration all the businesses, processes, incentives of the actors etc. from product origination to final destination. Hence, it is very likely that some/many players do not add direct/real value to the product or core activities of the product/service chain. Nevertheless, they may add costs and create non-transparency for the chain actors.

In supply driven systems the focus is rarely on quality delivery and quality improvement but mostly on capacity utilization within a given quality specification range (lower end).The focus is always on pie-sharing rather than on pie-growing. Almost always the incentives are not aligned fairly. For instance in most cases the farmer who puts in the most effort for the longest period of time gets the least return. In contrast the middlemen take a greater share of the pie with least efforts for a shorter time period. In essence, the supply chains are push based systems. By definition the organizations within the chain work to maintain the status-quo rather than to innovate.

On the other hand when we talk about supply chains, the focus is on a downstream flow of goods and supplies from the source to the customer. Value flows the other way. The customer is the source of value, and value flows from the customer, in the form of demand, to the supplier. That flow of demand, sometimes referred to as a "demand chain", is manifested in the flows of orders and cash that parallel the flow of value. Hence values flow in the opposite direction to the flow of supply. Thus, the primary difference between a supply chain and a value chain is a fundamental shift in focus from the supply base to the customer need. **Supply chains** focus upstream on integrating supplier and producer processes, improving efficiency and reducing waste, while **value chains** focus downstream, on creating value in the eyes of the customer. The supply chain:

- Supply driven
- Supply chains are concerned with what it costs and how best we can utilize our capacity profitably (individual business profit).
- The main objectives of supply chain management are to maximize capacity utilization

- Focus is on Pie-Sharing, Capacity and Profit optimization, maintaining status-quo

Hence, creating a profitable value chain therefore requires alignment between what the customer wants, i.e., the demand chain, and what is produced via the supply chain. So, supply chains focus primarily on **reducing costs** and **attaining operational excellence**, while value chains focus more on **innovation in product development** and **marketing.**

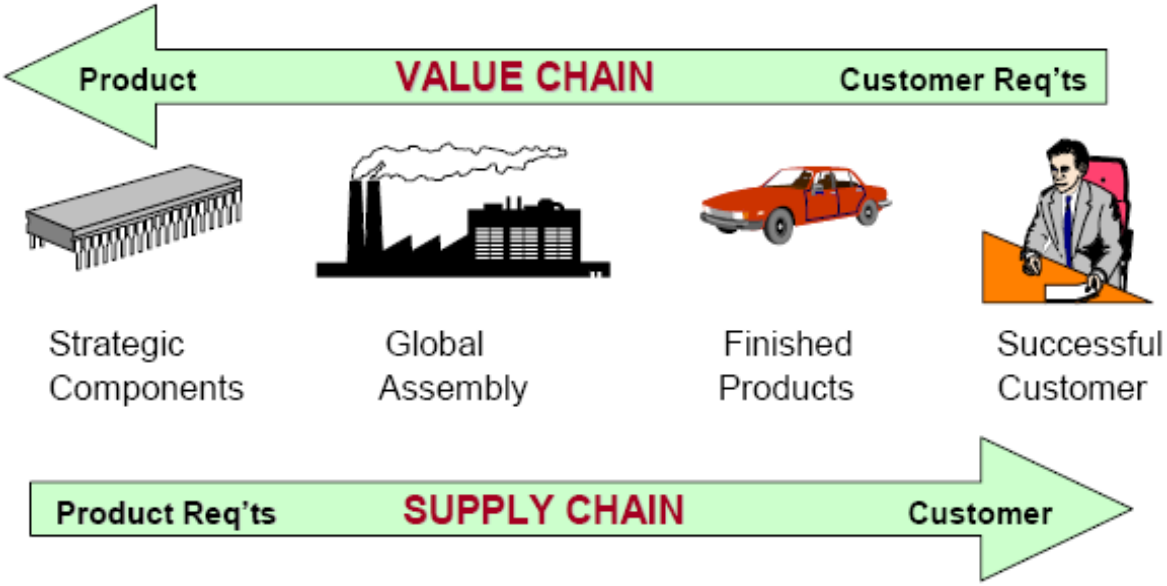
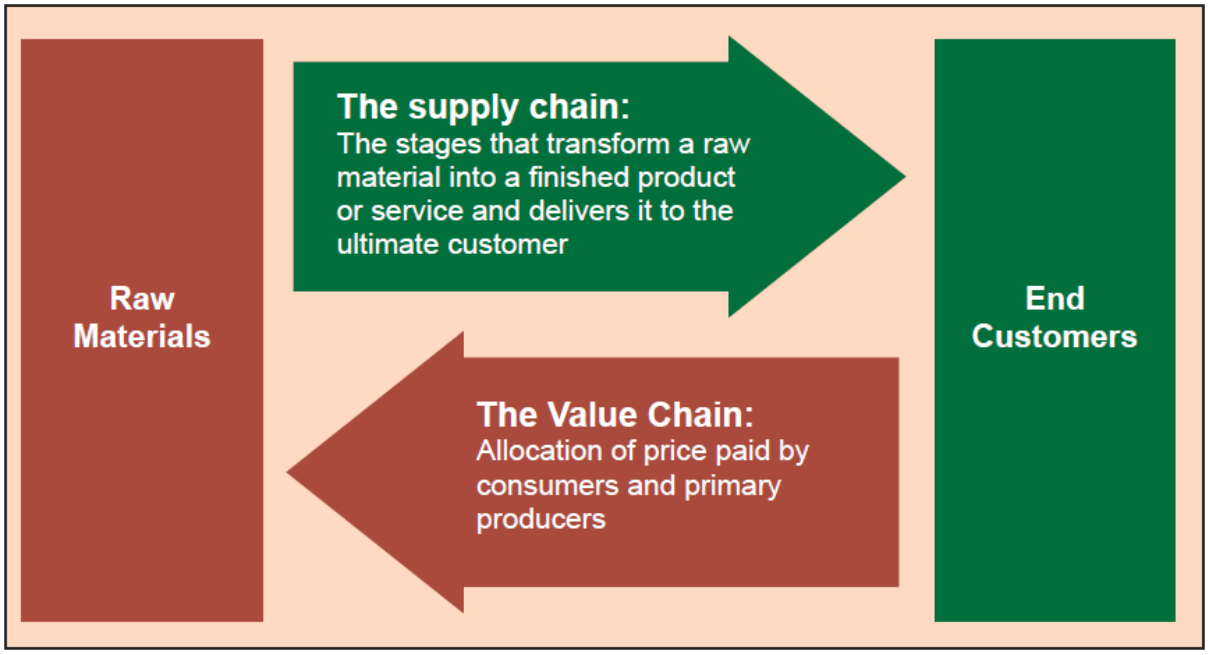


Figure 5: A comparison of Value Chain with Supply Chain

Summary;

There's a temptation to use "value chain" and "supply chain" interchangeably, but there is a difference in the concepts that is significant. The supply chain model – which came first – focuses on activities that get raw materials and subassemblies into a manufacturing operation smoothly and economically. The value-chain notion has a different focus and a larger scope. A supply chain is simply a transfer of a commodity from one stakeholder to another in a chained manner. The value chain is the value addition at different stages of transfer. In different stages of value chain, different stakeholders add value to the product to increase the end product value. In other words, a value chain analysis looks at every step from raw materials to the eventual end-user – right down to disposing of the packaging after use. The goal is to deliver maximum value to the end user for the least possible total cost. That makes supply-chain management a subset of the value-chain analysis



1.11. The Value Chain System

The value chain system consists of four levels i.e. **micro** (business), **meso** (institutional), **macro** levels (framework conditions) and **meta** level (building on encouraging attitudes), which foster cooperation among all stakeholders.

Market-oriented production and logistics at the level of private businesses (micro level): value chain coordination, hygiene management along the value chain, design, strategic management and marketing, continuity and reliability of supplies, product innovation etc.

Business-oriented services at the level of public and private institutions (meso level): consultancy and training services, financial services, marketing information, food control, laboratory services, research and development etc.

Business-oriented legislative and administrative framework conditions (macro level): food law harmonized to international standards, streamlined food control systems, liberalized laboratory services etc.

Effective public-private dialogue (meta level): adaptation to market-economic norms and business culture granting small and micro enterprises the possibility to lobby for sub-sector interests

Chapter: 2. Value Chain Analysis

2.1. Basic Concepts In Agricultural Value Chain Analysis

What is a Value Chain Analysis?

The value chain also known as Porter's Value Chain Analysis is a business management concept that was developed by Michael Porter. In his book *Competitive Advantage* (1985), Michael Porter explains Value Chain Analysis; that a value chain is a collection of activities that are performed by a company to create value for its customers. **Value Creation** creates added value which leads to competitive advantage. Ultimately, added value also creates a higher profitability for an organization.

Value chain analysis involves breaking a chain into its constituent parts in order to better understand its structure and functioning. Thus, the analysis consists of identifying chain actors at each stage and discerning their functions and relationships; determining the chain governance, or leadership, to facilitate chain formation and strengthening; and identifying value adding activities in the chain and assigning costs and added value to each of those activities. The flows of goods, information and finance through the various stages of the chain are evaluated in order to detect problems or identify opportunities to improve the contribution of specific actors and the overall performance of the chain.

2.2. Porter's Value Chain Analysis

The strength of the Porter's Value Chain Analysis is its approach. The Porter's Value Chain Analysis focuses on the systems and activities with customers as the central principle rather than on departments and accounting expense categories. This system links systems and activities to each other and demonstrates what effect this has on costs and profit. Consequently, it (Value Chain Analysis) makes clear where the sources of value and loss amounts can be found in the organization.

The Value Chain activities

Porter's Value Chain Analysis consists of a number of activities, namely **primary activities** and **support activities.** Primary activities have an immediate effect on the production, maintenance, sales and support of the products or services to be supplied. These activities consist of the following elements:

Inbound Logistics

These are all processes that are involved in the receiving, storing, and internal distribution of the raw materials or basic ingredients of a product or service. The relationship with the suppliers is essential to the creation of value in this matter.

Production

These are all the activities (for example production floor or production line) that convert inputs of products or services into semi-finished or finished products. Operational systems are the guiding principle for the creation of value.

Outbound logistics

These are all activities that are related to delivering the products and services to the customer. These include, for instance, storage, distribution (systems) and transport.

Marketing and Sales

These are all processes related to putting the products and services in the markets including managing and generating customer relationships. The guiding principles are setting oneself apart from the competition and creating advantages for the customer.

Service

This includes all activities that maintain the value of the products or service to customers as soon as a relationship has developed based on the procurement of services and products.

Support activities of the Value Chain Analysis

Support activities within the Porter's Value Chain Analysis assist the primary activities and they form the basis of any organization. In the figure dotted lines represent linkages between a support activity and a primary activity. A support activity such as human resource management for example is of importance within the primary activity operation but also supports other activities such as service and outbound logistics.

Firm infrastructure

This concerns the support activities within the organization that enable the organization to maintain its daily operations. Line management, administrative handling, financial management are examples of activities that create value for the organization.

Human resource management

This includes the support activities in which the development of the workforce within an organization is the key element. Examples of activities are recruiting staff, training and coaching of staff and compensating and retaining staff.

Technology development

These activities relate to the development of the products and services of the organization, both internally and externally. Examples are IT, technological innovations and improvements and the development of new products based on new technologies. These activities create value using innovation and optimization.

Procurement

How a company obtains raw materials?

These are all the support activities related to procurement to service the customer from the organization. Examples of activities are entering into and managing relationships with suppliers, negotiating to arrive at the best prices, making product purchase agreements with suppliers and

outsourcing agreements. Organizations use primary and support activities as building blocks to create valuable products, services and distinctiveness.

2.3. Purposes of value chain analysis

Value chain analysis is conducted for a variety of purposes. The primary purpose of value chain analysis, however, is to understand the reasons for inefficiencies in the chain, and identify potential leverage points for improving the performance of the chain, using both qualitative and quantitative approaches. Value chain analysis is a useful analytical tool that helps understand overall trends of industrial reorganization and identify change agents and leverage points for policy and technical interventions. It is increasingly used by donors and development assistance agencies to better target their support and investments in various areas such as trade capacity, enterprise competitiveness, income distribution and equity among value chain participants.

By going beyond the traditional narrow focus on production, value chain analysis scrutinizes interactions and synergies among actors and between them and the business and policy environment. Thus, it overcomes several important limitations of traditional sector assessments which tend to ignore the dynamic linkages with and among productive activities that occur outside the particular sector under assessment or involve informal operations.

Value chain analysis also reveals the dynamic flow of economic, organizational and coercive activities involving actors within different sectors. It shows that power relations are crucial to understanding how entry barriers are created, and how gain and risks are distributed. It analyses competitiveness in a global perspective. By revealing strengths and weaknesses, value chain analysis helps participating actors to develop a shared vision of how the chain should perform and to identify collaborative relationships which will allow them to keep improving chain performance. The latter outcome is especially relevant in the case of new manufacturers – including poor producers and poor countries –that are seeking to enter global markets in ways that can ensure sustainable income growth.

Value chain analyses are conducted through a combination of qualitative and quantitative methods, featuring a further combination of primary survey, focus group work, participatory rapid appraisals (PRAs), informal interviews, and secondary data sourcing. The information is

useful by itself to understand the linkages and structure of the value chain and serves as the basis for identifying many of the key constraints and policy issues that require further exposition.

Agricultural value chain analysis can be conducted for the purposes:

- Understand how an agricultural value chain is organized (structure), operates (conduct) and performs (performance). Performance analysis should concern not only the current performance of the value chain, but also likely future performances, as well.
- identify leverage interventions to improve the performance of the value chain
- analyze agriculture–industry linkages
- analyze income distribution
- analyze employment issues
- assess economic and social impacts of interventions
- analyze environmental impacts of interventions
- guide collective action for marketing
- guide research priority setting
- conduct policy inventory and analysis

2.4. Steps in Value Chain Analysis

Value chain analysis is a process that requires four interconnected actions: data collection and research, value chain mapping, analysis of opportunities and constraints, and vetting of findings with stakeholders and recommendations for future actions. These four actions are not necessarily sequential and can be carried out simultaneously.

The value chain team collects data and information through secondary and primary sources by way of research and interviews. Mapping helps to organize the data, and highlights the market segments, participants/actors, their functions and linkages. The collected data is analyzed using the value chain framework to reveal constraints within the chain that prevent or limit the exploitation of end market opportunities. The resulting analysis of opportunities and constraints should be vetted with stakeholders through events such as workshops, focus groups or "reporting-out" days. The steps are explained below.

Step One: Data Collection

Good value chain analysis begins with good data collection, from the initial desk research to the targeted interviews. The value chain framework—that is, the structural and dynamic factors affecting the chain—provides an effective way to organize the data, prioritize opportunities and plan interventions.

The desk research consists of a rapid examination of readily available material. The aim is to familiarize the team with the industry, its market and the business environment in which it operates, as well as to identify sources for additional information. Information such as statistics on exports/imports, consumption reports, global trade figures, etc., can be obtained through the Internet, phone calls and documents from trade, commerce and industry ministries, specialized industry journals, and professional and trade association newsletters. Once the desk research is conducted, an initial value chain map can be drafted for refinement during the primary research phase.

Interviews are conducted with 1) firms and individuals from all functional levels of the chain, and 2) individuals outside the value chain such as writers, journalists or economists. In addition to providing information about the movement of product and the distribution of benefits, the interviews should inform on value chain actors' current capacity to learn; how information is exchanged among participants; from where they learn about new production techniques, new markets and market trends; and the extent of trust that exists among actors. Interviews can help to identify where chain participants see opportunities for and constraints to upgrading. Missing or inadequate provision of services necessary to move the value chain to the next level of competitiveness can be identified locally, regionally or nationally.

In addition to individual interviews, focus group discussions are a useful way to explore concepts, generate ideas, determine differences in opinion between stakeholder groups and triangulate with other data collection methods. Guided discussion better captures the social interaction and spontaneous processes that inform decision making, which is often lost in structured interviews.

The qualitative data gathered by these methods will reveal dynamic factors of the value chain such as trends, incentives and relationships. To complement this, *quantitative* analysis of the chain is necessary to provide a picture of the current situation in terms of the distribution of

value-added, profitability, productivity, production capacity and benchmarking against competitors. Analyzing these factors highlights inefficiencies and areas for reducing cost.

Step Two: Value Chain Mapping

Value chain mapping is the process of developing a visual depiction of the basic structure of the value chain. A value chain map illustrates the way the product flows from raw material to end markets and presents how the industry functions. Value chain map is made up of three inter-linked components. These are value chain actors, enabling environment (infrastructure, policies, institutions, and processes that shape the market environment), service providers (the business or extension services that support the value chains' operations).

It is a compressed visual diagram of the data collected at different stages of the value chain analysis and supports the narrative description of the chain.

The importance of separating out these various functions is that it draws attention away from an exclusive focus on physical transformation.

Some thought about the linkages between activities: These linkages are crucial for corporate success. The linkages manifested through flows of information, goods and services, as well as systems and processes for adjusting activities. A certain commodity value chain can be mapped as:

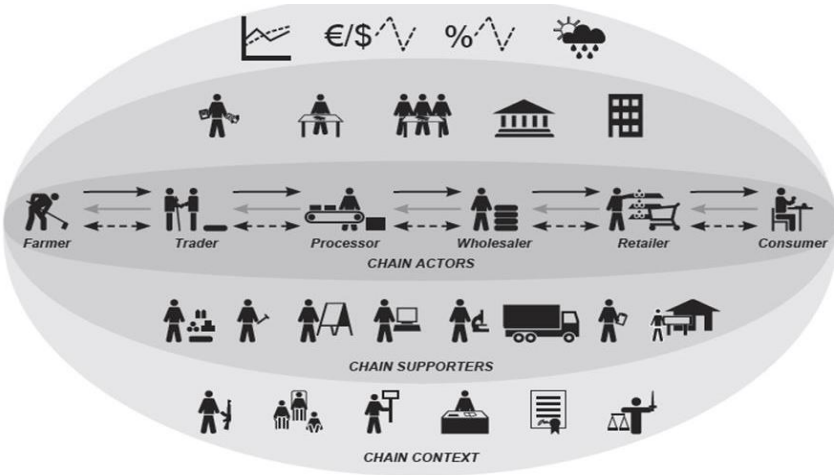


Figure 6: A comprehensive value chain map

The purpose of a visual tool in the analysis process is to develop a shared understanding among value chain stakeholders of the current situation of the industry. The mapping exercise provides an opportunity for multi-stakeholder discussions to reveal opportunities and bottlenecks to be addressed in subsequent stages of the chain development. Maps are also used to identify information gaps that require further research.

Value chain mapping undertakes a SWOT analysis (i.e. of the Strengths, Weaknesses, Opportunities and Threats) of all institutions that will be involved in development of that value chain product. This helps bring the capacity building needs of those institutions. This is essential for improving their performance or ability to deliver.

Value chain mapping also describes the existing political, legal and administrative framework conditions in the community and the country as a whole. This helps identify any changes required in order to get the product to be competitive or successful in markets.

It is obvious from all the reasons enumerated above that a value chain map cannot be an end in itself. It is basically an activity or exercise aimed at gathering information on the business realities of the product of interest. This will form a basis for upgrading and designing appropriate promotional strategies that will make the value chain viable.

A major goal of value chain mapping is laying foundation for design of a sound and viable intervention strategy for the targeted product. This is achieved through:

- An analysis of the functions of that value chain e.g. management, marketing, production, processing etc.
- Identifying all operators that play a role in the value chain e.g. input suppliers, producers, processors, consumers etc.
- Identification and assessment of the effectiveness of all organizations that support the chain, at one point or other (e.g. their name, services provided, location etc.).

Of particular importance in this exercise is the need to create awareness among all stakeholders in the chain about just how interdependent they are. If any of them is to achieve economic or

financial success, there is a need to see each other as partners or collaborators, rather than competitors who have to be pushed aside. Consequently, any role or responsibility held or assigned to a stakeholder is crucial or important for the overall performance, competitiveness and success of the value chain. At any stage of the chain, any constraint or bottleneck likely to impede its progress should be identified and possible solutions suggested.

Finally, in developing a value chain, it needs to be kept in mind that there is **no one way** of mapping a value chain. Stakeholders need to be encouraged to experiment and adjust their methodology as they go along; indeed they are encouraged to create their own methodology for achieving success, if feasible.

We shall now go on to consider the tasks involved in mapping a value chain for a commodity.

Tasks involved in value chain mapping

In mapping a value chain, several functions need to be performed at various stages. Some of these functions are to determine:

- Activities to be performed at various stages e.g. processing, processing
- Operators who are to perform these functions (i.e. at the micro, meso and macro levels)
- Which operators have linkages to each other?
- Challenges associated with specific value chain functions
- Support services and service providers (both in the private and public sectors)
- Capabilities, strengths and weaknesses of various service providers
- Capacity building and organizational needs of the various service providers.

Operators and their Functions

In a value chain mapping, operators and their functions are identified in the diagram below:

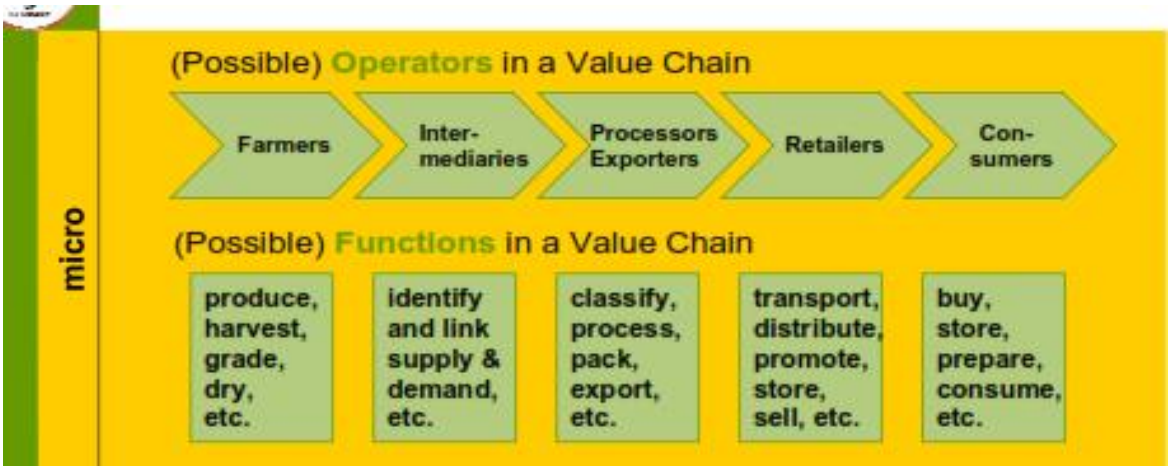


Figure 7: Value Chain Operators and their functions, micro level

Support Services and Service Providers

An example of support services providers in a value chain are shown in the diagram below:

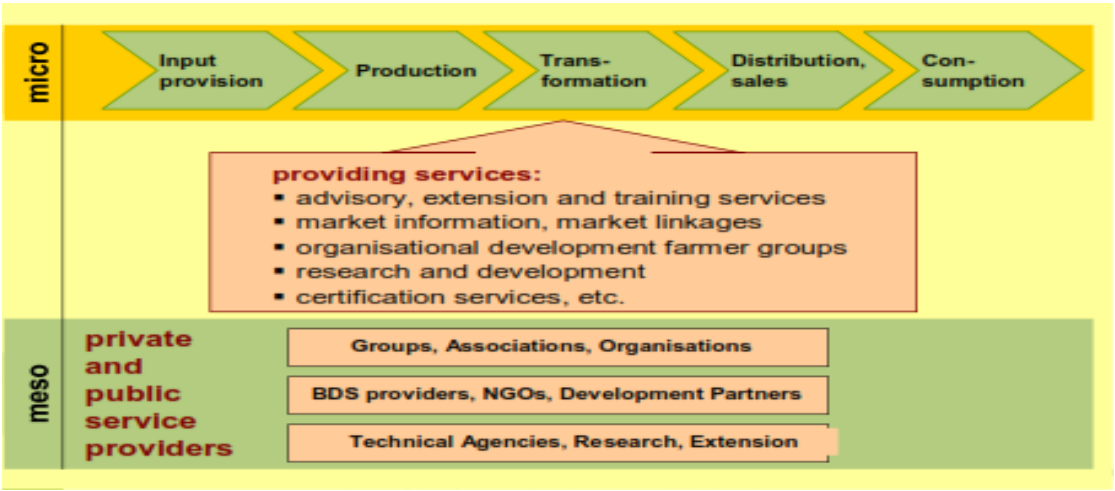


Figure 8: Support service providers, meso level

Step Three: Analysis of Opportunities and Constraints Using the Value Chain Framework

Step three uses the value chain framework as a lens through which the gathered data is analyzed. The framework is a useful tool to identify systemic chain-level issues rather than focus on firm-level problems. While interviews give the value chain team the chance to gather information from individual firms, the value chain framework helps to organize this information in such a

way that the analysis moves from a firm-level to a chain-level perspective. If the chain cannot be competitive, the success of individual firms is compromised. Therefore, taking a systemic approach is key to sustaining the competitiveness of the chain and the micro and small enterprises (MSEs) operating within it.

The factors affecting performance of the chain are further analyzed to characterize opportunities and constraints to competitiveness. These factors are classified under structure and dynamic components. The structure of the value chain influences the dynamics of firm behavior and these dynamics influence how well the value chain performs in terms of two critical outcomes: value chain competitiveness and MSE benefits.

Structure

The structure of a value chain includes all the firms in the chain and can be characterized in terms of five elements:

1. End market opportunities at the local, national, regional and global levels—the framework prioritizes this element because demand in end markets defines the characteristics of a successful product or service.
2. Business and enabling environment at the local, national and international levels—this includes laws, regulations, policies, international trade agreements and public infrastructure (roads, electricity, etc.) that enable the product or service to move through the value chain.
3. Vertical linkages between firms at different levels of the value chain—these are critical for moving a product or service to the end market and for transferring benefits, learning and embedded services between firms up and down the chain.
4. Horizontal linkages between firms at the same level of the value chain—these can reduce transaction costs, enable economies of scale, increase bargaining power, and facilitate the creation of industry standards and marketing campaigns. E.g. cooperatives.

5. Supporting markets—these include financial services, cross-cutting services (e.g., business consulting, legal advice and telecommunications) and sector-specific services (e.g., irrigation equipment, design services for handicrafts).

Dynamics

The participants in a value chain create the dynamic elements through the choices they make in response to the value chain structure. These dynamic elements include:

1. Upgrading—increasing competitiveness at the firm level through product development and improvements in production and marketing techniques or processes
2. Inter-firm cooperation—the extent to which firms work together to achieve increased industry competitiveness
3. Transfer of information and learning between firms—this is key to competitiveness since upgrading is dependent on knowledge of what the market requires and the potential returns on investments in upgrading.
4. Power exercised by firms in their relationships with each other—this shapes the incentives that drive behavior and determines which firms benefit from participation in an industry and by how much

Each plays a role in influencing value chain competitiveness. Using a table format, these factors of the value chain framework can be evaluated in terms of offering opportunities for upgrading and the constraints to taking advantage of these opportunities.

Value chain Framework

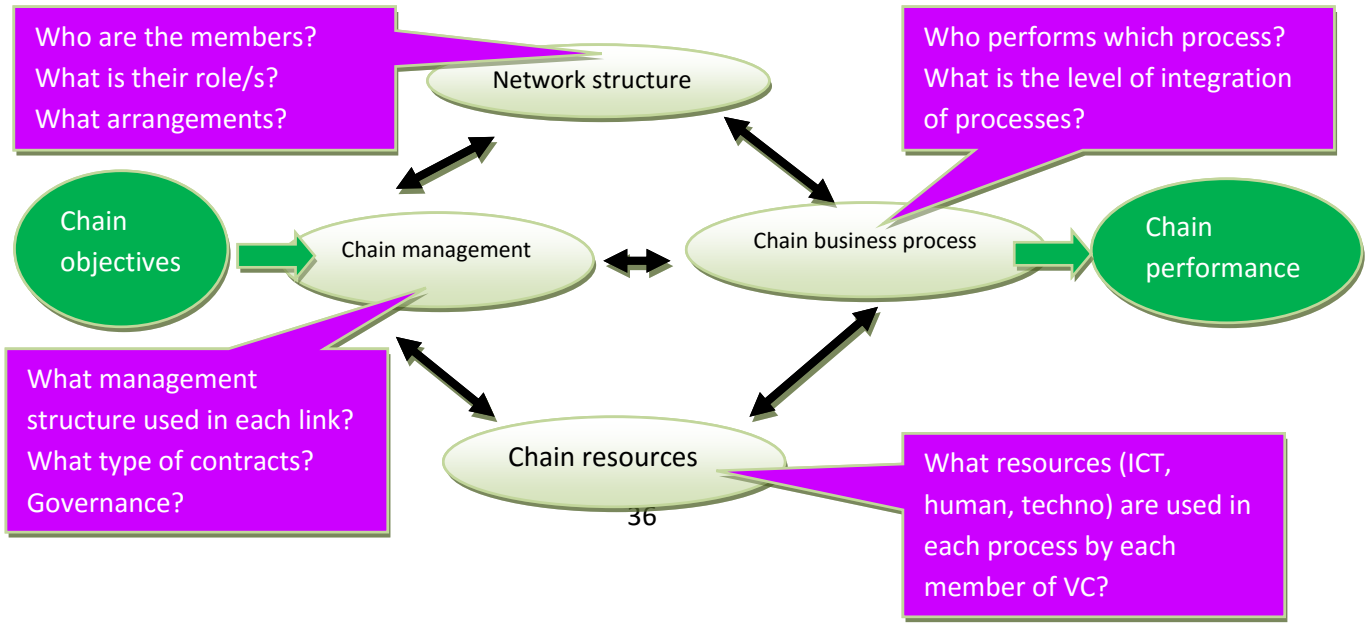


Figure 9: Value chain framework

Step Four: Vetting Findings of Chain Analysis through Stakeholder Workshops

Value chain analysis helps develop a private-sector vision to reflect stakeholders' interest in improving the efficiency and competitiveness of the chain. The fourth step, vetting findings, uses value chain analysis through a structured event (or series of events) like a workshop or reporting-out day to facilitate discussion with and among selected participants.

The objective of these events is to bring participants together who are responsible for critical market functions, service provision, and the legal, regulatory and policy environment. The goal is to have these participants—who have an incentive to drive investments in upgrading—to develop and assist in implementing a private sector-led competitiveness strategy. To develop this strategy, the stakeholders will need to prioritize the opportunities and constraints identified during the value chain analysis. With an open format, such structured events foster buy-in to the analysis process.

Participants are selected based on the role they play in the value chain, or their responsibility for critical market functions. There should also be MSE, medium and larger firm and association representatives who, during the interview phase, exhibited an understanding of the issues related to the value chain (especially the opportunities), a strong interest in the types of questions posed during the interview, and leadership skills among peers or the community.

Vetting events can take on several forms from simple one day *reporting-out* sessions to more structured workshops that stretch to two or three days. The events are planned to reinforce the importance of knowing and understanding the end market. In presenting the findings of the value chain analysis, workshop leaders should stress that to remain competitive, stakeholders and other

participants must continuously learn what end markets demand in terms of product specifications, quality, and other requirements.

It can be powerful to have a series of buyers present at the workshop. Where not possible, a phone call or pre-recorded video interview can be an effective means for stakeholders to see and hear directly from the buyer.

The event should include facilitated discussions, review and adjustments of value chain map and a review of the analysis table. For this exercise, it is recommended that the completed table be projected on a screen, and additions and modifications made during discussions inserted with the computer projecting the table. This assures a participatory process and on-the-spot adjustment witnessed by attending participants. If changes are made, the updated table can be immediately printed and distributed to participants before they leave.

Key issues that can be addressed through the value chain analysis

- Share of benefits and costs from value chains and market development.
- Distribution of added value along the chain.
- Market share of the different actors and corresponding size of sub-sector.
- Institutional and legal framework, such as regional production and processing zones, trade protocols, regulations on movement of people, agriculture marketing policies and financial institutions.
- Growth potentials (nodes with market potential).
- Infrastructure development.
- Potential for poverty reduction and rural income generation.
- Potential for sustained food supply at affordable competitive prices for consumers.
- Potential for maximization of returns on capital investment at different levels of the value chain strategy.
- Potential for strengthening sector and regional complementarities and interdependence through implementation of horizontal and vertical integration approaches in the commodity production value chains strategy.

2.5. Importance of Vertical and Horizontal Linkages to Foster Win-Win Relationships

The cause of integration/linkage is to strengthen the production-distribution chain and to minimize the cost and wastage of products at various levels. The integration also enables the company to keep upstream and downstream profits and eliminates intermediaries.

Integration strategy is used by the firms to increase market share, become more diversified, eliminating the cost of developing new product and introducing it to the market, minimizing competition by taking over competitor's business, etc.

Vertical Linkages

Effective vertical linkages between firms at different levels of the value chain play a key role in supporting the upgrading capacity of the chain. For example, firms in global value chains for fresh fruits and vegetables must be able to respond quickly to changing food safety and quality standards. Rapid response to changing market conditions requires on-going communication and cooperation both up and down the chain. When vertically linked firms are willing and able to share information on new products and technologies, then the value chain as a whole is more competitive because it can adapt more rapidly to changing market conditions.

Effective vertical relationships can contribute to value chain competitiveness in other ways, by creating conditions that support risk-taking and investment. Examples of this can be found in handicraft value chains, where it is common for lead firms to provide inputs to their artisan suppliers. This assures the lead firm of a quality product, even when quality inputs are not locally available. Such in-kind credit is an embedded service that helps artisans overcome cash flow constraints. Other examples of embedded services include training, technical assistance and credit for capital improvements. When agricultural producers have a secure, established relationship with their buyers, buyers may be willing to assist with long-term investments such as organic certification, irrigation equipment or post-harvest handling facilities. Such win-win interactions between firms benefit the entire value chain by improving productivity, product quality and reliability of supply.

On the other hand, if vertical relationships are characterized by mistrust, misinformation and opportunistic behavior, the entire value chain may struggle to remain competitive. Individual firms, by conducting their vertical relationships on the basis of an adversarial "win-lose" way of

thinking, can create negative results for themselves as well as the rest of the firms in the value chain.

Forms of vertical integration/linkage

- **Forward linkage**: If the company acquires control over distributors, then it is downstream or forward integration.
- **Backward linkage**: When the company acquires control over its supplier, then it is upstream or backward integration.

Horizontal Linkages

Through horizontal linkages, firms at the same level of the value chain interact to accomplish what a single firm working independently could not do so well. This interaction may come in the form of either cooperation or competition (or both). Effective horizontal relationships can promote efficiencies, reduce costs, open markets and spur beneficial competition. A producer association is a classic example of horizontal relationships designed to promote economies of scale, favorable market pricing, and other benefits for its members. Effective models of cooperation among micro- and small enterprises are needed in order for large numbers of these very small firms to be integrated into competitive value chains. Cooperation makes it possible for small-scale producers to reduce the costs of inputs and supporting services (e.g., training or transportation), while gaining access to new buyers and better prices through group marketing. By operating as a group, small-scale producers become more attractive commercial partners to larger firms, because the large firms' transaction costs are lower than they would be in dealing with many small firms.

Differences between horizontal and vertical integration:

1. Horizontal Integration occurs between two firms whose product and production level are same. Vertical Integration is an integration of two firms that operates in different stages of the manufacturing process.

2. Horizontal Integration aims at increasing the size of business and scale of production, whereas Vertical Integration focuses on strengthening and smoothening its production-distribution process.

3. The greatest advantage of horizontal integration is that it eliminates competition between firms, which ultimately extends the market share of the company. Conversely, Vertical Integration results in lowering the cost of production and wastage.

4. Horizontal Integration only brings synergy, but not self-sufficiency while Vertical Integration helps the company gain synergy with self-sufficiency.

5. Horizontal Integration helps to acquire control over the market, but Vertical Integration is a strategy used for gaining control over the whole industry.

2.6. Principles in Selecting a Sub-Sector to Promote

In choosing a sub-sector to promote, the principles to consider include the following:

- Assessing the growth potential of different sub-sectors and their respective contribution to gross national income e.g. choosing between a horticultural crop and a livestock commodity.
- Distribution of expected additional income across different groups of the society e.g. farmers, processors, traders
- Consideration of the resources available for value chain promotion e.g. human and financial capital, and time frame.
- Identification of promising opportunities for bringing together stakeholders in the public and private sectors, and any other development partners.

Having identified the sub-sector to promote for value chain development, we will now consider the processes that go into the choice of a specific value chain product.

2.7. Different aapproaches for conducting the analysis

According to Strategic Management Insight, there are two approaches to the value chain analysis: cost and differentiation advantage.

Cost advantage: After identifying the primary and support activities, businesses should identify the cost drivers for each activity. For a more labor-intensive activity, cost drivers could include how fast work is completed, work hours, wage rates, etc. Businesses should then identify links between activities, knowing that if costs are reduced in one area, they can be reduced in another. Businesses can then identify opportunities to reduce costs.

Differentiation advantage: Identifying the activities that create the most value to customers is the priority. These can include using relative marketing strategies, knowing about products and systems, answering phones faster, and meeting customer expectations. The next step is evaluating these strategies to improve the value. Focusing on customer service, increasing options to customize products or services, offering incentives, and adding product features are some of the ways to improve activity value. Lastly, businesses should identify differentiation that can be maintained and adds the most value.

2.8. Goals and outcomes of conducting value chain analysis

The primary goal of using the value chain analysis is creating or strengthening your business's competitive advantage. "If a company can create an advantage ... through a value chain analysis, it captures a competitive advantage and increases its overall profit," the article explains. "To capture a competitive advantage, a company maps out its specific activities within the five generic value chain activities and looks for ways to create efficiencies."

Ideally, value chain analysis will help you identify areas that can be optimized for maximum efficiency and profitability. It is important, along with the mechanics of it all, to keep customers feeling confident and secure enough to remain loyal to your business. By analyzing and evaluating product quality and effectiveness of services, along with cost, your business can find and implement strategies to improve.

Serve as a base for proposed value chain interventions included are therefore those which explicitly or implicitly aim at:

- Creating new value chains;
- Forging or strengthening new links within a value chain;
- Increasing the capabilities of target groups to improve the terms of value chain

participation;

• Minimizing the possible negative impacts of value chain operations on nonparticipants and/or adjacent communities.

Chapter: 3. Value Chain Development: Challenges, Opportunities and Intervention Strategies

3.1. Value Chain Development

Value Chain Development means positive or desirable change in a value chain to extend or improve productive operations and generate social benefits: poverty reduction, income and employment generation, economic growth, environmental performance, gender equity and other development goals.

It is improvement of cooperation between stakeholders of a particular sector and the coordination of their activities along different levels of a value chain with regard to the following five triggers. The ultimate goal of developing value chain is to increase the competitiveness of the sector on the (international) market.

The five triggers for value chain development are: system efficiency, product quality and specifications, product differentiation (competition), social and environmental standards, and enabling business environment.

Value chain development generally

- Empowerment of producers
- Improve quality
- Improve logistics (= planning)
- Cost price reduction (improvement margins)
- Scaling Up → Increase of Volume

3.2. Challenges and opportunities for value chain

The effectiveness of the value chain in ensuring value for money, minimizing operational cost and ultimately enhancing competitiveness, depends to a large extent on the elimination/overcoming of constraints and seizing opportunities associated with the value chain (and its components).

3.3. Approaches to Identifying Challenges and Opportunities in the Value Chain

Constraints is defined as any factor that prevents a unit or system from being effective or achieving its objectives. Constraints may differ from one component of the value chain to the other; it may also differ from one linkage point in the chain to another. But generally, **Constraints** come in the form of lack of timely information, poorly developed human resource, mistrust, inadequate material resource, inadequate technology and low commitment.

Opportunities, on the other hand, may be defined as avenues/openings within a unit or system which have the potential to enable the unit/system achieve its objectives or enhance its effectiveness, if utilized.

A concurrence of the main constraints and opportunities provides the leverage points for the value chain development. Improving the effectiveness of a value chain requires some intervention to address the leverage point i.e. overcoming constraints and utilizing opportunities. In this unit, we shall focus on how to identify constraints and opportunities embedded in a value chain, as a foundation/basis for designing a realistic and realizable intervention strategy. There

are two approaches to identifying a value chain for development. These are the constraint identification and market analysis approaches.

a. Constraint identification approach

The constraint identification approach considers the problems the producer faces in marketing his/her produce as the starting point of the value chain development. The producer identifies these problems and works towards solving them to enable him/her market his/her produce efficiently.

Figure 10: Constraints Identification Approach to Value Chain Development

b. Market analysis approach

The market analysis approach considers the evaluation of opportunities from the market perspective by assessing consumer demand as the starting point for value chain development. It is important for the actors in the value chain to understand that they can only access market if they succeed in supplying competitive products through joint effort.

This means that all the actors – input suppliers, producers (farmers), brokers, processors- must apply appropriate production and handling technologies, become business-oriented and

understand each other as partners in the value chain. **The competitiveness** of the value chain depends on trust, cooperation and communication between all actors. The strength of the entire value chain depends on the performance of every single partner in the value chain. The competitiveness of the final product corresponds to the capacity of the weakest link in the value chain.

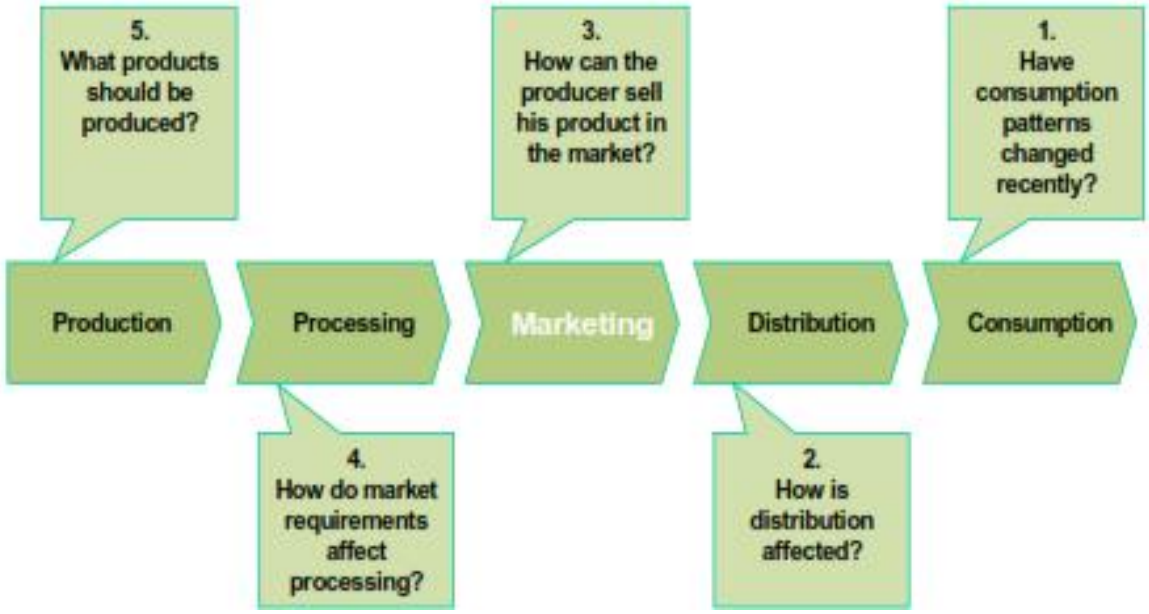


Figure 11: Market Analysis Approach to Value Chain Development

Opportunities for Value Chain Development

Several opportunities exist for developing a value chain. These include the following:

a) **Globalization of trade**: the way modern technology and transportation have integrated the world economic systems. Globalization enables us to get information about sources of inputs, market opportunities, technology, etc. that can help us to produce to meet the demands of the market.

b) **World Trade Organization (WTO) agreement on agriculture**: it is an organisation established to break the barriers to trade and regulate international trade by ensuring the enforcement of international standards. WTO creates wider market opportunities and ensures transparency in the market at the national and international levels.

c) **International standards**: these are standards set at the international level to ensure that quality goods are supplied to the market. They also prevent discrimination against weaker countries.

d) **Changing consumer preferences and behavior**: people's taste and preferences change because of availability of alternative products on the market. This creates opportunities for new products to be introduced.

e) **Factor endowment**: this has to do with comparative advantage. The producers might have certain resources that enables them to produce certain goods better that others. These resources thus become opportunities for the producers to produce more of these goods for the market.

f) **Advances in technology**: advances in, communication, transportation, information, production and processing technologies have created opportunities to create and add value thus ensuring the efficient production of goods.

g) **Proximity to the European market**: this leads to reduction in cost in terms of freight and ensures the supply of fresh products to the European market.

h) **Liberalization of agricultural trade**: this has led to the removal of some trade barriers and ensures the free movement of goods.

i) **Expanding domestic market**: increases in population and income levels as well as changes in consumer preferences and taste have combined to expand the domestic market thus creating opportunities for producers to introduce more products onto the market.

j) **Trade agreements**: agreements between regional and international economic groupings like the Economic Community of West African States (ECOWAS) and African, Caribbean and Pacific (ACP) and the European Union (EU) as well as bi-lateral agreement between trade partners have created opportunities for the production of diverse goods to satisfy the demands of the market. They have also created opportunities for accessing inputs, capital, technical assistance and technology.

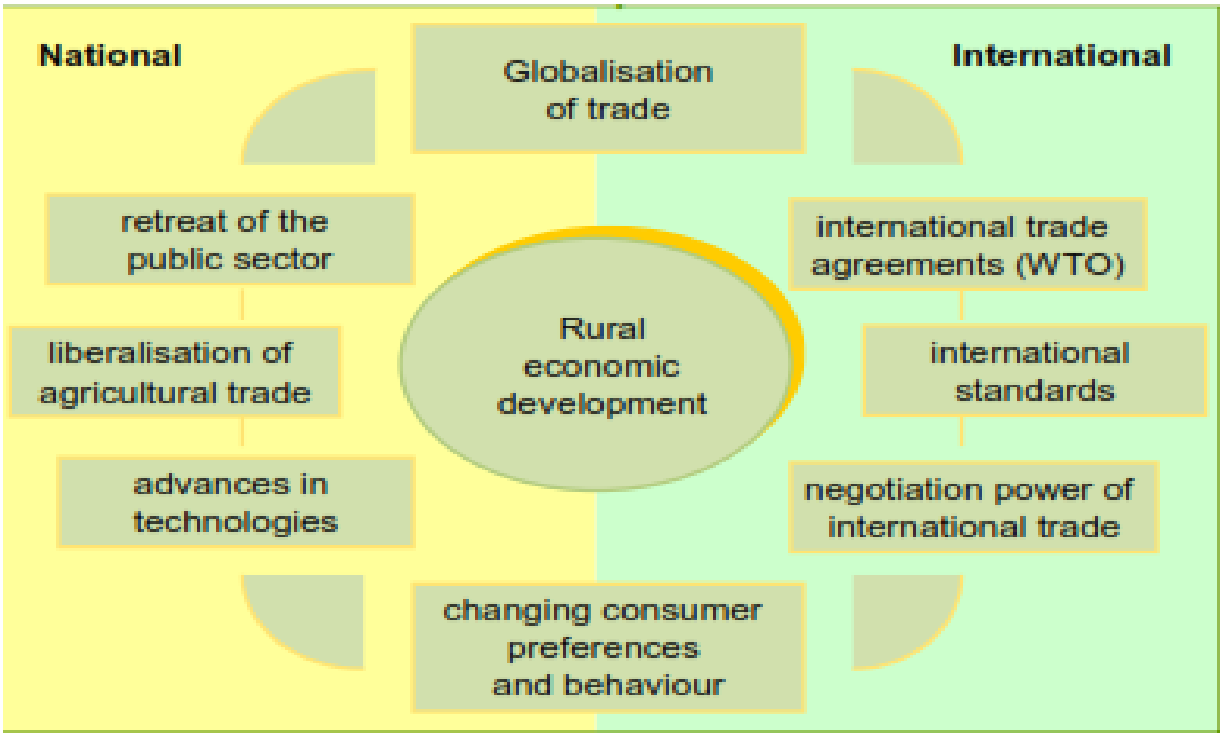


Figure 12: Opportunities for value chain development

Challenges in Value Chain Development

Much as there are numerous opportunities for the value chain there are challenges that one encounters in the development of a value chain. The challenges have been categorized under the following headings.

1. **Input:** this refers to the basic items required for production by various actors along the value chain. The challenges at the input level include:
   a) Low performance genetic materials: e.g. seed, planting material, breeding stock, etc. When these are of inferior quality they do not give the optimum yield.
   b) Inconsistency in quality and supply of raw materials: lack of consistency in the quality and supply of raw materials like agro-chemicals can lead to low quality output. It can also hamper the regular supply of products to the market.
   c) Variability in raw material quality: variations in the quality of raw materials for production and processing result in inferior goods on the market, high down time (under capacity utilization), high cost of production and loss of market share.

2. Production

a) Limited protocols on good agricultural practices for commodity chains: limited availability of manuals that provide information on steps for Good Agricultural Practices (GAP).

b) Producers not fully integrated into the market economy: many producers are not business oriented and are not producing in a business-like manner to satisfy the demands of the market. In other words, most production is not influenced by market expectations and demands.
c) Misuse of agrochemicals: this can lead to the production of inferior quality goods with serious health hazards for the producer, the consumer and the general public, loss of market share, increase in cost of production, lower competitiveness, etc.
d) Seasonal fluctuations in production: this can lead to low utilization of the factors of production, inadequate supply of goods to the market and price and income instability.

e) Excessive dependence on climate: it can sometimes lead to complete crop failure and livestock death, increases the uncertainty of production and unreliable supply of raw materials and final products to the market.
f) Poor caliber and quality of labor: this leads to low productivity, high wastage, inefficient utilization of information and technology, etc.

3. Processing

a) Lack of value addition to farm produce: caused by inadequate research and development. This affects innovativeness thus leading to lower incomes, increase in wastage and environmental problems.
b) Lack of adequate processing systems: there is no adequate processing capacity, obsolete processing equipment. These lead to high cost of production, uncompetitiveness, loss of profit margins and discourage basic production.
c) Inappropriate packaging material: unattractive final products, shorter product shelf life and low value capturing.

4. Marketing

a) Stringent market requirements by supermarkets: refers to ever increasing safety and quality requirements by supermarkets and consumers leading to difficulties in market access.
b) Barriers to external markets as a result of domestic measures of trading partners: subsidies

provided by governments of our trading partners coupled with the removal of agricultural subsidies by our government make the domestic products uncompetitive.

c) Cost of certification: the high cost of certification of products tends to discourage producers from accessing international markets.
d) Misuse of Sanitary Phyto-Sanitary (SPS) and Technical Barrier to Trade (TBT) agreement: possible abuse of phyto-sanitary and technical requirements can lead to denial of market access.

e) Lack of appreciation of quality management along the chain: the various actors along the chain sometimes fail to realize that the quality of the final product delivered to the market is a combined effect of their quality management in the different segment of the chain.
f) High import tariffs in the external market: high tariffs on primary products as well as escalating tariffs on value added products lead to limited market access.
g) Inefficient distribution system: inefficient movement of goods and services from one end of the value chain to the other. This leads to high transaction costs, erratic supply of both inputs and final products.
h) Price fluctuations: seasonal and cyclical movement of price due to bottlenecks in the supply of goods and instability in incomes.
i) Flooding of domestic market with imported equivalents: high importation and availability of subsidized foreign goods on the local market. This crowds out local products.
j) Inelastic demand for exported commodities: low response of primary product consumption to lowering of prices. Thus, people do not consume more of the product even at lower prices.
k) Low level of market information: market information is not organized in a useful form for value chain actors and limited access to available market information where organized. These lead to high transaction costs, high prices of products, and high wastage at various segments of the value chain.

5. Consumption

a) Lack of appreciation of consumer culture and behavior: consumers generally have low appreciation for health and safety consciousness. This results in ineffective demand for safe and quality goods.
b) Weak and inactive consumer associations: consumer associations are poorly organized making them weak and inactive. This does not drive the production and processing segments of the value chain to be competitive.
c) Lack of effective demand for quality products: Low disposable incomes of most households leading to low effective demand for quality products.
d) Most consumers are not health or safety conscious and may not insist on buying quality products.

6. Physical Infrastructure

Physical infrastructure includes irrigation, roads, storage facilities (dry and cold), utilities (water, electricity, telephone, etc.) and port facilities: these are inadequate and unreliable thus affecting production, processing, distribution and storage of primary and final products.

7. **Social Infrastructure**

Social infrastructure comprises networking for Value Chain development (strategic partnership), group formation and development, and trust among others. Their effect increases transaction costs, cheating, lack of transparency, moral hazard, and unhealthy competition among the various actors in the value chain.

8. **Policy and Administration Issues**

Policy, administration and institutions relating to certification, patenting, business establishment, standards and standardization, negotiation and enforcement of contracts, slow change in national policy in response to global trends, consistency in public policy, taxes and levies, sustainable institutions capable of supporting VC development, lack of clearly specified roles of supervising institutions. These increase transaction costs, business risk, lower business confidence as well as competitiveness.

9. **Environmental Concerns**

Environmental concerns relate to waste management and the potential unintended impact of value chain activities on the environment. This can lead to environmental degradation and loss of market opportunities (e.g. some buyers are averse to environmental degradation caused by production) and social conflicts.

10. **Socio-cultural and Business Ethics**

Socio-cultural and business ethics: these include absence of appreciation for value addition, slow response to change, mistrust, ineffective communication between actors in the chain and within actors in a particular segment of the chain and inappropriate orientation and behavior of operators along the value chain. These may result in the collapse of businesses (bankruptcy) because of lack of proper business succession arrangements.

11. **Technical/Technological Inadequacies**

Technical/technological inadequacies: these include inadequate requisite technical and technological know-how, inadequate research and development, inadequate staff/personnel, equipment and knowledge and limited opportunities for value addition to by-products. These do not encourage innovativeness in products and processes.

12. Financial

Financial challenges: these relate to inadequate and inappropriate financial products and lack of access to financial services (credit). Financial institutions lack understanding of the sector and are not able to develop products to suit the various actors in the value chain. The result is high cost of credit and high default in repayment.

13. Value Chain Development and Facilitation

Value chain development and facilitation: refers to the responsibility for the initiation and provision of resources for sustaining the facilitation, monitoring and evaluation of the value chain development process.

14. Services

Services: there is usually a mismatch of service need and service provision. In addition critical information is untimely and there is lack of specialization of service providers.

3.4. Steps in Value Chain Development

Step1: **Selecting a Sub-Sector to Promote or develop**

In choosing a sub-sector to promote, the principles to consider include the following:

- Assessing the growth potential of different sub-sectors and their respective contribution to gross national income e.g. choosing between a horticultural crop and a livestock commodity.

- Distribution of expected additional income across different groups of the society e.g. farmers, processors, traders
- Consideration of the resources available for value chain promotion e.g. human and financial capital, and time frame.
- Identification of promising opportunities for bringing together stakeholders in the public and private sectors, and any other development partners.

Step 2: Value Chain Mapping

Value chain mapping is the process of developing a visual depiction of the basic structure of the value chain. A value chain map illustrates the way the product flows from raw material to end markets and presents how the industry functions.

Step 3: Identifying the Opportunity

In this stage, you will identify some opportunities for a value chain by first mapping and evaluating your existing supply chain. You probably have some idea of your resources but may need to further define a clear project objective or focus. Learn how to gain the support of some members of the supply chain and perhaps identify someone who will champion the value chain.

After you have completed this section, you will be able to:

• Outline the opportunity by developing a project summary and evaluating the market

• Assess resources, risks and capabilities of a value chain project.

Step 4: Developing a Pilot Project Plan

At this stage you look at developing a pilot project plan with clear goals, plans and measures. A pilot is a small, trial-size version of a commercial-scale value chain. It minimizes some risk by allowing you and your partners to commit yourself and work out any bugs while you proceed on a small scale. This is the stage where you identify suitable partners for the value chain, select a manager and achieve commitment from all partners perhaps in the form of a written agreement.

Step 5: Monitoring and Evaluating the Pilot Project

This is the stage where you will implement and monitor your pilot project. You will adapt and build in order to determine whether a full scale value chain is a possibility.

3.5. Value Chain development Strategy

The set of statements and guidelines at chain level with the purpose to guide the future development of the chain and its links, and based on the shared ultimate goal of the chain. Chain strategies cover domains as market coverage, co-ordinated investments, and extension of the chain with new participants, innovation. Besides chain (oriented) strategies every link in the chain has its own (supplementary) strategies. There are three possibilities of chain strategy.

I. Low cost strategy or Chain optimization

Due to increasing competition, producers and retailers are forced to minimize costs. Dealing with individual parts in isolation may strengthen the economic efficiency of one part, but at the expense of others. Therefore, the successive links must together minimize costs. This can happen by employing ICT facilities, logistics and elimination linkages. **Key issues** in this strategy are **efficiency** and **effectiveness.**

II. Integral chain care

Consumer choices are increasingly being determined by requirements in the area of health and safety. Care for the environment and animal-friendly production methods are becoming more important. Striving for sustainability is the new goal set by the western society. All companies in the chain must co-operate together in order to avoid loss of consumers confidence. Here quality assurance is the key. Isssues that should get attantion in this strategy are cconsumers' concerns, quality, sustainability, safety & health and animal welfare.

III. Market segmentation or Chain differentiation

The other chain strategy option is market segmentation or differentiation. Market segmentation or differentiation refers to providing product or service to the use by the elasticity that a user have for the service or product. This enables producers to meet their customer needs by different value creation and product differentiation.

Over time we see a development of chain strategies. Shift of the focus from product to service to experience. We see also a shift in drivers, from industry to consumer to society; technology shift and a shift in how to do business with each other.

3.6. Criteria for Choosing a Value Chain to Promote

The following are some important criteria that we can use in choosing a value chain to promote:

- Growth potential and competitiveness of the product on local, national and international markets in terms of:
  - Meeting market demand e.g. quantities, quality, type of product.
  - Potential competitive advantage e.g. uniqueness of product, lower cost of production and proximity to market.
  - Poverty reduction potential and social benefits of product to the community in terms of:
  - Income and employment creation
  - Relevance to the poor and disadvantaged in society, including women.
  - Product should have a high chance of success, in terms of the following:
  - Conducive public policy environment
  - Self-initiative and commitment of value chain operators and supporters.
  - Readiness of operators and other stakeholders to change, if necessary
  - Skills and abilities of operators to effectively manage activities in the chain at each level.
- Outreach (wider coverage):
  - Number of households and enterprises that can be reached
  - Regional coverage e.g. nations in the West African sub-region
  - Potential to replicate (duplicate) the value chain.
- Agencies involved in implementation in terms of:
  - Relevance to the set mandate and objectives
  - Cooperation with other partners
  - Skills and abilities to facilitate value chain development (e.g. based on own experiences, technical and facilitation skills, financial capacities etc.).
- Impact of value chain product on the environment:
  - Effective waste management practices
  - Controlling environmental degradation
  - Prevention of health problems in the community.

Chapter: 4. Enabling Environment for Value Chain Development

What is the Business Enabling Environment?

The business enabling environment (BEE) includes norms and customs, laws, regulations, policies, international trade agreements and public infrastructure that either facilitate or hinder the movement of a product or service along its value chain. At one end of the spectrum, conventions, treaties, agreements and market standards shape the global business enabling environment. The business enabling environment at the national and local level encompasses policies, administrative procedures, enacted regulations and the state of public infrastructure.

In addition to these more formal factors, social norms, business culture and local expectations can be powerful aspects of the business enabling environment. Understanding these unwritten rules of society is essential if practitioners are to understand why value chain actors behave the way they do, and reasonably predict how they will behave in response to value chain interventions. Analysis of the BEE at these levels may need to be further broken down in terms of firm size since there may be constraints and opportunities distinctly facing micro- and small enterprises (MSEs).

4.1. Value chain enabling environment

The larger environment within which a value chain operates has multiple elements that impact the value chain's structure and performance. Elements include: the physical infrastructure ranging from roads to power to water to storage facilities; the security situation enabling the movement of money and goods; the policy and regulatory environment ranging from broad monetary and fiscal policy to specific regulations (such as licensing, standards, etc); the legal system and ability to enforce contracts; public services such as education and health; and informal practices and power structures from cultural norms to presence of informal systems of regulation and taxation.

In the value chain framework, the enabling environment is depicted as a simple bubble around the entire value chain. In fact, it is the 'traffic cop' of the value chain, setting the rules and

influencing outcomes within the value chain in ways that can either be highly constructive or counterproductive to value chain goals.

It is difficult to over-emphasize the importance of understanding the enabling environment in value chain programs in conflict-affected settings, where sudden changes can either open new opportunities or undermine the best-laid plans. The enabling environment, therefore, must be understood early and carefully monitored to minimize the potential for programmatic disaster.

4.2. Why does the value chain enabling environment matter?

Every day an entrepreneur spends filling out paperwork or in line at a government office is a day not making sales or finding new customers. Burdensome and unpredictable regulation is costly both in terms of the time and money required for compliance as well as in opportunity cost. In many countries, these costs are substantial. In Brazil, for example, not only is the tax rate nearly 70 percent, but the procedures are so complicated that the average amount of time required to prepare, file and pay taxes is estimated to be 325 days.

A growth-oriented value chain faces a choice: comply with regulations and incur costs so high that they jeopardize the business's viability or try to survive in the informal sector without bank credit or enforceable contracts and at constant risk of harassment from authorities. Approximately 60 percent of urban businesses in Africa, 40-60 percent in Asia and 58 percent in Latin America remain outside the formal sector. They are limited in their ability to grow, attract investment and hire more workers. The workers they do employ have no legal protections. Reform of the value chain enabling environment can result in substantial benefits for an economy including faster growth, less unemployment, more gains from trade, greater formalization, reduced poverty, less corruption and lower budget deficits.

4.3. BEE and the Value Chain Project Cycle

Improving the business environment by lifting constraints and filling gaps in the regulatory and administrative support mechanisms is central to any comprehensive competitiveness strategy for a targeted value chain. The enabling environment as a catalyst to develop long-term market growth, inclusive development, and food security, due to this consideration of the enabling environment should inform each stage of a value chain development project is mandatory.

Value Chain Selection

BEE opportunities for specific value chains to become more competitive or achieve significant impact may influence the selection of value chains targeted for development. Conversely, if specific value chains face BEE constraints that cannot be addressed by a project, implementers may decide to select alternative value chains.

Value Chain Analysis

A careful analysis of the operation of value chains will often identify state failures as well as market failures. An analysis of policy constraints and opportunities, which is integral to value chain analysis, can be used during the development of a competitiveness strategy to identify where and how to compete in target markets. While benchmarking reports and diagnostic tools can facilitate an economy-wide view of business environment constraints or opportunities, most of them do not include sector- or industry-specific indicators; this may limit their utility in identifying value chain-specific constraints. Additionally, by relying solely on broadly-focused reports or diagnostics, program designers may waste time considering reforms that are not relevant to their targeted value chains. Some more specific tools can help focus analysis of the enabling environment:

- USAID's Competitiveness Impacts of Business Environment Reforms (CIBER) tool aims to engage value chain actors in a participatory assessment process to identify high-priority reforms and develop a plan of action.
- The Climate, Legal, and Institutional Reform (CLIR) tools offer a data-rich assessment of a country's business environment to help governments and donors gain a comprehensive understanding of the barriers to private-sector growth.
- International ranking and benchmarking reports are often a good starting point for obtaining a snapshot or overview of a country's business climate.
- The International Finance Corporation BEE Toolkits provide step-by-step guides to both diagnosing and facilitating business environment reforms.

Design and Implementation

Under the influence of globalization, the nature of production processes is changing. Upgrading' of the enabling environment, although not an upgrading strategy in a strict sense, recognises that

the competitiveness of the enabling environment for value chains is a major contributing factor in the success of the operations of a value chain. Improvements to the support, services, institutional, legal and policy frameworks in which value chains operate are often a productive area in which development agencies can intervene to improve the functioning of a chain.

Activities leading to policy reform are often a key component during implementation. Two popular and complementary types of approaches for reforming the business environment are referred to as "top-down"--national-level and/or public sector-driven--and "bottom-up"--local-level and/or private-sector driven. However, it is difficult sometimes to draw a clear line to distinguish a "top-down" approach from a "bottom-up" one. Oftentimes, elements of both types of approaches are combined to form an effective reform strategy. Regardless of the approach, the engagement of both public and private sector actors through appropriate dialogue and strategic communications is imperative to the success of any business environment reform initiative.

Monitoring and Evaluation

Monitoring of progress in the area of reform may lead to a reassessment of the choice of value chain. Monitoring and evaluation is complex in any private-sector development project, but BEE reforms present special challenges that should be considered.

- *What is success?* Desired outcomes of business environment reform projects vary. For example, the number of administrative procedures required of a firm may be less relevant than the time or cost needed to complete these procedures. In some cases, the time required to complete a procedure may be reduced as a result of a project initiative, but only at the expense of cost. Futher, the results of reforms may affect firms differently based on their size and location.
- *What is the most appropriate timing for evaluation?* BEE reform activities often set in motion changes in attitudes and roles in organizations that may not be fully realized until several years after a project ends. An evaluation conducted as a project closes may not capture the full benefits of the activities.
- *Can success or failure reasonably be attributed to the project?* External factors affect the results of a program in both positive and negative ways making it difficult to isolate the

impact of reforms. These factors include trade reform, fiscal and monetary policy, prices of input factors, improvements to the educational system, civil service reform and political reform.

Care must be taken in selecting indicators. *Doing business* indicators are most useful at the beginning of a reform process to select reform priorities and generate interest in undertaking reforms. They are rarely appropriate for monitoring and evaluation.

4.4. What is successful business enabling environment reform?

Reform is a process that encompasses much more than a series if inputs leading to discrete legal outputs. Successful reform incorporates relationships and shapes incentives that drive both business and government behavior. Successful reform builds trust, promotes transparency and ensures that benefits accrue to those taking risk. The most significant policy reform may not be the creation of a new law or policy, but rather changing or improving the implementation of an existing law or policy. Successful value chain enabling environment policy reform requires changing three things:

- how laws are implemented
- the burdens that are placed on businesses and the relationships in which businesses can engage
- the incentives that drive business decisions

If a reform cannot be expected to change how businesses make decisions, it may be preferable to focus resources elsewhere. Private-sector entities within a value chain can inform the process: they know whether or not a law is important, and whether reform is likely to change how they behave.

Chapter: 5. Value Chain Governance and Business Ethics

5.1. What is Value Chain Governance?

Value chain governance refers to the relationships among the buyers, sellers, service providers and regulatory institutions that operate within or influence the range of activities required to bring a product or service from inception to its end use. Governance is about power and the ability to exert control along the chain — at any point in the chain, some firm (or organization or institution) sets and/or enforces parameters under which others in the chain operate. The key parameters are:

1. What is to be produced? This includes product design and specifications.
2. How it is to be produced? This involves the definition of the production processes, which can include elements such as the technology to be used, quality systems, labor standards and environmental standards.
3. How much is to be produced, and when? This refers to production scheduling and logistics.

It is assumed that individual firms in modern value chains set the parameters to which other firms of the chain conform. Value chains are controlled by specifying the parameters for products, processes, and logistics.

- Product parameters determine the design of the products to be produced.
- Process parameters determine how the product is to be produced.
- Logistics parameters determine how much of a good is to be produced when and how the physical flow of goods is to be executed.

The importance of **product parameters** grows with the rising diversification of markets and increasingly complex, internationally distributed production processes, which mean, for example, that production components from different production countries are assembled in a third country. Also in less complex value chains, rapidly

changing product characteristics often determine the marketability of a good (e.g. clothing industry).

Process parameters are intended to reduce risks, but they also increasingly satisfy specific customer preferences not only related to physical product characteristics, but also to the external effects of the production processes. Important risk-reducing process standards include ISO 9000 for general quality assurance or HACCP (*Hazard Analysis and Critical Control Point*) for the food industry.

Logistics parameters are ultimately gaining importance because the competitiveness of value chains is increasingly being expressed by the organization of complex production processes without unnecessary loss of time and with low costs (e.g. through inventory maintenance). In this context, the ability of the actors in the value chain to electronically manage inter-organization communication and the flow of data also plays a growing role.

5.2. Why Governance Matters

Understanding how and when lead firms set, monitor and enforce rules and standards can help micro and small enterprises (MSEs) and other firms in the chain better integrate and coordinate their activities. Governance is particularly important for the generation, transfer, and diffusion of knowledge leading to innovation, which enables firms to improve their performance and sustain competitive advantage. Awareness of the governance structure of a value chain can provide governments, donors and development practitioners with information about how best to provide MSEs with the training and technical assistance needed to upgrade their position in the chain.

Governance helps to determine the following.

Acquisition of production capability: Lead firms can be very demanding about reducing costs, raising quality and increasing on-time performance. Yet, along with high standards, lead firms also provide knowledge and support. MSEs learn by observing what their buyers are doing or in

other cases, the lead firm will transmit best practices through embedded services or provide hands-on advice on how to improve production processes and producers' skills.

Market access: Even as developed countries dismantle trade barriers, developing country producers do not necessarily gain access because chains are often governed by a limited number of powerful buyers. In order to participate in export manufacturing to developed countries, MSEs need to be on the radar of the lead firms of their chains because the lead firm frequently makes the decisions on where products will be produced and who will produce them. Producers need access to lead firms and can gain it only by learning how to communicate with the firms and produce to specification.

Distribution of gains: The activities that reap the highest returns are usually found in intangible competences (R&D, design, branding) characterized by high barriers to entry that are frequently synonymous with holding the lead firm status in the chain. In contrast, developing country firms tend to engage in the tangible, production-related activities under terms set by the lead firm that have low entry barriers and thus low returns. It is important to know which activities in the chain bring in the most profitable returns and who engages in these value-adding segments. Understanding how a chain is governed provides MSEs and practitioners with valuable information on how to develop skills and with whom to develop relationships that would give them the flexibility and freedom to undertake additional functions in the chain, thus altering the current distribution of gains.

Leverage for policy initiatives: Given the power lead firms have to impose product and process parameters on their suppliers, they are also excellent leverage points for the business environment to use to exert influence on what happens in their supplier firms. Understanding chain governance and the power of lead firms can assist local and global, public and private, government and nongovernmental agencies and practitioners to advocate for better labor and environmental standards or a more equitable distribution of gains.

5.3. Types of governances

Governance is an important instrument to improve the performance of value chains and sustain increase their competitive advantage. A particular governance system can either help a firm or a producer group to grow and develop, or it can retard its growth. The types are differ by the relationships that value chain actors have with each other and with the lead firm. There are five type of governance in the value chain.

Market: Market governance involves transactions that require little or no formal cooperation between participants, the cost of switching to new partners is low for both producers and buyers. Repeat transactions are possible, but not necessary. Little information is exchanged between firms; interactions between firms are limited and no technical assistance to suppliers is provided. In this case the buyer has no controlling interest in the production, sets few if any standards and provides producers with little to no information on what the market wants and how to produce it. The parameters are defined solely by each firm (trader) at its point in the chain and the central governance mechanism is price rather than a powerful lead firm.

Modular: Typically suppliers in modular value chains make products or provide services to a customer's specifications. Suppliers in such value chains tend to take full responsibility for the process technology. This keeps switching costs low. Linkages are more substantial than in simple markets because of the high volume of information flowing across the link between firms but at the same time complexity of interactions can be kept simple as the information required by value chain actors can be codified for instance through product and process standards.

Examples for this type of governance are value chains where lead actors require from their suppliers products of a defined product or process standard. These are voluntary standards (not government-set mandatory standards) which are often defined by the private sector. The process standard may include for instance organic or fair trade production systems. Legal contracts (supply contracts) are often part of the system.

Relational: In this network-style governance pattern, interactions between buyers and sellers are characterized by the transfer of information and embedded services based on mutual reliance regulated through reputation, social and spatial proximity, family and ethnic ties, and the like.

Such form of governance is practiced in value chains in which uncertainties and changes are a constant factor. Close working partnerships with suppliers play a key role in survival and success of a firm in turbulent environments. A sector in which relational governance is commonly practiced is for instance the fashion apparel industry. Rapid changes create considerable uncertainty in the downstream market. For example, as a result of continuously changing consumer tastes, retailers face uncertainties in terms of both product design and volume needs. The inherent characteristics of such markets have important implications for the relationships between the firms that serve the end consumers (i.e., retailers) and the firms that supply them (i.e., apparel or textile companies). Joint planning, joint problem solving, collaborative communication and legal contract are the most important elements of relational governance. Specifically, legal contract is a major governance mechanism that a company could use to deal with interdependence. It specifies promises and obligations to perform particular actions. For both parties, legal contract mitigates the uncertainty associated with dependence on the other party for critical resources.

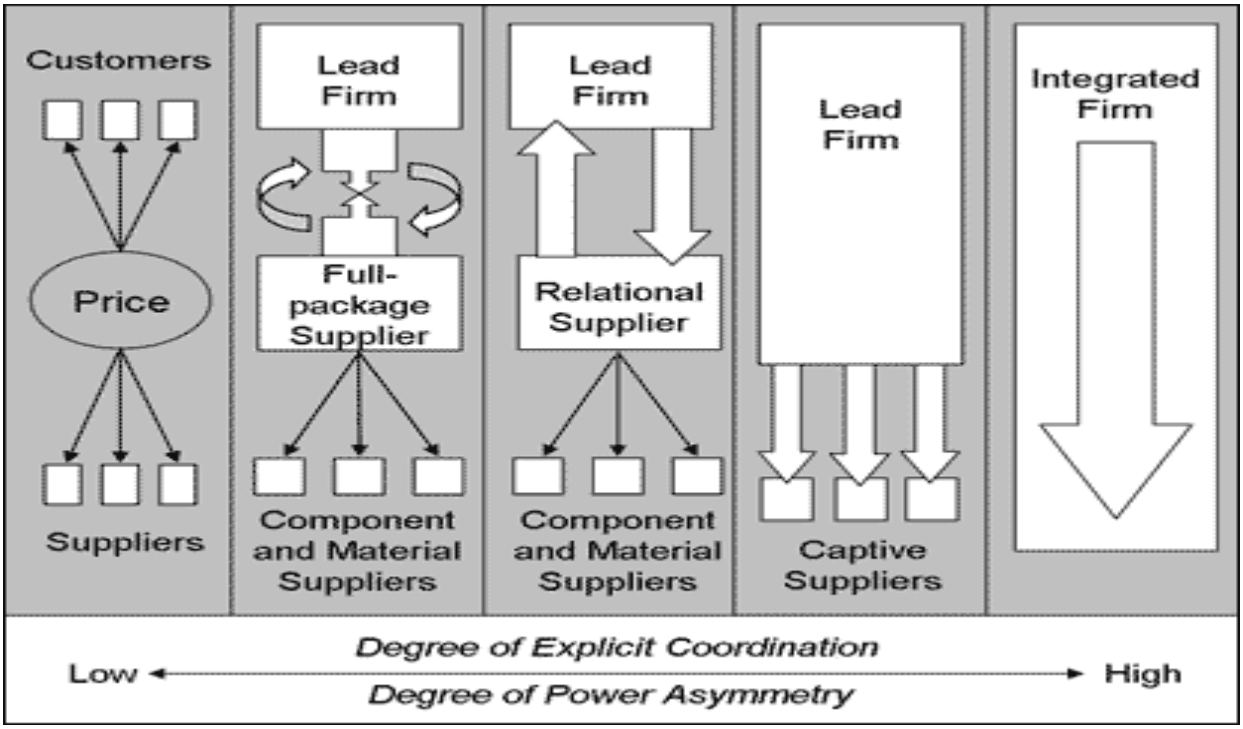
Captive: In these chains, small suppliers are dependent on a few buyers that often wield a great deal of power and control. Such networks are frequently characterized by a high degree of monitoring and control by the lead firm. Competent ethical leadership is important in such cases to ensure that suppliers receive fair treatment and an equitable share of the market price. The asymmetric power relationships in captive networks force suppliers to link to their buyer under conditions that are often specific to that particular buyer. This leads to thick linkages and high switching costs all round.

Typical **examples** for captive governance systems can be found between sugar mills and sugar cane growers, but also tea planters and tea factories. Some form of contract farming can also be put in that type of value chain governance.

Hierarchy: Hierarchical governance describes chains that are characterized by vertical integration and managerial control within a set of lead firms that develops and manufactures products in-house. This usually occurs when product specifications cannot be codified, products are complex, or highly competent suppliers cannot be found. Hierarchical structures provide

regular employment, guarantee quality and build producer capacity. Less tangible social benefits may also be associated with hierarchical (patriarchal!) relationships.

For example or provide schools, health facilities or consumer credit. These benefits can be important to the livelihood strategies of the vulnerable but the prioritization of social considerations over industry competitiveness represents a potential trade-off between economic upgrading and social upgrading.



5.4. Determinants of Governance Structure

The form of governance can change as an industry evolves and matures, and governance patterns within an industry can vary from one stage of the chain to another. The dynamic nature of

governance can be largely accounted for with three variables: the complexity of information that the manufacture of a product entails (design and process); the ability to codify or systematize the transfer of knowledge to suppliers; and the capabilities of existing suppliers to efficiently and reliably produce the product. Additional influences on the governance structure include the quality, stability, and power of the business enabling environment and institutions, as well as other sources of power in the chain, such as suppliers and consumers.

Information Complexity: Refers to the intricacy of information and knowledge that must be transferred to ensure a particular transaction can occur.

Information Codification: Is the extent to which lead firms can convert tacit, implied information and knowledge into explicit, concrete and situation-specific information and transmit it to producers effectively, efficiently and at minimal cost.

Supplier Capability: Refers to the ability of suppliers to meet all transaction requirements. These may include quantity and quality specifications; on-time delivery; and environmental, labor and safety standards.

Types of governances	**Complexity of transactions**	**Possibility of codifi cation**	**Competence level of suppliers**
Market	Low	High	High
Modular	High	High	High
Relational	High	Low	High
Captive	High	High	Low
Hierarchy	High	Low	Low

5.5. Economical, Social, Environmental and Corporate governance Standards

There are legal and regulatory standards and voluntary codes exercised within the value chain which foster/hinder the overall performance of the chain. These are economical, social environmental and corporate governance.

Economic standards

- Monetary flows to the public sector
- Employment and human resource development
- Procurement and supply chain management
- Technology transfer and intellectual property rights

Social standards

- 100% health and safety of employees
- Labour standards and working conditions
- Corruption and bribery
- Human rights
- Violence and conflict
- Social impact assessment and management
- Community and stakeholder engagement (non-commercial)
- Charitable giving
- Social/community investment
- Social reporting and management systems

Environmental standards

- 100% Environmentally safe production, products and services
- Resource and energy efficiency
- Environmental impact assessment and management
- ‰ Environmental reporting and management systems

Corporate Governance standards

- Rights and treatment of shareholder
- Governance policies and business principles
- Information disclosure and reporting
- Responsibilities of the Board
- Customer/end-user care

5.6. Business Law and Ethics

"**Laws**" are the written statutes, codes, and opinions of government organizations by which citizens, businesses, and persons present within a jurisdiction are expected to govern themselves or face legal sanction. Governments use laws and regulations to point business behavior in what they perceive to be beneficial directions. Ethics implicitly regulates areas and details of behavior that lie beyond governmental control. The emergence of large corporations with limited relationships and sensitivity to the communities in which they operate accelerated the development of formal ethics regimes.

Very often it is held that business is not bound by any ethics other than abiding by the law. Milton Friedman is the pioneer of the view. He held that corporations have the obligation to make a profit within the framework of the legal system, nothing more. Friedman made it explicit that the duty of the business leaders is, "to make as much money as possible while conforming to the basic rules of the society, both those embodied in the law and those embodied in ethical custom".

Business law: encompasses all of the laws that dictate how to form and run a business. This includes all of the laws that govern how to start, buy, manage and close or sell any type of business. Business law includes state and federal laws as well as administrative regulations.

Business ethics (also known as **corporate ethics**) is a form of applied ethics or professional ethics, that examines ethical principles and moral or ethical problems that can arise in a business environment. It applies to all aspects of business conduct and is relevant to the conduct of individuals and entire organizations. These ethics originate from individuals, organizational statements or from the legal system. These norms, values, ethical, and unethical practices are the principles that guide a business. They help those businesses maintain a better connection with their stakeholders. Business ethics refers to contemporary organizational standards, principles, sets of values and norms that govern the actions and behavior of an individual in the business organization.

5.6.1. Influential factors on business ethics

Many aspects of the work environment influence an individual's decision-making regarding ethics in the business world. When an individual is on the path of growing a company, many outside influences can pressure them to perform a certain way. The core of the person's performance in the workplace is rooted by their personal code of behavior. A person's personal code of ethics encompasses many different qualities such as integrity, honesty, communication, respect, compassion, and common goals. In addition, the ethical standards set forth by a person's superior(s) often translate into their own code of ethics. The company's policy is the 'umbrella' of ethics that play a major role in the personal development and decision-making processes that people make in respects to ethical behavior.

The ethics of a company and its' individuals are heavily influenced by the state of their country. If a country is heavily plagued with poverty, large corporations continuously grow, but smaller companies begin to wither and are then forced to adapt and scavenge for any method of survival. As a result, the leadership of the company is often tempted to participate in unethical methods to obtain new business opportunities. Additionally, Social Media is arguably the most influential factor in ethics. The immediate access to so much information and the opinions of millions highly influence people's behaviors. The desire to conform with what is portrayed as the norm often manipulates our idea of what is morally and ethically sound. Popular trends on social media and the instant gratification that is received from participating in such quickly distort people's ideas and decisions.

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