

# Making Value Chains Work Better for the Poor

A Toolbook for Practitioners of Value Chain Analysis





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December 2008

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# Foreword

This toolbook is the result of a concerted effort of a large number of people. Currently in its third version, substantial updates have been made since 2005 when this toolbook was first envisaged. This version of the toolbook has benefited enormously from the establishment of a network of collaborators from around the world (currently 73 persons) who have contributed to the wikibook hosted at www.valuechains4poor.org. While the wikibook is a continually evolving resource, version 3 of this toolbook presents the state of the book as at 30 November 2008.

The working group of authors would like to gratefully acknowledge the support of the many people who contributed to the conception and preparation of this toolbook. These include Alan Johnson from the Department for International Development (DFID), Thomas Finkel and the staff of the Gesellschaft fűr Technische Zusammenarbeit – Development of Small and Medium Enterprises (GTZ-SME) promotion project, Kees van der Ree, Bas Rozemuller and Ingrid Hultquist of the ILO-PRISED (International Labour Organisation - Poverty Reduction through Integrated Small Enterprise Development Project) project.

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# List of Abbreviations

	A mer Burin and Development A $(S (Devenuel))$
ABD	Agro Business Development A/S (Denmark)
BCAS	Bangladesh Center for Advanced Studies
CAMIP	Cambodia Agricultural Market Information Project
CF	Collaborating Farmers
CIDA CIEM	Canadian International Development Assistance
DFID	Central Institute for Economic Management (Vietnam)
DVC	Department for International Development Domestic Value Chain
EU	European Union
FMS	Farmer Marketing School
FTE	-
GAP	Full Time Equivalent
GAP GTZ	Good Agricultural Practices
HACCP	Gesellschaft für Technische Zusammenarbeit (German Development Cooperation)
IFAD	Hazard Analysis and Critical Control Point
	International Fund for Agricultural Development
IFC	International Finance Corporation
ILO	International Labour Organisation
IPM	Integrated Pest Management
ITTCP	Information for Tourism and Trade Promotion Center (Vietnam)
LF	Lead Farmers
M4P	Making Markets Work Better for the Poor
MPDLC	Micro Projects Development through Local Communities (Vietnam)
MPDF	Mekong Private Sector Development Facility
	North-East Economic Development Project (Thailand)
	National Economic Research Institute (Vietnam)
	National Economic and Social Development Board (Thailand)
NCF	Non-Collaborating Farmers
OEM	Original Equipment Manufacturer
OTOP	One Tambon (Village) One Product
PRISED	Poverty Reduction through Integrated Small Enterprise Development
R&D	Research and Development
RDMA	Rural Development in Mountainous Areas
ROI	Return on Investment
Rs	
SME	Small and Medium Enterprise
SNV	Netherlands Development Organisation
UK	United Kingdom
UNDP	United Nations Development Programme
USD	United States Dollar
VND	Vietnam Dong
ZMK	Zambia Kwacha

# Value Chain Toolbook – Introduction

### 1. Introduction

The toolbook provides value chain practitioners with an easy to use set of tools for value chain analysis, with a focus on poverty reduction. Although a number of handbooks on value chain analysis already exist, the aim of this toolbook is to strengthen the links between value chain analysis and development interventions that improve the opportunities available to the poor. Hence, the tools presented here are similar to those presented in other handbooks, but the unique feature of the toolbook is that each of the tools has a clear focus on analysing the impact of the value chain from the point of view of the poor.

## 2. Who should use the Toolbook?

The toolbook is designed as a concise manual to be used in the field and by those involved in project development and/or assessment of investment opportunities. The focus is on providing easy to follow tools and clear explanations about their use. This includes examples of how these can and have been used in real value chain analyses in the past. Although the value chain analysis theory that underpins the tools presented in the toolbook is an important element, the practical aspects of analysis dominate the toolbook content.

One of the basic assumptions for using this toolbook is that the starting point of the value chain analysis is market development aimed at making an impact on the poor by providing them with better income or employment security through market participation. This means that farmers/producers are not looked upon as small surplus sellers from within a self-sufficiency strategy but rather as commercial (micro-) entrepreneurs for whom participation in the market is a deliberate and focused choice.

As much as the toolbook is developed for field-based practitioners it is also a useful resource for local policy and decision makers. The toolbook can provide them with a better understanding on how markets can be organised, and the role they can play as decision makers to facilitate the development of value chains and improve the position of the poor within the value chain. The principles presented in the toolbook can also help inform the decision to select certain value chains in which e.g. a province or district wants to be more competitive and to commission value chain analysis research to determine development strategies.

# 3. Organisation of the Toolbook

The toolbook is organised in two sections. The first section gives a theoretical background to value chains and also explains the pro-poor entry points for value chain analysis described in this toolbook.

The second section contains eight practical value chain analysis tools that can be used to analyse different dimensions within value chains; see Table 1.

# Table 1: Tools for analysing various dimensions of the value chain.

The eight tools presented in the toolbook relate more closely with some dimensions than others, as indicated by a greater number of ticks for that association.

	Genera	General Tools		Qualitative Tools		0	Quantitative Tools	
	Tool 1	Tool 2	Tool 3	Tool 4	Tool 5	Tool 6	Tool 7	Tool 8
Dimensions	Prioritising Value Chains for Analysis	Mapping of the Value Chains	Governance: Coordination, Regulation and Control	Linkages, Relationship and Trust	Analysing Options for Demand Driven Upgrading: Knowledge, Skills, Technology and Support Services	Analysing Costs and Margins	Analysing Income Distribution	Analysing Employment Distribution
Participation of the poor	>	>	>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	>		> >	> > >
Employment and working environment	>	>	>		>	>	>	> > >
Wages and income	>	>	>			>>>	> >	>
Access to assets	>	>		>	> > >	>		
Access to information and technology	>	>	> > >	>	> > >	>		
Access to infrastructure	>	>	> >		>			>
Access to services	>	>	>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>				
Security and vulnerability	>	>	>		>	>	>	> > >
Empowerment	>	>	> >	> > >				

#### Terminology: dimension



Dimension in this toolbook means an area of interest or focus for the analysis. For example, a specific dimension targeted in this toolbook is the participation of the poor.

The eight tools are grouped in three sub-sets. The first sub-set contains two general tools on value chain selection and mapping of value chains. The second sub-set contains three qualitative tools to analyse the governance structure, linkages, and opportunities for upgrading. The third sub-set contains three quantitative tools to analyse costs and margins, income distribution and employment distribution.

Specific examples of the use of these different tools in value chain analysis appear in the toolbook as boxes, or are presented at the end of each tool. Other important points in the toolbook are highlighted with the following icons:



# 4. How to use the Toolbook

Using the tools presented in the toolbook is not meant to be a linear process of working one's way from Tool 1 to 8. Value chain analysis is not a linear process but should try to capture the dynamics and flexibility within the value chain as well. Depending on the main pro-poor interests, time available for analysis and experience with value chain work, some tools may be used more intensely than others.

Table 1 shows various dimensions of pro-poor value chain analysis and the tools that could be utilised to analyse those dimensions. The relevance of each tool to a specific dimension is indicated by the number of ticks; the greater the number of ticks (to a maximum of three ticks), the more relevant the tool is for analysing that particular dimension.

# 5. Scope and Objective of Value Chain Analysis

Having various tools available to analyse value chains does not mean that all of the tools should be used at all times. The choice of tools to be used (general, qualitative and/or quantitative) will depend largely on the scope and objective of the analysis itself (often dictated by financial or time constraints, or other limitations).

Pro-poor growth has been chosen as the main objective of value chain analysis in this toolbook. Therefore, the focus of the analysis should be on gaining a good understanding of the context in which producers and/or small traders operate as participants of the value chain. In chains that are in an early stage of development the same persons often carry out these two functions. It should be taken into account also that actors at the producer/trader level are often involved in more than just the single activity that is being analysed.

#### Terminology: actor



The term actor refers to any person (e.g. farmer, trader, supplier, buyer) who plays a role in the value chain.

Once the direct context of the activity to be analysed is understood, it becomes important to look at the wider environment in which the value chain operates. For example, the broad government economic policies and the extent to which pro-poor policies have been integrated into and are in tune with these broader government policies, rather than standing on their own.

Once the value chain analysis has been completed it is important to decide which of possible interventions identified are realistic in the sense that there is a genuine possibility of implementing such interventions, and what the timeframe of implementation could be.

PART 1CONCEPTSPART 2 -VALUE CHAIN<br/>ANALYSIS TOOLS -<br/>GENERAL TOOLSPART 3 -VALUE CHAIN<br/>ANALYSIS TOOLS<br/>- QUALITATIVE<br/>TOOLSPART 4 -VALUE CHAIN<br/>ANALYSIS TOOLS<br/>- QUANTITATIVE





# PART 1 – CONCEPTS

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# Concepts

## 1 Definition

The idea of value chain is quite intuitive. The term value chain refers to the full range of activities that are required to bring a product (or a service) from conception through the different phases of production to delivery to final consumers and disposal after use (Kaplinsky 1999; Kaplinsky and Morris 2001). Further, a value chain exists when all of the actors in the chain operate in a way that maximises the generation of value along the chain.

This definition can be interpreted in a narrow or broad sense.

In the **narrow sense**, a value chain includes the range of activities performed **within a firm** to produce a certain output. This might include the conception and design stage, the process of acquisition of input, the production, the marketing and distribution activities, and the performance of after-sale services. All of these activities constitute the 'chain' which links producers to consumers and each activity adds 'value' to the final product.

For example, the availability of post-sale assistance and repair services for a mobile phone company increases the overall value of the product as a consumer may be willing to pay a higher price for a mobile phone that has a good after-sale service. The same is true for an innovative design or for a highly controlled production. For example, in agribusiness enterprises an appropriate system of storing fresh raw materials (e.g. fruits) positively impacts on the quality of the final product and, consequently, increases its value.

The **broad approach** of defining a value chain looks at the complex range of activities implemented **by various actors** (primary producers, processors, traders, service providers) to bring a raw material through a chain to the sale of the final product. The 'broad' value chain starts from the production system of the raw materials and will move along the linkages with other enterprises engaged in trading, assembling, processing, etc.

The broad approach does not only look at the activities implemented by a single enterprise. Rather, it includes all its backward and forward linkages, until the level in which the raw material is produced will be linked to the final consumers. In the remaining part of this handbook, the term 'value chain' will refer exclusively to this broad definition.

The concept of value chain encompasses the issues of organisation and coordination, the strategies and the power relationships of the different actors in the chain. These and other relevant issues will be discussed in this toolbook. For now it is important to understand that conducting a value chain analysis requires a thorough investigation of what is going on between the actors in a chain, what keeps these actors together, what information is shared, and how the relationships between actors is evolving.

In addition, the idea of value chain is associated with the concept of governance, which is of key importance for those researchers interested in the social or environmental facets of value chain analysis. The establishment (or the evolution) of value chains may put pressure on natural resources (such as water or land) which may produce degradation of the soil, loss of biodiversity or pollution. Additionally, the development of value chains might affect social ties and traditional norms. For example, power relationships within households or communities may be modified or the vulnerable or poorest population groups may be negatively affected by the operations of value chain participants.

These concerns are highly relevant to agricultural value chains because agricultural value chains are critically dependant on environmental resources. Also, the agricultural sector is often characterised by the prevalence of traditional social norms. Finally, due to the high incidence of the poor in the agricultural sector, the value chain framework can be used to draw conclusions on the participation of the poor and the potential impact of value chain development on poverty reduction.

# 2 Value Chain Main Concepts

This section provides an overview of the main concepts of value chain from an academic perspective. This serves to clarify the concept and the concise literature review presented here introduces some of the main issues related to value chain analysis. The three main research streams in the value chain literature are: (i) the filière approach (Duruflé, Fabre et al. 1988), (ii) the conceptual framework elaborated by Porter (1985) and (iii) the global approach proposed by Kaplinsky (1999) and Gereffi et al (Gereffi 1994; Gereffi and Korzeniewicz 1994; Gereffi 1999; Gereffi, Humphrey et al. 2003).

#### Filière

The 'filière' approach (filière means thread or chain) includes various schools of thought and research traditions. Initially, the approach was used to analyse contract farming and vertical integration in French agriculture in the 1960s and was applied in parallel to agricultural systems under the French colonial system. In the latter case, the analysis mainly served as a tool to study the ways in which the agricultural production systems (especially rubber, cotton, coffee, and cocoa) were organised in the context of developing countries, In this context, the filière framework paid special attention to how local production systems were linked to processing industry, trade, export and final consumption.

The filière concept has therefore always encompassed a strong empirical perspective which was used to map the flow of commodities and to identify actors and activities. The rationale of the filière is similar to the broader concept of value chain presented above. However, the filière mainly focused on issues of physical and quantitative technical relationships, summarised in flow-charts of commodities and mapping of transformation relationship.

There are two strands of filière approach which share some insights with value chain analysis:

the economic and financial evaluation of filières (presented in Duruflé, Fabre and Yung (1988) and used in a number of French-funded development projects in the 1980s and 1990s), focuses on income generation and distribution in the commodity chain, and separates costs and incomes between local and internationally-traded components to analyse the spill-over of the chain onto the national economy and its contribution to GDP along the "effect method" ("méthode des effets"). the strategy-focused analysis of filière, especially used in the university of Paris-Nanterre, some research institutes (e.g. CIRAD and INRA) and NGOs working on agricultural development (e.g. IRAM), researching in a systemic way the interplay of objectives, constraints and results of each type of actors in the chain. Individual and collective strategies are analysed, as well as patterns of regulations, for which Hugon (1985) defines four main types of commodity chains in Africa: domestic regulation, market regulation, state regulation and international agri-business regulation. Moustier and Leplaideur (1999) have provided an analytical framework on the organisation of the commodity chains (mapping, individual and collective strategies), and its performance in terms of price and income generation, taking into account African food farmers' and traders' specialisation versus diversification strategies.

#### Porter's Framework

The second research stream refers to the work of Porter (1985) on competitive advantages. Porter has used the framework of value chains to assess how a firm should position itself in the market and in the relationship with suppliers, buyers and competitors. The idea of competitive advantage of an enterprise can be summarised as follows: how can a firm provide customers with a product or service of equivalent value compared with competitors, but at lower cost (strategy of cost reduction)? Alternatively, how can an enterprise produce a product or service that customers are willing to pay a higher price for (strategy of differentiation)?

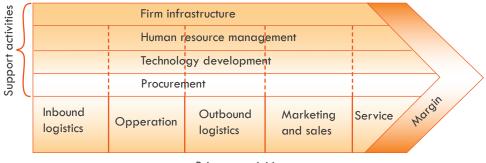
In Porter's (1985) framework the value chain provides a tool that firms can use to determine their source (current or potential) of competitive advantage. In particular, Porter argued that the sources of competitive advantage cannot be detected by looking at the firm as a whole. Rather, the firm should be separated into a series of activities and competitive advantage found in one (or more) of such activities. Porter distinguishes between **primary activities**, which directly contribute to add value to the production of the product or services and **support activities**, which have an indirect effect on the final value of the product.

In the framework of Porter the concept of value chain does not coincide with the idea of physical transformation. Porter introduced the idea that a firm's competitiveness does not relate exclusively to the production process. Enterprise competitiveness can be analysed by looking at the value chain which includes product design, input procurement, logistics, outbound logistics, marketing, sales, after-sales and support services such as strategic planning, human resources management and research activities.

In Porter's framework the concept of value chain therefore has a strict business application. Consequently, value chain analysis mainly aims at supporting management decision and executive strategies. For example, a value chain analysis of a supermarket in Europe may point out that the competitive advantage of such a supermarket over competitors is the availability of exotic vegetables. Detecting the source of competitive advantage is valuable information for business purposes. Following on this finding, the supermarket is likely to strengthen the relationship with producers of exotic fruits and advertisement campaigns will pay special attention to such issues.

#### Figure 1: Porter's value chain.

The model created by Porter identifies a number of primary and support activities that are common to a range of businesses. The value chain highlights specific activities through which firms can create value and therefore is a useful tool to simplify analysis.





An alternative way of approaching the search of competitive advantage is based on the concept of a value system; see Figure 2. Instead of limiting the analysis of competitive advantage to a single firm, the firm's activities are considered as a part of a larger stream of activities, termed 'the value system'. A value system includes the activities implemented by all firms involved in the production of a good or service, starting from basic raw materials to those engaged in the delivery of the final product to consumers. The concept of value system is therefore broader compared to the one of 'enterprise value chain' and resembles what this toolbook refers to when dealing with value chains (broad approach). However, it is important to point out that in Porter's framework the concept of value system is mostly a tool for assisting executive management in strategic decisions.

#### Figure 2: The value system.

With this approach the value chains of each firm are analysed to provide an overview of the value system.



#### The Global Approach

More recently, the concept of value chains has been applied to the analysis of globalisation (Gereffi and Korzeniewicz 1994; Kaplinsky 1999). This literature used the framework of value chain to examine the ways in which firms and countries are globally integrated and to assess the determinants of global income distribution.

Kaplinsky and Morris (2001) observed that in the course of globalisation, there has been a perception (usually well-justified) that the gap in incomes within and between countries has increased. They argue that value chain analysis can help to explain this process, particularly in a dynamic perspective.

Firstly, by mapping the range of activities along a chain, a value chain analysis breaks down total value chain earnings into the rewards that are achieved by different parties in the chain. This method will be introduced in the second part of this toolbook. A value chain analysis is the most accurate way of understanding the distribution of earnings. Other ways of viewing global distributional patterns provide only partial insights into these areas. For example, trade statistics only provide data on aggregate, gross returns rather than on net earnings, and branch-specific analyses (agriculture, industry, services) only capture part of the story.

Secondly, a value chain analysis can show how firms, regions and countries are linked to the global economy. This will largely determine the distributional outcomes of global production systems and the capacity which individual producers have to build in order to upgrade their operations and thus to launch themselves onto a path of sustainable income growth.

In the value chain framework international trade relations are considered part of networks of producers, exporters, importers, and retailers, whereby knowledge and relationships are developed to gain access to markets and suppliers. In this context, the success of developing countries and market actors in developing country lies in the ability of accessing these networks.

A key contribution of this tradition is a well-developed theory of governance of globally integrated production systems that is relevant to the power of lead firms to set standards that define the terms on which producers participate in these systems. Particularly, Gereffi, Humphrey, and Sturgeon (2003) attribute the mode of governance of a value chain to a combination of complexity of transactions, ability to codify (or formally describe) transactions, and the competency of the supplier base, the combination(s) of which result in different coordination structures of value chains. According to this approach, low supplier competency is a key barrier to participation of the poor in globally integrated chains.

## 3 A Pro-Poor Entry Point into Value Chain Analysis

Value chain analysis is reasonably flexible and the value chain can be analysed from the point of view of any one of the large number of actors in the chain. Value chain analysis as presented above can help design projects and programs to provide support to a value chain, or set of value chains, in order to achieve a desired development outcome.

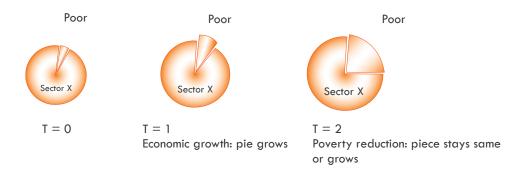
Examples of desired development outcomes could include: increasing the level of exports, generating maximum employment, benefiting a particular group in society, using locally produced raw materials, or concentrating development benefits in underdeveloped or disadvantaged regions of a country. The entry point, and therefore the concentration of the value chain analysis, is directly related to the desired development outcome from supporting the value chain.

The entry point and orientation of value chain analysis in this toolbook **is making value chains work better for the poor**. Therefore, the tools used in the analysis are oriented toward analysing the value chain from the point of view of the poor. The final objectives of improving value chains for the poor are two-fold. The first is to increase the total amount and value of products that the poor sell in the value chain. This results in higher absolute incomes for the poor as well as for the other actors in the value chain. The second objective is to sustain the share of the poor in the sector or increase the margins per product, so that

the poor do not only gain more absolute income but also relative income compared to the other actors in the value chain; see Figure 3. This is shown as T = 2 and can be defined as pro-poor growth.

#### Figure 3: Pro poor growth.

The baseline situation is shown as T = 0. Economic growth in which all participants of the value chain see increased income is shown in T = 1. In T = 2 the poor actors in the value chain get a relative increase in growth compared with the other actor in the value chain.



The value chain approach is mainly a descriptive tool to look at the interactions between different actors. One advantage of value chain analysis is that it forces the analyst to consider both the micro and macro aspects of production and exchange activities. The commodity-based analysis can provide better insights into the organisational structures and strategies of different actors and an understanding of economic processes which are often studied only at the global level (often ignoring local differentiation of processes) or at the national/local levels (often diminishing the larger forces that shape socio-economic change and policy making).

Kaplinsky and Morris (2001) stress that there is no "correct" way to conduct a valuechain analysis; rather, the approach taken fundamentally depends on the question that is being asked. However, four aspects of value-chain analysis of agriculture are particularly important.

First, at its most basic level, a value-chain analysis **systematically maps the actors** participating in the production, distribution, marketing, and sales of a particular product (or products). This mapping assesses the characteristics of actors, profit and cost structures, flows of goods throughout the chain, employment characteristics, and the destination and volumes of domestic and foreign sales (Kaplinsky and Morris 2001). Such details can be gathered from a combination of primary survey work, focus groups, participatory rural appraisals (PRAs), informal interviews, and secondary data.

Second, value-chain analysis can play a key role in **identifying the distribution of benefits of actors in the chain**. That is, through the analysis of margins and profits within the chain, it is possible to determine who benefits from participation in the chain and which actors could benefit from increased support or organisation. This is particularly important in the context of developing countries (and agriculture in particular), given concerns that the poor in particular are vulnerable to the process of globalisation (Kaplinsky and Morris 2001). One can supplement this analysis by determining the nature of participation within the chain to understand the characteristics of its participants. Third, value-chain analysis can be used to **examine the role of upgrading within the chain**. Upgrading can involve improvements in quality and product design or diversification in the product lines served, allowing producers to gain higher value. An analysis of the upgrading process includes an assessment of the profitability of actors within the value chain as well as information on limitations that are currently present. Governance issues (see below) play a key role in defining how such upgrading occurs. In addition, the structure of regulations, entry barriers, trade restrictions, and standards can further shape and influence the environment in which upgrading can take place.

Finally, value-chain analysis **highlights the role of governance** in the value-chain, which can be internal or external. Governance within a value-chain refers to the structure of relationships and coordination mechanisms that exist between actors in the value-chain. Governance is a broad concept which basically ensures that interactions between chain participants are organised, rather than being simply random. Generally speaking, governance within the chain occurs when some actors in the chain work to criteria set by other actors in the chain, for example quality standards or delivery times and volumes set by processing industries. Commercial rules that govern commercial relationships in global or local value chains may constrain or restrict the role of the poor, but also may create important learning and upgrading opportunities. Commercial rules can be very specific (codified), e.g. clearly set and described quality grades of agricultural produce with corresponding transparent prices or pricing formulas.

External governance is important from a policy perspective by identifying the institutional arrangements that may need to be targeted to improve capabilities in the value-chain (e.g. research), remedy distributional distortions, and increase value-added in the sector. External governance also relates to chain specific legislation and regulation, but also describes general public sector interventions relevant to value chain development.

Figure 4 illustrates the methodology used in value-chain analysis. At the heart of the analysis is the mapping of sectors and key linkages. The value-added of the value-chain approach, however, comes from assessing these intra- and inter-actor linkages through the lens of issues of governance, upgrading, and distributional considerations. By systematically understanding these linkages within a network, one can better prescribe policy recommendations and, moreover, further understand their impact on the chain.

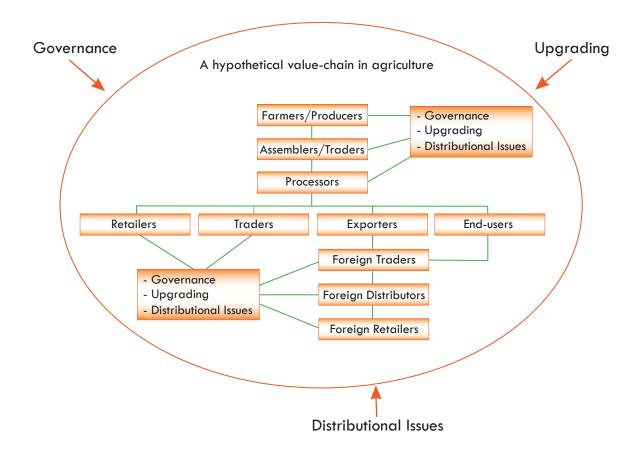
Value chains are complex, and particularly in the middle levels, one firm may feed into several of chains. Which chain (or chains) is the subject of enquiry depends on the point of entry for the research inquiry. Table 2 lists some possible points of entry.

In each case, the point of entry defines which links and which activities in the chain are the subject of further enquiry. For example, if the focal point of the enquiry is in the design and branding activities in the chain, then the point of entry might be on design houses, or the branding function in key global marketing companies. This will require the research to go backwards into a number of value chains which feed into a common brand name (for example, the different suppliers to Nestle). At the other end of the scale, a concern with small and medium sized firms, which feed into a number of value chains, might require the research to focus on final markets, buyers and their buyers in a number of sectors, and on a variety of input providers.

The key entry point that will be used in this toolbook is the impact of the development and operation of value chains on the poor. This entry point will be incorporated into each of the tools described in the toolbook. Although the tools contained in the toolbook are a standard set of tools for value chain analysis, the distinguishing feature of the tools presented in the following sections are that they are explicitly slanted toward the analysis of how the value chain is "working for the poor".

#### Figure 4: A schematic of a value chain analysis.

In this analysis the value chain linking actors from production to final consumption is overlaid with the three main issues of governance structures, upgrading strategies and distributional and equity.



Source: (Rich 2004)

## Table 2: Examples of different points of entry for value chain research.

The entry point in to the value chain will be determined by the primary research interest. Note in this table OEM denotes Original Equipment Manufacturer and SME denotes Small Medium Enterprises.

Primary area of research interest	Point of entry	What to map	Example
The global distribution of income	The final consumer (and recycling) in a sector	Backwards down whole chain to retailers, buyers and producers	For furniture, begin with groups of customers of department and specialist stores in rich countries
Role of retailers	Supermarkets or retail chains	Forwards to type of customer, backwards though buyers, producers and their suppliers	For food, begin with supermarkets
The role of independent buyers	Independent buyers, wholesalers	Backwards to producers and their suppliers in same chain, forwards to retailers	For shoes, begin with specialist buyers, in fruit and vegetables with category buyers
Design	Independent design houses, advertising agencies or large firms with global brands	Forwards to retailers in various final markets, backwards to variety of producers and their suppliers	For clothing, begin with Prada and the GAP in the volume markets and to Gucci in Haute Couture markets
Role of key producers	Large OEMs assembling final products	Forwards to retailing, backwards to suppliers and their suppliers	For autos, Ford; in consumer electronics, Sony
First tier suppliers	Large firms providing sub⊐assemblies to OEMs	Forwards to OEMs and their customers, perhaps in more than one sector; backwards to suppliers and their suppliers	For autos, Magna and Delphi; in computers, with motherboard and monitor manufacturers
2nd and 3rd tier suppliers	Generally small firms	Forwards to customers in a variety of sectors, backwards to suppliers and their suppliers	For food, to firms printing packaging materials; in banking, to providers of software modules
Commodity producers	Generally large firms	Forwards to producers, buyers and final markets and backwards to machinery and input suppliers	For copper, to major buyers at London Metal Exchange and to suppliers to the telecoms sector
Agricultural producers	Farms	Forwards to processors, buyers and their customers, backwards to input suppliers	Fresh vegetables to salad packers and category buyers in final markets
Small firms and farms	Small farms, industrial SMEs	Buyers in a range of value chains, input suppliers	Handicraft suppliers to exporters, small farms to processing plants
Informal economy producers and traders	Home based workers, street traders	Forwards to processors, assemblers or third party organisers/distributors, backwards to retailers	Outsourcing in clothing and shoes, recycling cardboard cartons to mills, street based tourist handicrafts
Gender, age and ethnicity	Female labour	Use of female labour throughout value chain	For clothing, women in cotton farms, factories, export agents, design houses, advertising agencies, retail stores

Source: (Kaplinsky and Morris 2001)















