

Understanding market-based livelihoods in a globalising world: combining approaches and methods

**Nazneen Kanji, James MacGregor and Cecilia Tacoli
International Institute for Environment and Development (IIED)**

November 2005

Contents

1. Introduction and purpose of paper

2. Livelihoods analysis

- 2.1 Definitions and frameworks
- 2.2 Methods and tools
- 2.3 Key strengths and weaknesses

3. Value chain analysis (VCA) and variants

- 3.1 Definitions and approaches
- 3.2 Methods and tools
- 3.3 Key strengths and weaknesses

4. Combined approaches

- 4.1 Why combine livelihoods analysis and value chain analysis?
- 4.2 How can approaches be combined? Illustrative examples from recent research.
 - 4.2.1 Combining methods to understand livelihoods and cashew nut production and trade: examples from Mozambique and India
 - 4.2.2 Combining cluster and commodity chain approaches to understand rural livelihood diversification: an example from Vietnam
 - 4.2.3 Combining methods to understand a growing sector: shrimp in Bangladesh
 - 4.2.4 Combining methods to understand different actors' constraints in a value chain, and the opportunities for policy: an example from peri-urban horticulture in Mali

5. Conclusions

Acknowledgements

The authors would like to thank Sonja Vermeulen, IIED; Padmini Swaminathan, Madras Institute for Development Studies, India and David Lewis, London School of Economics for useful comments on an earlier draft of this paper. We are also grateful to Sida and the Swiss Agency for Development Cooperation (SDC) for financing this work through the Sustainable Markets Group at IIED.

1. Introduction and purpose of paper

Poverty reduction is the main aim shared globally by governments, international agencies and civil society. The most effective ways to achieve this aim are contested but current policies tend to focus on enabling institutional environments, rather than direct initiatives to reduce poverty. Dominant thinking favours market-led growth as the key to development *and* to poverty reduction. Improving access to markets for goods produced in poor countries, by low-income producers and workers, is seen as a critical route out of poverty.

Although there has been much research on markets and on livelihoods, it tends to be carried out by researchers from different disciplines. The study of markets is dominated by an economic approach often using quantitative methods, where econometric models are developed. Non-economic social scientists and practitioners, who tend to pay more attention to the context, and to rely on qualitative and participatory methods, usually carry out livelihoods research. The purpose of this paper is two-fold: to argue that a multidisciplinary approach is useful and to provide some pointers on how to build an integrated methodology.

We describe research approaches and methodologies which contribute to making an accurate and realistic assessment of the potential of markets to enhance the livelihoods of poor groups of people. The first argument we make in this paper is that understanding the potential for enhancing people's livelihoods through market access and participation entails:

- Understanding their livelihood assets and strategies, which have developed over time in particular local contexts;
- Understanding the nature of markets for particular goods, which are affected by processes occurring locally, nationally and internationally; and,
- Examining the interaction between livelihoods and markets, to develop contextually relevant policies to reduce poverty.

We focus on two methodological approaches: firstly, livelihoods analysis and secondly, value chain analysis and its variants. Livelihoods analysis tends to focus on *people* and prioritise the local context whereas value chain analysis tends to focus on relationships and other linkages between *firms*, prioritising vertical linkages. Given the increasing interaction between the local and the global both are necessary to identify policy actions in support of low-income groups,

The first part of the paper describes the key features of livelihoods analysis and commodity/value chain analysis, discussing the methods and tools which can be used and the strengths and weaknesses of each approach. The second part of the paper explains **why** it is useful to combine the two approaches and provides methodological pointers on **how** to combine them. It draws on recent research to exemplify. Research framework and design will and should depend on the specific research questions, context and policy focus. While there are no blueprints, we argue for multi-disciplinary teams to develop innovative research design and analytical frameworks that build on the strengths, and take into account the relative weaknesses, of their different approaches, methods and tools.

2. Livelihoods Analysis

2.1 Livelihoods analysis: definitions and frameworks

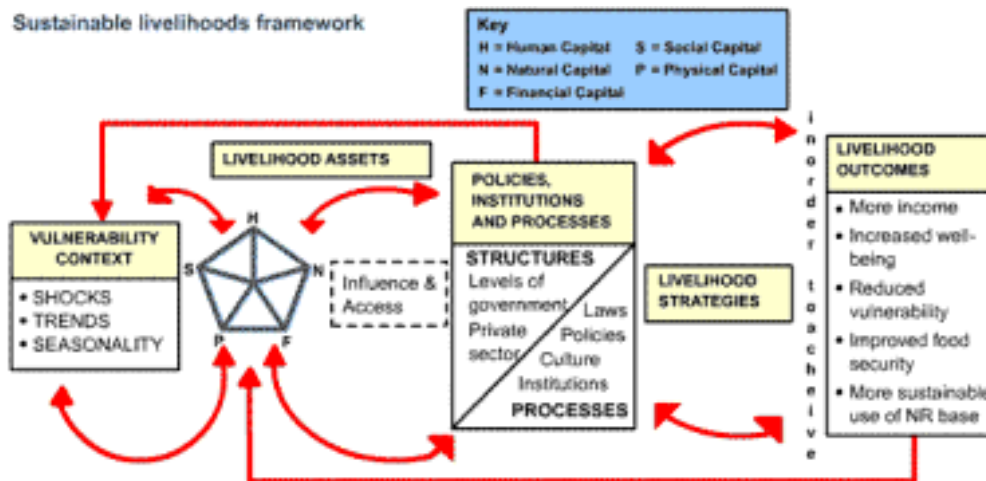
Carney (1998:4) holds that 'a livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base'. This definition is based on Chambers and Conway's work (1992).

The concept of livelihoods is increasingly used in development debates, in which people's capabilities, and social as well as material assets, are recognised to be important to make a living. The livelihoods approach is concerned first and foremost with people. It seeks to recognise and gain an understanding of people's own strategies to survive and improve their livelihoods, using their assets and capabilities.

Our understanding of poverty has changed in the past two decades. It is now widely accepted that poverty is dynamic (people move in and out of poverty) and multidimensional (limited access to services and social networks are as important as insufficient incomes). Vulnerability is an important concept in understanding poverty. It relates to risk and people are vulnerable to poverty when they are more at risk than others, due to factors at household level (e.g. ill health), community/regional level (e.g. drought) and national level (e.g. policies which affect the costs of goods and services).

There are a number of sustainable livelihood frameworks that take an asset/vulnerability approach to the analysis of poor people's livelihoods.¹ The DFID framework (Figure 1) defines five types of assets: human capital, social capital, natural capital, physical capital and financial capital, which are influenced by a particular vulnerability context, including trends, shocks and seasonality. Social capital is a broad term encompassing the norms and networks facilitating collective action for mutual benefit (Woolcock, 1998, cited in Bebbington, 1999:37). The framework depicts a set of policies, institutions and processes that influence and are influenced by people's livelihood strategies. Based on the various interactions, the framework delineates a set of livelihood outcomes, which go well beyond income measures.

Figure 1:



It was initially developed with rural contexts in mind and reflects a concern with understanding how natural resources (including common property resources) contribute to livelihoods and how resources can be managed so that future livelihoods are not undermined.

¹ Agencies, such as DFID, CARE, Oxfam and UNDP have used a livelihoods approach. A useful overview is provided by: Carney *et al.* 1999. The assets/vulnerability approach is also reflected in parts of the World Development Report of 2000/2001 and in the Bank's recent work on social protection – see Holzmann and Jorgensen (1998); World Bank (2001).

At the core of the framework is the livelihood assets or capitals pentagon, capitals which are related and combined in different ways:

- Human capital: skills, knowledge and health
- Social capital: networks, membership of groups and relationships of trust, reciprocity and exchange
- Natural capital: natural resources including intangible public goods such as biodiversity to divisible resources such as land and forests
- Physical capital: infrastructure and producer goods– transport, shelter, water, energy and communications
- Financial capital: stocks and flows including income, credit, and savings.

There have been useful developments in thinking about livelihoods, in particular, Bebbington's (1999) framework, which builds on his work on rural livelihoods and poverty in the Andes. His "Capitals and Capabilities" framework redraws the 'capitals' pentagon in the DFID framework and interprets capitals somewhat differently:

- A different set of five capitals or assets: human, social and natural (as in the DFID framework), produced and cultural. He uses 'produced' capital to talk about a wider range of assets than physical and financial and moves away from a focus on agrarian livelihoods to rural livelihoods which include (for example) rural industry, rural-urban commerce and migration as livelihood strategies.
- More emphasis on social and cultural capital. People's assets are not merely a means through which they make a living- they also give meaning to the person's world. The maintenance of social and cultural practices that accompany rural residence is also important, not only earning a living.

Capitals are not simply resources to use in building livelihoods but give people the capability to be and to act – for example, human capital gives people to the capability to engage more fruitfully and meaningfully with the world and also to change the world. Bebbington's framework therefore sees assets not only as vehicles for instrumental action (making a living) but also to make living meaningful and for emancipatory action that is to challenge the structures under which one makes a living. He emphasises the way in which social capital is tied up with livelihoods in that it provides access to resources – and breaks down the distinction between resources and access since access itself is a critical resource to build sustainable, poverty alleviating rural livelihoods.

The way in which people combine and transform their assets make it possible to engage with state, market and civil society in different ways. Changing livelihood dynamics among poor groups may be related to the changing assets of other actors. For example, people may be migrating more to earn an income because they have lost access to land, water or forests as a result of the acquisition of those assets by other actors- that in turn may have been promoted by certain policies.

A final important addition to the assets framework is the idea of 'political capital' (Booth et al, 1998). Political capital is linked to the stocks of power that different groups have, at societal, community and intra-household level. It is similar to social and cultural capital, in being an 'intangible' asset, which can be observed in social relations and political positions, but not measured. Yet, it is of fundamental importance for access to other forms of capital. For example, much of the work on gender and livelihoods rests on the findings that, in most contexts, women have less power and 'political capital' which results in reduced access to a range of other resources or capitals.

It is also important to understand the key differences between urban and rural livelihood assets and strategies. The asset vulnerability framework developed by Moser (1998) specifically addresses urban poverty. This is differentiated from rural poverty by three main features:

- The commoditisation (or monetarisation) of labour, food and services. Urban residents must rely more on goods and services purchased rather than produced at the household level. Labour is also usually exchanged for wages, or for the production of goods and services destined to be sold rather than used for household subsistence;

- Environmental hazards in the urban context are often more serious than in rural areas, due to population density and the proximity of industrial activities;
- Social fragmentation in the urban areas can erode social capital and support networks.

In urban areas, labour is the most important asset for poor urban people who rely mainly on waged work and housing may be an important physical asset, as it can be used for home-based work and rooms can be rented out.

The livelihoods framework provides a comprehensive, and complex, approach to understanding how people make a living, and includes their interaction with a range of institutions, including markets. It can be used as a loose guide to a range of issues which are important for livelihoods or it can be rigorously investigated in all its aspects.

2.2 Methods and tools for livelihoods analysis

A very wide range of methods and tools can be put to use to analyse livelihoods, ranging from sample surveys to community level participatory exercises to individual and household case studies². This section will outline selected basic methods, with a focus on those which can be carried out rapidly and at low cost.

Secondary data: A range of information and statistics can usually be found to describe the national environment (which helps to understand the “vulnerability context” -shocks, trends, seasonality) as well as on people’s assets and livelihood strategies. National poverty assessments and regional participatory poverty assessments are a good place to start but a range of reports and statistics produced by government, NGOs and donors may also be useful.

Key informant interviews: Key informants are well-placed individuals who are approached for their views on livelihood issues, using a semi-structured list of questions. Key informants should be diverse – government officials, private entrepreneurs, traders, community leaders, farmers, women of different ages and occupations and people from groups that tend to be excluded. The knowledge which can be gained from key informants is often underestimated – there is probably no method as low cost, in relation to the understanding of livelihoods obtained, as spending three days in an area talking to a wide variety of people. The key to maximising the value of this method is triangulation, meaning that the views and opinions of diverse individuals are solicited and then compared.

Participatory methods: There is a wide range of methods which cannot be covered here.³ Such methods are used not only for investigative purposes, but also to involve community members in the processes, which affect their livelihoods and enabling them to deal better with external actors. Methods such as *wealth ranking* can be used to assign households to well-being categories (for example, as a basis for interviewing a sample); *timelines* can be used to provide profiles of longer-term trends including policy changes; *Venn diagrams* can be used to represent key institutional interactions and *preference ranking* (ordinal ranking based on pairwise comparisons) can be used to explore livelihood assets and access to services. Participatory analysis of policy making procedures and institutions, using flow charts and diagrams, can produce a bottom-up view of the policy arena.

Sample surveys: This method is usually more expensive than those described above, but surveys can be employed following more qualitative methods, if more quantitative data is required. The kind of data that surveys can generate includes production levels, income, consumption levels,

² DFID has produced Sustainable Livelihood Guidance Sheets which are available at www.livelihoods.org. The sheets provide details of different methods and references to further literature and websites.

³ See Jules Pretty, Irene Guijt, John Thompson and Ian Scoones, *Participatory Learning and Action: A Trainer’s Guide*. IIED, 1995.

seasonal prices, wages for different tasks and so on. Care should be taken in undertaking surveys as experience shows that the time needed to design, administer and analyse surveys is often greater than anticipated. Questions should be unambiguous, surveys should not take over an hour to administer and thought should be given to training and supervising enumerators properly. As always, it is important to disaggregate the respondents in terms of age, gender, wealth groups and other variables that may be important in the local context, such as caste.

Livelihoods analysis makes use of both qualitative and quantitative research methods and a combination of methods is recommended. Unlike quantitative research, qualitative research does not seek to establish absolute values for the things it investigates, but to build up an accurate interpretation of what is being studied through triangulation of many descriptive sources. It can explain the reasons for particular quantitative findings. However, findings from qualitative and participatory methods can also be 'counted' or quantified to give the researcher an idea of the pattern of findings.

2.3 Key strengths and weaknesses of livelihoods analysis

The livelihoods approach usefully points to the different assets, both material and social (tangible and intangible), which affect the strategies which people adopt. Social, political and cultural capital may not be easy to quantify (although attempts have been made with social capital), but their role is undoubtedly important in understanding access to markets. The framework recognises that policies, institutions and processes influence people's choices of livelihood strategies, and change the opportunities and constraints, which they face in pursuing different strategies in a particular context. However, there are no clear or simple ways to 'measure' these choices and trade-offs between different livelihood strategies and outcomes.

In practice, the approach has been used to structure micro-level studies and to assist programme and project planning. Small-scale sample surveys, semi-structured interviews and group discussions have been used to construct a picture of people's livelihoods. Studies using a range of participatory tools have constructed people's own views of their current assets and livelihood strategies, their material and social assets and their key problems, including their interaction with organisations in their immediate environment. A livelihoods approach has informed food market studies, where the objective is to understand the extent to which the poor participate in these markets, on what terms and whether they are net buyers or sellers at different times of the year. In practice, the framework has encouraged researchers to understand the complexity of livelihoods at household and community levels and the local contextual factors and relationships that affect livelihoods. It has been used as a research framework largely by non-economic social scientists.

The organisations and individuals who are interviewed in studies using the livelihood approach have tended to be local government and NGOs rather than actors in the private sector. However, increasingly, with economic and particularly trade liberalisation, it is the private sector which tends to be involved in buying and trading goods as well as in setting the rules. Few studies using the livelihoods approach have addressed the functioning of markets or private sector organisations in much depth, nor does the approach provide well-developed tools to think about the vertical linkages between local, national and global markets. In other words, the "Policy, Institutions and Processes" part of the framework in Figure 1 remains a bit of a black box.

3. Value chain analysis (VCA) and variants

3.1 Definitions and approaches

Markets refer to the place or arrangements for the exchange of goods and services. Markets for goods, the key focus of this paper, are constantly evolving and with the globalisation of trade and production⁴, becoming increasingly complex and spanning local and global dimensions. Demand drivers are increasingly not local, emphasising the need to understand the links between local/domestic markets and overseas markets. The most obvious example is horticulture, where retailers, particularly supermarkets, in Europe and the United States, have stimulated the production of a wide range of fresh fruit and vegetables in developing countries (Dolan and Humphrey, 2000).

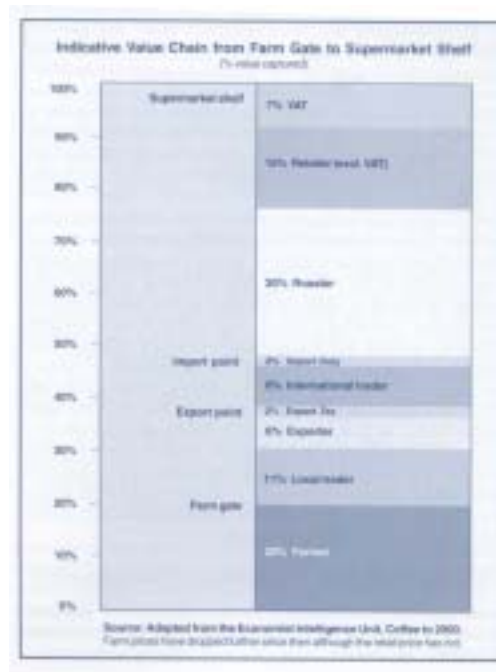
A useful methodology for understanding how markets operate, for a particular good, is value chain analysis. A value chain is a set of value-adding activities through which a product passes from the initial production or design stage to final delivery to the consumer (Kaplinsky, 2000) and can be local, national, regional or international in scope. The worth of the commodity increases at each stage as processing, packaging, transport or alteration adds value. VCA has its origins in industrial sociology and new institutional economics and focuses on transactions between firms operating within the chain.⁵ VCA analyses the *significance* of how the revenues generated by gross consumer spending is translated into the relative net revenues distributed along the chain from production through processing to sale.

One of the few commodities for which this has been done is coffee (Fitter and Kaplinsky, 2001). The authors calculate the percentage of retail value added at each stage in the chain, from the farm gate to the exporter via the factory in the producing country and then from the import agents to the factory and retailer in the consuming country. About 40% of the final product price (supermarket rather than coffee bar) accrued in developing countries in the 'snapshot' taken in 1995.

⁴ Globalisation implies functional integration between internationally dispersed activities, in other words it is not only international in scope but also global in organisation (Gereffi et al, 2001:1).

⁵ Gereffi (1994) originally developed this approach based on an analysis of global commodity chains.

Box 1 Descriptive Trade Chains:



Even when information to construct the value chain has been collected, as in the above case of coffee, crucial information at the separate stages may not be included which is vital to understanding how value is distributed and where there may be levers for change. For instance, the gross value-added by a sector in the supply chain needs to be compared with the costs associated with adding that value. These costs include investment of labour and capital, as well as the risks of conducting business.

In general, no standard methodology has been employed and the approach to analysing supply chains varies. Academic economists tend to prefer modelling which is data heavy and for which information is rarely sufficient within trade chains (over time or for costs and benefits in each part of the chain). However, this is improving as data becomes more regularly collected and available. Policy-focused economists have tried to model the range of incentives associated with trade chains. Precisely because the full information required to map the distribution of values is difficult to obtain, researchers have often used “supply chain analysis” which examines the network of facilities and distribution channels that includes the procurement of materials, production and assembly, and delivery of the product or service to the customer (OECD definition, cited in Vorley 2003). Even if it is not possible to compute the actual percentages of retail value that accrues to different actors in the chain, supply chain analysis is a useful method for understanding factors which are key to the functioning of an industry.

In general, such analysis involves collecting information from the different firms and actors in a supply chain, to gain a comprehension of the following key topics:

Market power and concentration – the number and size distribution of suppliers within an industry or sector and their ability to influence the entire supply chain.

A chief concern is that market power can lead to abuses (such as price fixing) that can be anti-competitive and ensure that any profits earned within an industry ‘lodge’ within a particular sector and accrue to its constituent enterprises. Identifying concentration helps us comprehend better both the *nature* of competition and the *location and nature* of power within the industry or horizontal sector, alerting us to the location of potential levers for effecting change in a supply chain.

Barriers to entry – the financial and social obstacles to potential newcomers in a market

These can include a wide range of financial, social and information-related factors:

- Lower cost advantages to established firms owing to market concentration and realisation of economies of scale in production and distribution;
- Strong buyer or consumer preferences for the output of established firms;
- Control of access to raw materials, technology and the supply chain by established firms through direct ownership or through patents, licenses, franchises, etc;
- High capital investment necessary to enter an industry or sector;
- Social barriers to entry which may be significant, such as ethnicity, caste or gender.⁶

Thresholds and scale

Practically, there are internal economic imperatives that drive activity that are not always a factor of simple supply, demand or price. *Economies of scale* refer to those factors that cause the average cost of producing a unit of a good or service to fall as output rises. *Economic thresholds* refer to the capacities (break-even points, optimums) of a range of activities within a firm, plant, sector or industry. Both help to dictate operations and direct growth of an enterprise, a horizontal sector and an industry.

Investments in the business

All businesses have to buy inputs (including of their own labour) and re-invest in certain aspects of their business, including upgrading of machinery etc. Hence, business turnover *minus* re-investment is needed for precise assessments of profits.

Finance and credit

These can be formal and informal, ranging from bank credit, to credit provided by traders or NGOs, to informal money lenders. The opportunities facing industry participants might hinge on the availability of finance at appropriate rates of interest and levels of risk. Understanding the nature of financial incentives facing industry participants can prove difficult and the drivers subtle – repayment terms, time periods and the significance of past investments – particularly for small enterprises. Often financial incentives facing industry participants can only be estimated.

Access to information

Information asymmetries are pervasive in all economies (Stiglitz, 2003). Industry participants make decisions based on the information (economic and other) they receive, some of which might be imperfect and even wrong. Information is available from government or NGO services, but significantly from other industry participants. Industry information can be abused for financial gain, via withholding or providing misleading information. Indeed, industry participants often manage information flows in ways that enhance their individual financial benefits while limiting another participant's opportunities to realise maximum financial gain (often the participant who supplies or buys from them or competes with them).

Yet, it is often argued that the flow of nearly real-time information along the supply chain not only improves productivity, but also improves the ability of an industry to compensate for fluctuations in demand. The importance of information flow in defining supply chains and industry participant incentives are seen in the impact of recent innovations in mobile telecommunications, particularly in developing countries, linking distant rural horticultural producers with current market dynamics in urban centres.

Product and market differentiation

Increasingly, particular products are produced for specific markets and consumers. The grades and standards which are increasingly demanded by different actors along the supply chain act as new forms of governance which are reconfiguring supply chains, so that they exclude participants

⁶ For example, a study of grain markets in south Asia showed that they tended to be dominated by large local merchants who control access to the means of distribution (transport, sites, capital, credit and information); even in the petty retailing sub-sector, caste and gender are major entry barriers (Harriss-White, 1995).

who cannot meet particular standards (Vorley, 2003). The impact of standards disrupts normal market functions and hence its analysis: producers eager to access perceived long-term stability through supermarket supply chains might take lower price offers or even pay to be granted access.

Perceived risk in participating at different points in the chain

Assessing risk is an integral part of the assessing business functionality. Many entrepreneurs engage in protracted future-gazing, assigning probabilities to certain events, or at least ranking the likelihood of these events. Decisions taken reflect risks associated with perceptions over future supply, demand and price, based on a mixture of information flows, financial hunches and personal willingness to submit to economic risk.

3.2 Methods and tools for data collection

The information required for VCA ranges from qualitative information on how the chain 'functions' to quantitative data on the prices and costs borne by different actors in the chain, none of which is easy to obtain. The researcher must piece together information from various sources – public statistical sources, grey literature, published work, interviews with key informants and organisations with a knowledge of the industry as well as the interviews with key actors in the chain.

The main difficulties include:

- Little official data along the supply chain: often little central data exist on the network of firms that produce and trade in goods, except when they trade across international boundaries;
- Firm data is proprietary and hence sensitive: key industry participants will be reluctant to provide their prices and costs (particularly commercial firms that prefer to protect their data from competitors and sometimes from NGOs), necessitating lengthy and costly observation (of firm, markets, inputs and trade) by analysts or developing a close working relationship.

Despite these difficulties, it is often possible to construct a list of industry participants (from a trade association or Chamber of Commerce) and interview a random sample. Larger companies often have websites with useful information and there are an increasing number of websites on trade and retailing, some run by regional trade associations. Even when companies may be unwilling to participate, other companies will often provide useful information on firms at other points in the chain. IIED research on supply chains indicates that business people are more likely to agree to individual interviews, where they will provide a lot more information than they are prepared to do in any kind of multi-stakeholder forum.⁷

Indirect information can be useful indicator of firm and industry incentives. All but the simplest exchanges require some form of **contract** to protect both buyer and seller from a range of associated hazards. A buyer and seller will **negotiate** and agree on various aspects of an exchange of goods or services and often this will be enshrined in some form of contract. Every contract (formal, informal, written, verbal or otherwise) involves three basic economic components:

- Allocation of *benefits* – distribution of the gains from trade;
- Allocation of *risk and uncertainty* – what happens if things go wrong;
- Allocation of *responsibilities* – to decisions bearing on the relationship.

If contracts can be obtained, they are useful sources of information and may also provide a focus for discussions of governance and power dynamics in a chain. For instance, how prices are decided, what volume of goods is the buyer obliged to buy, whether payment immediate is immediate or not and so on. Yet, the majority of the poor participants are tied into a number of verbal contracts.

Recently VCA been used to analyse the chain from the point of view of low-income producers and of employees and to explore the implications posed by the chain's functioning for their livelihoods and well being and the levers for poverty reduction. The manual produced by McCormick and

⁷ See also Harriss, 1992, on 'Talking to Traders about Trade'.

Schmitz (2002) is a useful attempt to adapt the methodology to carry out research on homeworkers in the garments industry. Yet, it is clear that methodologies need to be considerably refined to include intangibles, incentives, hidden information, flows of capital and risks before precise comprehension of the levers for change can be indicated by VCA alone.

3.3 Key strengths and weaknesses

In recent years, there has been a growing body of work that has examined international trade in goods (and services) from the perspective of value chains – under various titles (value chain, integrated chain, trade chain, supply chain). It is clear that some chain relationships allow buyers to directly influence production activities, including the type of good produced, the timing and quantity of supply and the standards that suppliers have to observe in terms of their production processes and product quality. Research carried out on particular sectors, such as garments, electronics and agricultural commodities has provided valuable insights into the role of lead firms, often located in high-income countries, in constructing these chains.

Although a detailed understanding of value chains requires data and information that is difficult and expensive to collect, some form of value chain analysis can help to understand the challenges and opportunities faced by local producers, particularly when directed networks of producers operating under the auspices of international firms begin to operate in a country altering local supply chain patterns and local procurement practices. It has also been used successfully to understand whether firms in low-income countries can upgrade their activities.

Activists have used the fact that some chains are governed by lead firms from high-income countries to address labour and environmental standards further up the chain in developing countries. However, these campaigns have sometimes had unanticipated outcomes, since raising such standards can result in higher costs and eventual exclusion of smaller firms, resulting in job and livelihood losses. This is one reason why participatory analysis with actors at the ‘upstream’ or producer end of the chain is important, particularly when it comes to exploring options for policy and action, in favour of enhanced livelihoods and poverty reduction.

4. Combined approaches

4.1 Why combine livelihoods analysis and value chain analysis?

Both methodologies we have discussed in this paper have strengths and weaknesses. Much is complementary and combining the two approaches provides a more comprehensive understanding of both the structure of markets and the way in which markets for particular goods interact with livelihood strategies.

Multi-disciplinary research teams sometimes carry out separate work in parallel, using different approaches and methods. What we are advocating is the development of a common analytical framework, which uses different but complementary methods to address common research questions. Both quantitative and qualitative research methods are important. Social and political factors influencing the livelihoods of low-income groups, and the workings of particular supply chains, will be more likely to emerge using qualitative methods. On the other hand, a quantitative analysis of costs and prices will help to understand the choices made by firms and their effects on the livelihoods of low-income producers and workers.

The importance of understanding the specific context cannot be underestimated – the history, politics, policies and institutions of a particular place have a bearing on how markets develop and interact with people’s livelihood strategies. At the same time, markets for many goods now demand

an understanding of global supply and demand and the role of changing private as well as public sector policies. Thus there is a need for combining some form of supply chain analysis with some form of livelihoods analysis.

The key advantages of combining livelihoods and value chain analyses can be summarised as follows:

- Livelihoods analysis goes beyond costs and prices, income and consumption to provide complementary information to assess (rather than measure) the choices that people make in particular contexts. It can help explain what is sometimes termed “weak supply responses” to trade liberalisation, for example, when farmers have not responded to higher prices on one crop by producing more of it. It recognises that other outcomes besides increased incomes are important to people – for example, food security, or more secure rather than higher incomes, or a more sustainable use of natural resources. It allows an assessment of possible trade-offs between outcomes.
- Value chain analysis provides an essential picture of how the local interacts with the global and the way in which some firms may influence the workings of actors in other parts of the chain. The way in which pressure on prices and costs are often transmitted from retailers to producers has a critical bearing on the potential for enhancing livelihoods through supply chains for particular commodities.
- Both livelihoods and value chain analyses can be conducted in a participatory way – either in the sense of generating data and understanding with different stakeholders or more powerfully, facilitating learning and action by people who are targeted by particular economic and trade policies. Increasing the involvement of different stakeholders, particularly those who are usually marginalized, can contribute to more effective policy processes for poverty reduction.

4.2 How can approaches be combined? Illustrative examples from recent research

These four examples are drawn from IIED’s collaborative studies, which show both how methods were combined and why it was important to do so. They are by no means exhaustive of the range of issues and methods that are relevant to understanding market-based livelihoods, but they provide examples which have looked at markets in particular goods and products with a view to understanding how the livelihoods of low-income groups may be enhanced.

4.2.1 Combining methods to understand livelihoods and cashew nut production and trade: examples from Mozambique and India⁸

The objectives of this IIED/Eduardo Mondlane University study in Mozambique were to:

- Understand the effects of trade liberalisation in the cashew sector on the livelihoods of smallholder farmers producing cashew and of workers in the declining processing industry.
- Identify opportunities to enhance the contribution of cashew to poverty reduction and gender equality

A case study methodology was used. Sites were selected in two of the highest cashew producing provinces to include high production areas and processing factories. The following methods were used:

- Structured interviews with randomly selected producers (small holder farmers);
- Questionnaire-based interviews with male and female factory workers
- Semi-structured interviews with producers, workers and traders;
- Interviews with key informants working in the sector at local, provincial and national levels – government, firms including processors and exporters, NGOs and community leaders

⁸ More information on this project is available at: www.iied.org/sarl/research/projects/t3proj01.html.

- Focus group discussions with producers and workers; participant observation (in factories and of small-scale traders) and individual case histories.

The use of these different tools allowed us to triangulate information, to deepen our understanding of the sector and to involve key actors in suggesting ways to enhance the contributions that cashew makes to the livelihoods of women and men.

One of the methodological lessons was that although we had not planned to, we had to undertake some *global* supply chain analysis and understand the basics of the international cashew trade, in order to understand the effects of national level liberalisation. To give a few examples, international prices of cashew nuts (the edible kernels) have been falling due to the entry of more producing countries; the trade in raw cashew nuts at national level is dominated by a small number of large traders with links to the Indian processing industry and risks involved in procurement and trade on volatile international markets are passed upstream along the chain by international buyers. We also found that quality considerations are particularly important in export markets and are likely to increase. The investigation of the international end of the cashew chain is still ongoing, through the India cashew nut industry study.

The other lesson from the Mozambique study relates to multi-disciplinary work. The study was carried out by sociologists, geographers and anthropologists and did not include economists and as a result, we struggled with some of the issues around prices, costs, marketing margins and profits. Our work on local and export cashew chains suggested to us that local and regional markets were more important for livelihoods (in terms of less risky, more secure incomes) than international markets (via India). We could have made a stronger case to policy makers if we had been able to better demonstrate the size of these different markets and marketing margins for different actors in some of the more complicated chains. In the India study, the following information on prices and costs has been collected in the export chains, and if possible, a comparison will be made with local chains.

Box 3: Key prices and costs to be investigated in the study of the cashew export industry in India: (selecting one grade of cashew nuts and supermarket outlets in the UK)

- Prices paid **to** farmers/cultivators
- Prices paid **by** processors for raw nuts
- Import price of raw nuts (cif: cost, insurance and freight) and price paid by processor (who might be the importer)
- Processing costs in different types of factories/processing arrangements – including:
 - Wages for different tasks
 - Other benefits to workers
 - Non-wage costs
- Price of kernel at factory gate
- Price of kernel at export point (FOB)
- Price of kernels (cif) paid by UK importer of kernels
- Selling price to roaster/salter companies (sometimes also importers e.g. Planters)
- Secondary processing costs (including wage and non-wage costs)
- Supermarket prices to consumer.

On the other hand, the livelihoods approach and qualitative methods were extremely useful for policy and intervention. It made explicit farmers' choices about what to produce, process and market, which was valuable to government policy to promote cashew nut exports and to promote poverty reduction. To take three examples:

- Increasingly poor harvests in ground nuts in the south of Mozambique led to an increase in the use of cashew nuts for consumption, since the staple is often eaten with a sauce of vegetable and pounded nuts – so farmers were choosing not to market;
- The constraints faced by farmers who lived long distances from main roads became clearer: the closure of processing factories, the lower prices of cashew combined with women's workload, travel time and costs deterred them from marketing cashew;
- The social and cultural significance of cashew trees and fruit are often ignored, for example the local consumption and exchange of the alcohol made from the fruit is an important reason why farmers may continue to produce cashew.

In addition, disaggregating findings by gender showed how women were central to the production, processing and local marketing of cashew but were often excluded from interventions to promote production, better paid positions in the factory and larger-scale trading. Specific efforts to include women would not only address women in their own right as producers and workers but would also be more likely to increase the effectiveness of interventions.

As part of the research methodology, a national reference group was formed at the beginning of the project with key actors in the cashew sector from government, the private sector, NGOs, researchers and donors. This group provided inputs into the research but were also an important means of promoting action based on the findings. Workshops to discuss findings were held at national level as well as in the two provinces where the research was carried out, which helped to enrich the findings as well as to encourage use of the research.

4.2.2 Combining cluster and commodity chain approaches to understand rural livelihood diversification: an example from Vietnam⁹

The objective of the research was to document livelihood diversification in Vietnam's Red River Delta, and identify key policy issues to increase the positive impact of rural-urban linkages on livelihoods. This is a densely populated region, and the main objective of the local government's strategy in the past years has been to develop non-farm activities in rural areas to provide additional income to residents and possibly stem migration to Hanoi. One sector that has grown significantly is the rattan and bamboo weaving industry, which we therefore selected as a case study.

We initially decided to analyse the livelihoods of different groups in the area, to put the rattan and bamboo weaving activities within their broader context. We then planned to examine the commodity chain of the rattan and bamboo industry. However, during the fieldwork we found that drawing on the clusters literature would help us better understand the local opportunities and constraints of the sector.

Rattan and bamboo weaving is a traditional activity in some districts, where it has specialised into typical diagonal weaving. In other districts, its expansion is due mainly to efforts by the local government, which set up training in basic weaving skills. While in the past the activity was managed by cooperatives, it is now best described as a private sector industry. Much of the work is home-based and consists of piece work done by household members (especially women, the elderly and sometimes children) to fit in with farming and other activities. Work is commissioned by local small enterprises which usually also provide materials. These small enterprises then do some finishing work and pass on the order to larger enterprises outside the province that market them nationally or on export markets. The latter is largely controlled by state-owned enterprises.

Because of the significance of rattan and bamboo weaving in local people's livelihoods, and the potential for expansion into export markets (final products are bought by international retailers such as Ikea), we decided to look more closely as whether it could develop into a successful 'cluster' of

⁹ More information on this project is available at http://www.iied.org/docs/urban/rururb_bp09eng.pdf

small enterprises.¹⁰ This meant looking at both horizontal linkages between production units, and vertical linkages. The latter included backward linkages (the provision of raw materials and other inputs) and forward linkages (packaging and shipping, as well as relations with export buyers who might contribute to the development of the sector by encouraging technological innovation, better information on consumers' preferences, etc).

We found that, although home-based workers tend to work for a variety of small enterprises, there is little coordination between the latter. This has a number of consequences which raise concerns about the long-term sustainability and development of the sector. With regard to forward linkages, the lack of direct relationships with external buyers means that there has been very limited diversification of products to meet consumer demand. While small enterprises compete to lower their prices, they have not really thought of international competition from countries within the region that have lower labour costs. Improving quality would seem an appropriate way forward but, because the key actors at the production level are small enterprises, they do not have the initial capital to hire designers, train workers and relocate to the new provincial small industrial and handicraft zones which provide tax incentives and infrastructure to minimise environmental pollution linked to fumigation of rattan, use of varnishes, etc. With regard to backward linkages, a small number of suppliers have emerged in the villages. However, rattan and bamboo are increasingly scarce both within the region and in Vietnam, and suppliers now go as far as Laos to find suitable raw materials. Here again, because of their small size and limited capital, small enterprises face recurrent shortages and are unable to set up more stable flows of materials by entering longer-term contracts with suppliers.

What were the advantages of combining livelihood and supply chain analyses?

The findings of the livelihoods analysis helped us convince local government officials that rattan and bamboo weaving provides a significant proportion of rural households' incomes while leaving sufficient time to farm. This provided an essential backdrop to discussions on how best to support the sector to continue its role in local economic development and livelihoods. The supply chain analysis, on the other hand, helped give a better understanding of the constraints (for example in securing raw materials) and the opportunities (for example, gaining more direct access to export markets). Even when we faced difficulties in gathering information from the downstream actors in the chain, especially the state-owned enterprises that control exports, supply chain analysis helped make sense of the constraints which small enterprises faced.

In addition, in the highly fragmented production structure such as that of the rattan and bamboo weaving sector, investigating clusters of small enterprises helped frame policy recommendations on issues of scaling-up: while the local government is making serious efforts to promote rural industrialisation, inevitably it is very difficult to provide infrastructure for very small enterprises. Supporting clusters may be a viable alternative, especially for local government whose initiatives are limited to its area of jurisdiction.

4.2.3 Combining methods to understand a growing sector: shrimp in Bangladesh¹¹

The objectives of this research project were to:

- Map the supply chain for extensively-farmed shrimp in Bangladesh
- Examine the significance of the industry for sustaining rural livelihoods
- Comprehend the effects of introducing standards for the livelihoods of industry participants, especially the poorest

The methods and tools used were:

- Literature review
- Semi-structured interviews and focus groups with industry stakeholders and participants.

¹⁰ See Shmitz and Nadvi, 1999 for more information on clustering and industrialisation.

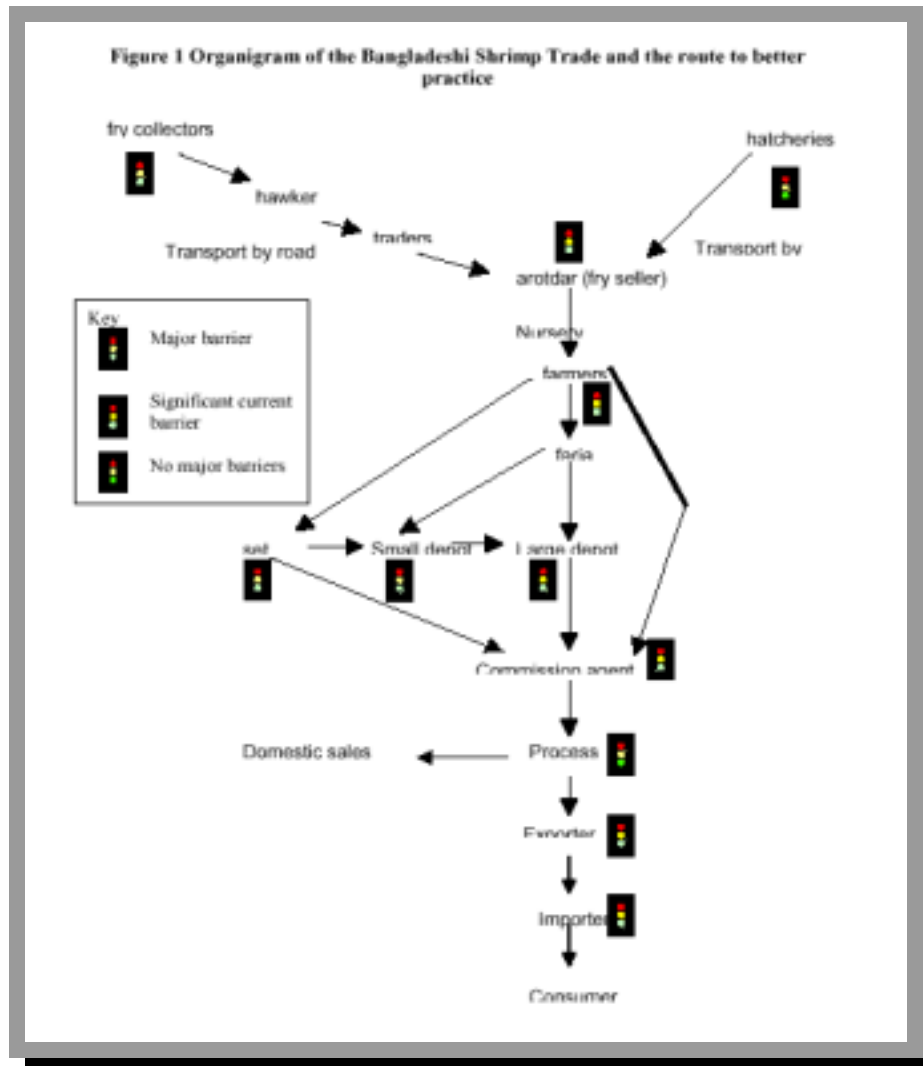
¹¹ Cappell and MacGregor (2003) in Nautilus and IIED (2003).

- Static value chain analysis for shrimp in Bangladesh, using available data from surveys combined with anecdotal information from key informants within the government, private sector and NGO sector.

The shrimp industry includes some of the poorest citizens of Bangladesh and has been heavily researched by livelihoods analysts during the past decade. Indeed, a wealth of information and data exists; much of which is contradictory and incomplete. This project combined existing information with insights from stakeholder interviews to develop a simple statistical model of the industry. This model highlighted disparities between reported revenue flows through the chain (from earlier surveys of industry participants) and conventional wisdom on the levels of poverty experienced by industry participants. It also clashed with findings on per family rural income in associated industries of garments and vegetables production in Bangladesh.

One key omission from the literature was reference to financial flows and the availability of credit – Bangladesh's experience with the Grameen Bank hints at poorly functioning rural credit markets; a cursory analysis shows that shrimp farming and its attendant value chain is poorly serviced by formal credit providers. This is particularly a problem for the poorer rural farmers. Industry participants appear to be chiefly serviced by informal credit through moneylenders. Indeed, using imputed informal moneylender interest rates (from VCA research in the garments industry), the shrimp industry's supply chain fits neatly with conventional wisdom. Informal credit alone changes the estimated expected return on labour, investment and land to the farmer by over 50%, and helps to guide policy prescriptions for poverty reduction towards agricultural extension and credit provision.

Figure 2 *Static supply chain for shrimp in Bangladesh with notations for effects of standards*



The benefits of combining tools within a VCA framework were the ability to interrogate the static model and to gain a deeper understanding of how the industry might actually operate. Once the issue of informal money lending was raised in interviews with farmers, further interviews were carried out which threw light on the scale of constraints faced by poorer industry participants. Key constraints to poverty reduction include expensive trade credit, inconsistent information flows, the unregulated sale of expensive inputs (particularly fertiliser). These insights cause policy makers to rethink their approach to reducing poverty – standards are unlikely to deliver benefits to the poor through revenue trickle-down through the chain (from higher gross revenue at export) and the certain losers from such a policy will be the poorest rural industry participants.

Here, the VCA starting point was informed by previous extensive livelihood analysis; and reconfigured policy prescriptions for the rural economy in shrimp-producing areas. This can be taken further - combining future VCA with livelihoods framework will have shed light on a range of issues including land consolidation and environmental damage, which have implications for smallholders.

4.2.4 Combining methods to understand different actors' constraints in a value chain, and the opportunities for policy: an example from peri-urban horticulture in Mali¹²

The objectives of this research project were to:

- Document changes in the livelihoods of different groups of people (based on gender, generation, wealth and migrant status) in the peri-urban areas of Bamako, Mali's capital city. A specific focus of the project was to better understand winners and losers in a context of urban expansion (where 'modern' administrative and land tenure systems overlap with traditional ones) and intensifying rural-urban linkages in the form of social and economic exchanges and growing monetarisation of assets and activities;
- Establish a learning group including policy makers, NGOs, academics and local community representatives to discuss how the improved understanding of rural-urban linkages can inform policy processes, including the establishment of decentralised local authorities.

The methods and tools used included:

- a set of participatory tools to draw up the general picture of the peri-urban neighbourhood, including its natural resources and their management, differences in access to assets for different groups, the institutions and their accessibility, and changes over time;
- this was complemented by focus group discussions, based on the findings of the participatory discussions;
- and a quantitative questionnaire with a small purposive (non-representative) stratified sample of individuals was used to triangulate findings on the emerging issues;
- an analysis of the horticultural value chain, which involves the majority of the population either as producers or traders, was conducted at the same time.

Two key findings in relation to the horticultural value chain show how combining it with other methods and tools can provide more relevant information for policy processes.

The first finding concerns the production system. Due to the proximity of Bamako, most children and young people complete secondary education and then find (or look for) employment in non-farm activities. However, labour is not (yet) a constraint on agricultural production, because despite low incomes and limited access to credit, local farmers can rely on migrant workers. Secondary rights to land are applied, whereby migrant farmers work on their host's parcel for part of the week, and the rest of it cultivate the plot they have been allocated in exchange for their labour. This is possible because customary land tenure is still prevalent in the neighbourhood – however, the expansion of the city and the growing number of retired civil servants settling in the area mean that an informal land market is rapidly developing, which is likely to undermine secondary rights and therefore the existing farming system.

The second finding concerns marketing of horticultural produce. Women dominate wholesale trade, most of whom either reside in the same peri-urban neighbourhood or originate from it and now reside in the city. This is important, as commercial exchanges are embedded in wider social relations, which provide the basic rules of trust needed for financial transactions. Wholesale traders are an essential link in the horticultural value chain, but also probably the most vulnerable one. They are a major source of credit for producers, who otherwise have difficulties accessing formal credit schemes. They also provide credit to retail traders, who pay them on the basis of sales. This means that the wholesale traders absorb any financial losses owing to harvest failure or low sales volumes. Due to the highly perishable nature of horticultural produce and the lack of storage and processing facilities, losses can be high if produce is not sold immediately: a truck breaking down can well mean that a full load of tomatoes is lost. Hence, while the value chain analysis conducted showed that wholesalers do indeed make high profit margins compared to other actors in the chain, the method did not show clearly that they also shoulder most of the risk. Moreover, losses of

¹² http://www.iied.org/docs/urban/rururb_wp05.pdf (in french) and briefing paper in english: http://www.iied.org/docs/urban/rururb_bp04eng.pdf

financial liquidity among this group are likely to have an adverse impact both upstream and downstream, as they provide credit to other actors in both directions of the chain. This additional information only came out from discussions in the participatory tools meetings and in the focus group discussions.

What were the benefits of combining different methods for the understanding of the horticultural chain and the livelihoods of local people?

- It allowed a more in-depth understanding of how social relations determine the rules of commercial and financial transactions in the value chain. This applies to relations between producers and traders, as well as to relations between local farmers and migrant secondary rights holders;
- It helped understand how higher profit margins do not necessarily result in inequality within the chain, if some actors shoulder most of the risk (as in the case of the wholesalers);
- It helped identify entry points for intervention. While the importance of horticulture for local economic development in the neighbourhood was well appreciated by local government officials, the significance of secondary land rights in ensuring sufficient labour inputs was not fully understood. Similarly, the extent to which the lack of storage and processing facilities affects wholesale traders and, as a result, increases the vulnerability of the whole chain were not clear.

5. Conclusions

We have argued in this paper for the need to combine approaches and methods to understand market-based livelihoods in a globalising world. This entails multi-disciplinary work using approaches and methods which are dominated by different disciplines. As the examples show, research that explicitly combines social and economic analysis, combining some form of livelihoods and value chain analysis, is more likely to yield results that are reliable, robust, comprehensive and policy-oriented. Indeed, both types of analysis contain common elements and their fusion mutually enriches analysis.

In each example we have used, the study may have adopted a different methodological starting point but a combination of different methods and tools, drawn from livelihoods and value chain analysis, have provided a more comprehensive understanding of the issues involved in promoting poverty reduction:

- The study of trade liberalisation and livelihoods in Mozambique began with the livelihoods of cashew nut producers and workers in the processing industry. However, investigating international trade and global value chains was essential in understanding national-level policy constraints and opportunities for improving livelihoods.
- In the rattan and bamboo weaving example in Vietnam, an understanding of vertical linkages along the supply chain was essential to inform effective policies to promote livelihoods, at the local government level. In addition, this study included an assessment of how a cluster of small enterprises might work together to enhance the livelihoods of the producers.
- The study of shrimp farming in Bangladesh shows how critical issues relating to credit and livelihoods arose from semi-structured interviews with poor shrimp farmers and VCA of the industry using existing information.
- In Mali, a financial assessment of profits in the horticultural chain had to be tempered by a consideration of risks taken by wholesalers in the supply chain.

The best examples of both livelihoods analysis and value chain analysis entail long time frames and considerable investment by researchers in building personal relationships with informants.

When such investment is not possible, a combination of methods which allow you to cross-check information from different sources and at different levels is even more important. In sum, with rapidly changing forms of organisation and governance of supply chains, a combination of livelihoods analysis and some form of value chain analysis provides a fruitful approach to understanding the opportunities and constraints which small producers and small enterprise participants face in increasingly globalised systems. The more participatory the research is, the more likely it is that results will be useful, since the research process itself can contribute to learning and action.

REFERENCES

- Bebbington, A. 1999. *Capitals and Capabilities: A Framework for analysing peasant viability, rural livelihoods and poverty in the Andes*. London: IIED.
- Booth, D., Holland, J., Hentschel, J., Lanjouw, P. and Herbert, A. (1998) Participation and Combined Methods in African Poverty Assessment: Renewing the Agenda. Africa Division, DFID, UK.
- Cappell, R. and MacGregor, J. (2003). Structure and organisation of production and marketing in Bangladesh. Working Paper 4. In Nautilus Consultants and IIED (2003), 62–96.
- Carney, D. 1998. *Sustainable Rural Livelihoods: What contribution can we make?* DFID UK.
- Carney, D., M. Drinkwater, T. Rusinow, K. Neefjes, S. Wanmali, and N. Singh. 1999. "Livelihoods Approaches Compared: A Brief Comparison of the Livelihoods Approaches of the UK Department for International Development (DFID), CARE, Oxfam, and the UNDP." DFID.
- Chambers, R. and Conway. 1992. Sustainable Rural Livelihoods: Practical concepts for the 21st century. IDS, University of Sussex: Brighton.
- Dolan, C and Humphrey, J. (2000). Governance and trade in fresh vegetables: the impact of UK supermarkets on the African horticultural industry. *Journal of Development Studies* 37(2): 147–76.
- Fitter, R. and Kaplinsky, R. 2002. Who gains from product rents as the coffee market becomes more differentiated? A value chain analysis. *IDS Bulletin*, 33:3.
- Gereffi, G. 1994. "Capitalism, Development and Global Commodity Chains," in *Capitalism and Development*. L. Sklair (ed.). London: Routledge.
- Gereffi, G., Humphrey, J., Kaplinsky, R. and Sturgeon, T.J. 2001 Introduction: Globalisation, Value Chains and Development. *IDS Bulletin*. 32:3.
- Harriss, B. 1992. Talking to Traders about Trade. In S. Devereux and J. Hoddinote. Fieldwork in Developing Countries. Harvester Wheatsheaf, Hemel Hempstead, UK.
- Harriss-White, B. 1995. Maps and landscapes of grain markets in South Asia. In J. Harriss, J. Hunger and CM Lewis, eds. *The New Institutional Economics and Third World Development*. Routledge, London
- Holzmann, R. and S. Jorgensen. 1998. "Social protection as Social Risk Management: Conceptual Underpinnings for the Social Protection Sector." World Bank.
- Kaplinsky, R. 2000. "Spreading the Gains from Globalisation: What can be learned from value chain analysis?" *IDS Working Paper*, 110.
- McCormick, D. and Schmitz, H. 2002. Manual for value chain research on homeworkers in the garment industry. Institute for Development Studies, Brighton, UK.
- Moser, C (1998) The Asset Vulnerability Framework: Reassessing Urban Poverty Reduction Strategies, *World Development* 26:1.
- Nautilus Consultants and IIED (2003). Investment Mechanisms for Socially and Environmentally Responsible Shrimp Culture. DFID, 162pp.
- Pretty, J., Guijt, I, Thompson, J. and Scoones, I. (1995) Participatory Learning and Action: A Trainer's Guide. IIED.
- Schmitz, H and K Nadvi (1999) Clustering and industrialisation: introduction, in *World Development* 27:9
- Stiglitz, J. 2003. Globalization and Its Discontents. Penguin, London.
- Vorley, B. 2003. Food, Inc. Corporate concentration from farm to consumer. UK Food Group.
- World Bank. 2001. "World Development Report 2000/1: Attacking Poverty."