

**MANUAL FOR VALUE CHAIN RESEARCH ON
HOMeworkERS IN THE GARMENT INDUSTRY**

by

Dorothy McCormick

*Institute for Development Studies
University of Nairobi, Kenya*

and

Hubert Schmitz

*Institute of Development Studies
University of Sussex, UK*

November 2001

Table of Contents

	<u>Page</u>
Acknowledgements	6
Introduction	7
Part I. Homeworkers in Value Chains: Concepts and Issues	11
1. Homeworkers in the global economy	12
2. What is a global value chain?	17
3. Why is value chain analysis important?	21
4. Types of garment chains	24
<i>4.1 Geography of garment chains</i>	<i>24</i>
<i>4.2 Control of garment chains</i>	<i>27</i>
5. The new retailing and its implications for workers	29
6. Homeworkers in chains: types of homeworkers	32
<i>6.1 Types of homeworkers: production processes</i>	<i>32</i>
<i>6.2 Types of homeworkers: worker status</i>	<i>34</i>
7. Gender analysis	35
Part II. Methodology	38
8. Mapping the chain: first principles	39
<i>8.1 What is your question?</i>	<i>39</i>
<i>8.2 Initial and final map</i>	<i>40</i>
<i>8.3 The need for conventions</i>	<i>41</i>
<i>8.4 Information for the initial map</i>	<i>45</i>
<i>8.5 Drawing the initial map</i>	<i>47</i>
<i>8.6 Next steps</i>	<i>48</i>
9. Refining the value chain map	49
<i>9.1 Mapping gives power</i>	<i>49</i>
<i>9.2 Getting the data</i>	<i>50</i>
<i>9.3 Identifying relationships and leverage points</i>	<i>58</i>

9.4	<i>Overly detailed map</i>	63
9.5	<i>The research process: a struggle</i>	64
10.	Detailed maps of particular parts of the chain	64
10.1	<i>Mapping homeworkers</i>	65
10.2	<i>Mapping the sources and power of design</i>	67
10.3	<i>Mapping producer services</i>	68
10.4	<i>Other examples of mapping</i>	69
11.	Learning from global buyers: tapping the know-how of key actors	73
11.1	<i>Preparing the interviews</i>	74
11.2	<i>Conducting the interviews</i>	76
12.	Learning from the manufacturers	80
12.1	<i>Cost breakdown</i>	80
12.2	<i>Assessing advantages and risks of internalising and externalising operations</i>	82
12.3	<i>Assessing trends in the segmentation of homeworkers (core and fringe)</i>	82
13.	Learning from home-workers	84
13.1	<i>Comparisons</i>	84
13.2	<i>Observing</i>	86
13.3	<i>Interviewing homeworkers</i>	88
13.4	<i>Ethical questions in researching home-based work</i>	89
14.	Comparing the views of global buyers, local producers and their homeworkers	91
15.	Working with public agencies	94
16.	Applying gender analysis to garment chains	99
17.	Conclusion: big and small changes	105
 Part III. Making an impact		 106
18.	Using a participatory approach	106
19.	Supporting collective action	108
20.	Mobilising around codes and standards	110

20.1 <i>Using codes and standards</i>	110
20.2 <i>Occupational Health & Safety</i>	113
20.3 <i>Child labour</i>	116
21. Helping home-workers to switch chains	117
22. Spreading best practice	118
22.1 <i>Advance notice of ups and downs in orders</i>	119
22.2 <i>Provision of child care facilities</i>	120
22.3 <i>Sick leave</i>	120
22.4 <i>A WIEGO catalogue of best practice</i>	122
23. Conclusion	123
Appendix – Research Methods	125
A.1 <i>Principle of combining different methods</i>	125
A.2 <i>Use of secondary sources</i>	126
A.3 <i>Interviews with key informants</i>	127
A.4 <i>Observation</i>	129
A.5 <i>Questionnaire surveys</i>	130
A.5.1 <i>Sampling</i>	131
A.5.2 <i>Questionnaire writing</i>	134
A.5.3 <i>Questionnaire administration and coding</i>	135
A.5.4 <i>Data analysis</i>	136
A.6 <i>Case studies of selected enterprises and networks</i>	138
A.7 <i>Participatory research methods</i>	140
A.8 <i>Feminist research methods</i>	145
Glossary	147
Bibliography	154
Websites	160

List of Boxes

Box 1.1: Maria: A homemaker with few options

Box 1.2: Agnes: A homemaker moving up the value chain

Box 1.3: Homeworking is widespread in many countries

Box 3.1: Researchers and activists

Box 4.1: S & H outfitters

Box 6.1: Embroidery homeworkers in Madeira

Box 6.2: Homework in Europe

Box 7.1: Homework is women's work

Box 13.1: An exercise in observation: Distributing work to homeworkers

Box 20.1: Union sundown?

Box 20.2: National occupation health and safety regulations apply to homeworkers

Box 20.3: The "no sweat shop" campaign

Box 22.1: Where to start?

Box 22.2: Lucy

Box A.2: General rules for interviewing

List of Tables

Table 1.1: Types of Value Chain Governance

Table 4.1: Types of buyers, quality requirements, and representative firms

Table 11.1 : Weaknesses and strengths of manufactures on a scale of 1 to 5

Table 12.1 : Costs and profit margins (per unit of output)

Table 12.2 : Extent of externalisation by type of activity

Table 16.1: Steps in gender analysis of garment chains

Table 16.2: Results of Step 1 of Gender Analysis (Producers Only)

Table A.1 : Example of multi-stage sampling

List of Figures

Figure 1.1: Chain of value adding activities

Figure 4.1: Triangle manufacturing

Figure 8.1: Chain map – number of workers

Figure 9.1: Chain map – workers' hourly wage (US\$)

Figure 9.2: Chain map – number of enterprises

Figure 9.3: Chain map – share of female workforce (%)

Figure 9.4: Overly detailed chain map

Figure 10.1 : Network of homeworkers

Figure 10.2: Sources of design in global buyer-driven chain

Figure 10.3 : Producer services for the garment chain

Figure 10.4 : Wages and skill shortages

Figure 11.1 : Performance comparison, India - China

Figure 11.2 : Performance comparison, Brazil - Italy

Figure 12.3 : Sub-contractor network of small manufacturer

Figure 14.1 : Expectations of buyers and performance by producers *from the producer's point of view*

Figure 14.2 : Expectations of buyers and performance by producers *from the buyer's point of view*

Acknowledgements

- ? Marilyn Carr of WIEGO co-ordinated the process of moving from an embryonic idea to a worked out project. She provided the challenge and support to move us forward.
- ? The Rockefeller Foundation funded the preparation of this manual. The support of Katherine McFate has played a critical role in obtaining this funding.
- ? WIEGO's Global Markets Advisory Group, at its meeting in Dehli, March 2001, gave most valuable feedback on an early partial draft.
- ? Very helpful comments on the subsequent full draft were provided by Stephanie Barrientos, Simel Esim, Tanya Goldman, John Humphrey, Ralphie Kaplinsky, Mary Kinyanjui, Francie Lund, John Njoka, Rosalinde Ofreneo, Carmen Roca, Caroline Skinner and Jane Tate.
- ? A joint IDS – WIEGO meeting at Sussex in October 2001 generated a further round of useful suggestions.
- ? Lizbeth Navas-Aleman assisted in the preparation of several sections concerned with fieldwork methods and data analysis. John Njoka produced the glossary.
- ? Terry Pearce provided effective technical support, in particular with the diagrams and references.
- ? We are grateful for all support received and accept responsibility for the entire work.

Dorothy McCormick, IDS-Nairobi
ids@nbnet.co.ke

Hubert Schmitz, IDS-Sussex
H.Schmitz@ids.ac.uk

Introduction

In developed and developing countries, grassroots organisations are trying to improve the livelihoods of informal producers. Such organisations have been concerned in particular with the home-based workers who carry out production tasks or provide services for the garment industry. Organisations such as the *Self Employed Women's Association* (SEWA) of India, and *HomeNet International*, both founding members of *Women in the Informal Economy: Globalizing and Organizing* (WIEGO), have tried to provide homeworkers with information and organisational strength. Women represent a majority of those working in the garments industry, particularly in home based operations, where they are excluded from formal labour market protection and organisation.

WIEGO has given the practitioners in these organisations a regular opportunity to exchange experiences, learn from each other and develop new instruments for placing local experiences in a global context. This has become increasingly necessary because the local prospects of enhancing skills and incomes depend on decisions taken in other parts of the globe. The globalisation of product markets has led to an unprecedented interdependence of enterprises and workers across regional and national boundaries.

While this general point is well understood by all involved, the local workers and their organisations lack specific knowledge about the distant forces, which determine their conditions. For example, how does the increasing concentration in the retail sectors in the US or UK affect the organisation of the value chain which they are part of? How does their performance - in terms of costs, quality, flexibility or speed - compare with that of competitors in other regions or countries? How do their earnings compare with those of similar producers elsewhere? Lack of knowledge on these and many other issues make it very difficult for homeworkers to defend their positions or become pro-active. Government bodies are unlikely to provide the required information and understanding; and the work of academic institutions is often too abstract to be of use to them.

The value chain approach

This is why WIEGO regards it as one of its prime tasks to equip its member organisations with a new instrument to carry out the required research themselves. Discussions held at WIEGO workshops suggest that the value chain approach is probably the best way forward. This was certainly the consensus at the workshop on Value Chains in the Garment Industry in Ottawa in March 2000, which was attended by many practitioners and researchers of the WIEGO network. It was further reinforced at the Annual WIEGO Conference, held at Harvard in May 2000, attended by the leaders of these grassroots organisations, academic institutions and international development agencies.

Global value chain analysis can help to identify winners and losers from the globalisation of product markets and to find ways of spreading the gains from globalisation. However, the analysis of global value chains is still at an early stage. Even academic researchers are still struggling to strengthen concepts, to develop useful taxonomies and produce good theories. Some progress, however, has been made and the member organisations of WIEGO are trying to use the emerging insights from value chain analysis for their more practical work.

The feasibility of using this approach for collecting and interpreting sector and location specific information was tested at the above-mentioned workshop in Ottawa. This resulted in the request to WIEGO to develop a methodology manual which would enable practitioners and researchers world wide to provide robust analysis and identify leverage points for action. This request for a manual has been echoed by other organisations concerned with informal producers in food and other sectors. There have also been requests to translate such a methodology manual into Spanish and other languages. In short, the proposed manual is expected to be of use to many practitioners and researchers, well beyond the WIEGO network.

Organisation of the manual

The manual is organised into three parts. *Part I* deals with important concepts and issues. For some readers, these chapters will be a review of familiar material. For others, the ideas presented will be new. Either way, we hope that this part of the manual will help you to put your research into context. In Chapter 1, we present the situation of homeworkers in the global economy. Through the cases of two typical homeworkers – Maria and Agnes – we examine the reality of homeworking. Chapters 2 and 3 discuss the notion of a global value chain and

explore its practical importance for researchers trying to understand the situation of homeworkers. In Chapter 4, we delve more deeply into the specifics of garment chains, exploring their geographic spread and the different ways in which they are controlled. Chapter 5 looks at how workers in these chains are affected by recent changes in retailing. Chapter 6 focuses on the homeworkers. In this chapter we lay out two sets of categories of homeworkers developed by the International Labour Organisation. The last chapter in this section (Chapter 7) takes up the important issue of gender, which we believe is critical for understanding the social reality of homeworkers.

Part II of the manual aims to give you the tools you will need to carry out a value chain study. Chapters 8, 9, and 10 show you how to use mapping techniques to get a visual representation of a value chain. Chapter 8 gives the principles of mapping to enable you to draw a preliminary map of a chain, while the following chapter shows you how to refine that preliminary map into a detailed picture of an entire chain. Chapter 10 suggests how you might make sub-maps in order to highlight parts of a chain that are of particular interest to your study. The following three chapters discuss how to gather information from different groups of informants: global buyers (chapter 11), manufacturers (chapter 12), and the homeworkers themselves (chapter 13). Chapters 14 and 15 provide additional techniques to help you to supplement and analyse the data already gathered. Chapter 14 discusses ways in which you can compare and contrast the views of different informants. Chapter 15 offers specific suggestions for working with public agencies and assessing their role. Gender issues surface throughout these chapters. Chapter 16 draws together the steps required to apply gender analysis to garment chains. Chapter 17 concludes the discussion of methodology and stresses that reducing information asymmetries and using new insights for joint action is a political process.

Part III of the manual is about using your research to make an impact. The five chapters in this part focus on how to use chain analysis for practical purposes. Chapter 18 stresses the need to involve the stakeholder in the analysis of the problems and the search for solutions. It then takes you through the principles of a participatory approach. Chapter 19 shows how collective action can draw on chain analysis to further the interests of the homeworker. Chapter 20 discusses how codes and standards provide concrete possibilities for exerting pressure on companies and how value chain analysis aids the conduct of constructive negotiation. This includes discussion

of how chain analysis can be brought to bear on the sticky problem of child labour. Chapter 21 shows interventions, which help homeworkers to switch chains. And finally chapter 22 discusses how chain analysis can be used to devise “Best Practices” and how such practices can be spread

To assist those, whose basic research skills are weak or rusty, we also provide an appendix with a brief treatment of the most commonly used methods. Our reference list includes a number of research methods texts. We encourage users of this manual to draw on these resources and to supplement them with texts designed for use in your local circumstances.

We expect this manual to be widely used. Although it has been written for activists, practitioners and researchers in the WIEGO network, it discusses issues and provides research tools that should be of interest well beyond its original target group. While the manual concentrates on the garment industry, the methodology can also be used to investigate other industries. The manual’s style was intended to make it accessible to those whose training is not in research. Yet we believe that its general approach, its discussion of the issues, and the explanation of methodology should make it useful also to academic researchers venturing into this field for the first time.

Part I. Homeworkers in Value Chains: Concepts and Issues

Part I of the manual aims to give you general background in the areas that will be the focus of your research. We take you through the main issues surrounding homework (sections 1 and 6), value chains (sections 2-5), and gender analysis (section 7). In no case is the treatment exhaustive, and interested readers may want to supplement the text with other sources. We provide some resources – both printed references and a selection of websites – at the end of the manual.

The main messages of Part I of this manual are the following:

- ? Homeworkers are not a homogeneous group. Many carry out fragmented work earning low piece rates, but others carry out a wide range of tasks or have rare skills that earn them good incomes.
- ? Value chain analysis helps us to understand the connection to other actors in the chain. It addresses the question: Who adds value where along the chain?
- ? These value chains are not just strings of market relations where buyers and sellers act freely. Often there are powerful actors in the chain who pull the strings and control the flow of goods and information.
- ? In garments, the power has shifted from producers to traders and retailers. This is most pronounced in global value chains. In many product lines, global buyers set the terms for others in the chain (i.e., what is to be produced, where, buy whom, and at what price.)
- ? In national or local chains, uneven power is less of a problem. But the final markets are smaller and opportunities hence limited.
- ? The new rulers of the global value chains are often vulnerable. Value chain analysis helps to identify pressure points and improve the situations in weaker links, where returns are low.

1. Homeworkers in the global economy

An increasing number of people work at home. Some of these home based workers are independent ‘own account’ workers whose residence doubles as an office or workshop. Many of these are self-employed professionals. The second type of home based worker is the dependent subcontractor. These are men or, more often, women who perform assembly work or other low-skilled tasks on a contract basis. The International Labour Organisation (ILO) refers to this category of worker as a “homeworker”.¹ This manual will follow the ILO practice and use the term “homework” to refer to work done at home by an outworker for a manufacturer or an intermediary, and “homeworker” to refer to persons performing such tasks.

Producers in labour intensive industries like to use homeworkers because it gives them flexibility to respond to changing demand and also reduces their labour and overhead costs. Flexibility is enhanced because employers can hire and lay off homeworkers much more easily than they can factory workers. Using homeworkers also reduces factory overheads by eliminating the need to maintain capacity that will only be used at peak demand periods and by passing on to workers the cost of electricity, machine maintenance, and rent.

In many countries, the garment industry is a large employer of homeworkers. Their circumstances vary. Many are poor women, with few skills. Maria (see Box 1.1) is typical of this group.

¹ The ILO has defined homework as “work carried out by a person, to be referred to as a homeworker, in his or her home or in other premises he or she has chosen; for remuneration; which results in a product or service as specified by the employer, whether the equipment, materials or other inputs used are provided by this person, the employer, or the intermediary, as long as this person does not have the degree of autonomy and does not fulfil other conditions necessary to be considered an independent worker under national laws, regulations, or court decisions.” (ILO 1996, p. 65). Note that ‘outwork’ is a broader term that includes any work done outside the shop or factory which supplies it.

Box 1.1: Maria - a homemaker with few options.²

Maria is a homemaker. She sews pre-cut pieces of cloth into finished garments in her home on an industrial sewing machine. Although she puts internationally known labels in the garments she makes, she has never met any company representative. Rather she deals with a local intermediary, who brings the material to her and collects the finished garments.

The intermediary pays Maria on a piece-rate basis. Quality standards are high, and any flaw can be an excuse for refusing to pay for the item in question. In addition to providing her own machine, Maria must pay her own electricity and other overhead costs. The intermediary supplies only the cloth, thread and buttons.

Maria's work is intermittent. It can be very heavy at certain seasons. At these times, she may work up to 75 hours in a week to satisfy her contract. All of this work is paid on the same piece-rate basis. She gets no overtime pay, holiday pay, or paid leave. Her employer considers her to be an independent contractor, so he does not deduct taxes or social security contributions from her pay. Maria is happy enough to get her full pay now, but she knows that it means that there will be nothing for her later in life.

When there is less work, or when the complexity of the garment forces her to work more slowly, Maria still receives only the piece rate. The contractor has told her that minimum wage laws don't apply to her. Although she recently learned that this is not correct, she feels sure that she cannot get higher pay because there are too many women like herself ready to work for what little they can get.

Maria's husband is an unskilled labourer. He occasionally gets work for a month or more at a construction site. More often he works by the day wherever he can. His earnings fluctuate widely. Sometimes, to increase the family income, Maria keeps her 10-year-old daughter home from school to help her. The girl sews on buttons, then presses and folds the finished garments. She also looks after her two-year-old brother and four-year-old sister. This allows Maria to concentrate on machine sewing and increases the volume of production.

Homeworkers like Maria typically live with their extended families. The male members of the household may be unemployed or working in low-wage jobs. The women are poorly educated with few income earning opportunities. Homework is often a last resort, accepted because it offers participants a chance to combine remunerative work with childcare and other domestic responsibilities, and because contractors are usually willing to take workers with little or no formal training.

In contrast to Maria, some women have been able to use home working as a stepping stone to establishing their own businesses. Agnes is one of these (see Box 1.2).

² Maria's story is a composite, drawn from several sources, including Yanz *et al.* 1999; ILO 1995, 1996; and Wilson 1993.

Box 1.2: Agnes - a homemaker moving up the value chain³

For over twenty years, Agnes worked in a clothing factory. She began as a machine operator, sewing straight seams. Determined to improve her skills, she used to use her lunch hour to practice more complex operations on scraps of material. Seeing her interest, her supervisors gave her opportunities to train on some of the specialised machinery. By the time she left the factory, Agnes had risen to the position of quality control supervisor.

Agnes left factory employment voluntarily. The clothing industry was beginning to contract and her income was stagnating. She felt that she could make more money sewing on her own. Her husband, a skilled mechanic employed by a large firm in another industry, was supportive, as were her grown children. Agnes used her savings to buy an industrial sewing machine. She also visited a local NGO that assists women entrepreneurs to make contacts with potential markets. Through the NGO she was introduced to an intermediary - a designer cum trader - who was looking for people to produce for boutiques in the city's tourist area.

Agnes has now been working for this intermediary for four years. The intermediary provides the designs, the fabric, and the label. The intermediary buys the fabric, which is of very high quality, and delivers it to Agnes, who cuts and makes the garments. She then takes the finished garments to the intermediary, who delivers to the shops. Agnes is paid for her work by the piece. She bargained with the intermediary for a rate that would cover her increased electricity costs as well as her labour. She knows that her superior skills were crucial to her success in getting this rate.

When she began, Agnes worked from the front room of her house. With her profits and some assistance from her husband, she recently converted a car port into a workroom. She can now work more freely in the evenings and on weekends without disturbing her family. She has also bought a second machine so that her daughter can help her when she has very big orders. The daughter has completed secondary school and is now enrolled in a technical college where she is studying design.

Agnes has visited some of the boutiques, so she knows the final selling prices of her garments. She would like more of that price to come to her. She feels that she has learned a great deal by working with her intermediary, but she is now ready to move toward greater independence. In her view, the key to doing this is having her own label. She has designed the label and is trying to find out what she must do to have it legally protected. Only after that step has been taken will she begin making her own designs to take to potential customers.

In addition to superior skills and some available capital, Agnes has an understanding of the particular market niche she wants to penetrate. This combination of resources is enabling her to take the steps necessary to move up the value chain, from simple assembly work to full production and marketing. Having her own label will not guarantee her success, but it will open

³ Agnes's story comes mainly from personal conversations with an individual homemaker. Some particulars have been changed to protect her identity.

the way to the higher profit margins that are a necessary ingredient to successful production of high value garments.

There are many Marias and Agneses across the world. We know a fair amount about them, even though the statistics needed for an exact picture are lacking. Their stories highlight a number of the issues surrounding home working. The first is *gender*. Some homeworkers are male, but the vast majority, especially in the garment industry, are women. There are a number of reasons for this. In many cultures, sewing is considered ‘women’s work’. Many women have low skills and are therefore willing to accept low-skilled, poorly paid homework. Women have domestic responsibilities that, initially at least, make the idea of working at home attractive.

The second issue is the *level and variability of remuneration*. Both Maria and Agnes depend on contracts from intermediaries. Both women can have a great deal of work at one time and none at another. Maria is especially vulnerable because her piece rates are very low, making it difficult to save for the times when there is no work. Furthermore, if a machine breaks down, not only do Maria and Agnes lose precious time from work, but they also have to bear the cost of repairs. Paying their own electricity further reduces their net income.

Maria’s situation also reveals the *poor working conditions* of many homeworkers. The cramped conditions of her house, like most in poor areas, mean that she cannot work efficiently. Although she appreciates being able to keep an eye on her two pre-school children, she knows that her work sometimes suffers as she tries to combine child care with work. Some days she suffers from the isolation of working alone in the house all day. At other times, she finds it difficult to meet her production targets because the home is filled with other family members who expect her to cook and attend to their needs. Agnes works under somewhat better conditions. Her children are older and out of the house most of the time. Now that she has her own workroom, she can really concentrate on her work. Nevertheless, both women share the stress of widely fluctuating workloads. When work is heavy, they sometimes work late into the night six or seven days a week.

Home working often gives rise to *child labour* because the adult worker finds it difficult to meet production targets without help. By staying out of school, Maria’s daughter risks falling behind and eventually dropping out.

Women like Maria have *little or no bargaining power* with their employers. Their lack of power comes first from the fact that many deal through intermediaries and have little or no contact with the main contractor. Even if they could locate the contractor, they might have difficulty bargaining with him, first because they would be speaking as individuals and second because the lack of education of most homeworkers places them at an immediate disadvantage. Furthermore, in some places homework is banned, thus putting its participants outside the law and further reducing their bargaining power.

Homework is common in a number of labour-intensive industries, including clothing and textiles. Exact numbers are very difficult to find. Homeworkers are usually under represented in labour statistics because of their invisibility and the clandestine, sometimes illegal, status of the work itself. Studies in individual countries, however, have shown that homework is widespread (see Box 1.3).

Box 1.3 Homeworking is widespread in many countries

- ? In *Venezuela*, 45% of clothing industry workers are homeworkers.
- ? In *Thailand*, 38% of clothing industry workers are homeworkers.
- ? In *Chile*, an estimated 60% of all women's and children's clothing is produced by homeworkers.
- ? Also in *Chile*, homeworkers make 30% of all men's clothing.
- ? In the garment industry of *Lima, Peru*, there are 40,000 people working at home. These make up 82% of the workforce.
- ? In *São Paulo, Brazil*, a trade union leader estimated that there were 70,000 homeworkers in the garment industry in 1997.
- ? In the *Australian* garment industry, there are 15 homeworkers for every factory worker.

Source: Prugl 1992, 1998; HomeNet Newsletter 1999

2. What is a global value chain?

Traditionally, homeworkers are analysed in their local context. This manual takes a different starting point. Since, in our view, local conditions are often the result of global forces, we begin by looking at the place of homework in what have come to be called “global value chains.” The concept of a global value chain recognises that the production of goods and services has become ‘globalized’. A shirt, for example, may be designed in New York, cut in India, assembled in Kenya, and sold to a consumer in Los Angeles.

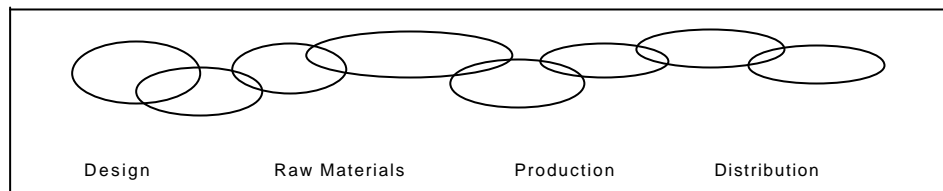
In the past, manufacturing usually happened in one place. Large firms had their design, production, and marketing functions under one roof, or at least within easy reach of one another. Firms with multiple plants might locate design and marketing at the head office, but the manufacturing remained undivided. Each product was made, from start to finish, in one place. Even the re-emergence of multinational corporations in the 1950s and 1960s did not change this very much. Firms establishing plants in foreign countries undertook the full range of manufacturing activities in each location.

By the 1970s, however, the picture started to change as multinational enterprises began to locate labour-intensive activities in developing countries as part of a global restructuring and rationalisation of their operations. The process intensified in the 1980s and 1990s, when greatly improved transportation and communication technologies made it feasible to subdivide the production process so that even a single product could be made in multiple locations. By the mid 1990s it was not uncommon for a consumer in Washington or New York to buy a product labeled “assembled in the Dominican Republic of components manufactured in the United States.”

The concept of the global value chain recognises that the design, production and marketing of many products now involves a chain of activities divided among enterprises located in different places. The value chain describes the activities required to bring a product from its conception to the final consumer. Throughout this manual, we emphasise the global character of value chains. Nevertheless, we recognise that, especially in countries with large domestic markets like India or South Africa, national value chains may be very important. Such national chains may share many characteristics with global chains, including their use of homeworkers.

Figure 1.1 offers a stylised view of a typical chain. The chain includes all of a product's stages of development, from its design, to its sourced raw materials and intermediate inputs, its marketing, its distribution, and its support to the final consumer.

Figure 1.1: Chain of value adding activities



The value chain concept has several dimensions. The first is its flow, also called its *input-output structure*. In this sense, a chain is a set of products and services linked together in a sequence of value-adding economic activities. At its simplest, we can think of a chain as having five main sections. A product is first designed, then raw materials are purchased and production takes place; the product is then distributed through wholesalers and retailers. At each stage, services such as transport or finance may be needed to keep the process going. As we will see when we start mapping real chains, some of these stages may be subdivided and others combined or compressed. Nevertheless, the five stages - design, inputs, production, wholesale, and retail - remain a handy device for understanding each step of the process.

A value chain has another, less visible structure. This is made up of the flow of knowledge and expertise necessary for the physical input-output structure to function. The flow of knowledge generally parallels the material flows, but its intensity may differ. For example, the knowledge inputs at a product's design stage may be much greater than the material inputs; production, on the other hand, needs large quantities of materials, but in many cases requires only standard or routine knowledge.

The second dimension of a value chain has to do with its *geographic spread*. Some chains are truly global, with activities taking place in many countries on different continents. Others are more limited, involving only a few locations in different parts of the world. A UK retailer may, for example, contract with a Chinese fabric supplier to deliver cloth to a garment producer in Sri Lanka. The finished goods will then be shipped directly to the UK retailer. It is also possible to

identify national, regional, or local value chains. These operate in the same way as the global chains, but their geographic ‘reach’ is more limited.

The third dimension of the value chain is the control that different actors can exert over the activities making up the chain. The actors in a chain directly control their own activities and are directly or indirectly controlled by other actors. A retailer, for example, controls the way he sells, but may be limited (indirectly controlled) by the range of goods available from wholesalers and producers. A homemaker may find that almost every aspect of her work is controlled by a distant retailer who has specified the design, quantity, and quality of the garments she is producing. The pattern of direct and indirect control in a value chain is called its *governance*. Since value chains are basically constellations of human interaction, the possible varieties of governance are endless. In the real world, however, we seem to see the four main types of governance shown in Table 1.1.

When the market governs a value chain, most transactions take place between buyers and sellers dealing at arms length. The value chain for standard goods such as men’s cotton athletic socks is a good example of a market driven chain. Many knitting mills all over the world produce such socks. There is no need for buyers and suppliers to collaborate on product definition because the item is standard. Buyers simply place orders for a given quantity of a particular quality and size range.

Table 1.1: Types of Value Chain Governance

Market	Firms deal with each other mainly in "arms-length" exchange transactions
Balanced network	Firms form networks in which no one firm or group of firms exercises undue control over the others. Firms prefer to deal with other members of their networks.
Directed network	Firms form networks that tend to be controlled by certain lead firms. The lead firms specify what is to be produced by whom and they monitor the performance of the producing firms.
Hierarchy	Firms are vertically integrated, so that they can directly control all or most of the activities of the chain

Source: Adapted from Humphrey and Schmitz (2000)

Some value chains can best be described as balanced networks. Firms form networks, but because the power relations among them are fairly equal, no one firm or group of firms dominates the network. In balanced networks supplier and buyer jointly define the product and combine complementary competencies. An example might be collaboration between producers of ‘eco-friendly’ knitted fabric and garment manufacturers who make this fabric into fashion garments. Since both are involved in high value-added production, they can work together more or less as equals.

Other value chains are governed by lead firms. We call these directed networks. The lead firms do not merely buy goods in the market. Rather they specify what is to be produced by whom, and they monitor the performance of the producing firms. In some cases, the networks are directed, or “driven”, by large producers such as transnational corporations or other large integrated industrial enterprises. The automobile industry is a good example of a producer-driven value chain. The large automobile companies dominate the chain by setting the specifications that must be followed by firms joining their networks of component suppliers. Other chains are driven by the buyers of the products. In clothing and footwear, many leading brand-name companies do no production themselves. Instead, they concentrate on design and marketing. Their strength as buyers enables them to dominate certain value chains. They determine what fabrics will be used, what styles will be produced, and in what colours.

Finally, some chains are characterised by vertically integrated firms. In these cases, firms, acting through their own decision-making hierarchy, can directly control chain activities. For instance, a study of the silk subsector in northeast Thailand revealed that one part of the “modern Thai silk” chain consisted of a single vertically integrated firm that was involved in all activities from silk-worm research to retailing the final product (Haggblade and Gamsler, 1991). Kenyan knitting mills are another example. Although they make hosiery, sweaters, T-shirts, and other garments, they are distinguished from apparel companies precisely because their operations are usually fully integrated. One Kenyan knitting mill that we visited makes knitted shirts. Its activities include spinning, dyeing, knitting, embroidery, and final assembly

3. Why is value chain analysis important?

Value chain analysis is important both conceptually and practically. Conceptually, the value chain approach presents a good picture of the process of creating value. For one thing, it shows clearly that production is not the only way to create value. A product is brought to market through a combination of activities, all of which contribute to its final value. In fact, in many chains, the value added for stages such as design or the production of certain key components is higher than that of the final assembly process. This has obvious implications for the returns to labour. Workers participating in high value-added activities are more likely to be well paid than those in functions adding lower value.

The value chain concept also enhances our understanding of the way trade takes place today. Research on value chains shows that an increasing amount of international trade occurs within trading networks.⁴ Firms in the networks are formally independent of one another, but linked by personal relations, repeated transactions, and often dense information flows. Networks contain firms of many different types, from global buyers to small local workshops.

Perhaps more important to users of this manual is the practical usefulness of value chain analysis as a way to understand problems and find ways of improving the situation of the “weaker” links in the chain, i.e., those with low returns and little bargaining power. We highlight several areas in which value chain analysis can be helpful.⁵ You may think of others.

? *Understanding problems of market access:* Even when developed countries reduce tariffs or eliminate other trade barriers, your country’s producers will not automatically gain market access. This is because many chains into European and North American markets are directed networks. In order to participate in them, developing country producers need access to the lead firms in these chains. Larger firms and those with other international connections are more likely to gain this access than small, unknown producers.

⁴ The other ways trade can happen – arms-length market transactions and intra-firm trade – have become correspondingly less important.

⁵ Here we draw on Kaplinsky (2000) and Humphrey and Schmitz (2000).

- ? *Acquiring production capability:* Those producers that gain access to a chain's lead firm are pushed to upgrade their production capability very quickly. The lead firms are very demanding with regard to reducing cost, raising quality, and increasing speed. But they also transmit best practices and provide hands-on advice on, for example, how to improve production flows and raise workers' skills. This combination of high challenge and high support explains how relatively underdeveloped regions can become major export producers in a short period of time. Lead firms' focus on transmitting production skills also explains why it takes developing country producers much longer to become proficient in design and marketing.
- ? *Understanding the distribution of gains along the chain:* Knowing how and by whom a chain is governed helps to understand the distribution of gains among firms along it. The ability to govern often comes from strength in particular competences such as design, branding, marketing, which command high returns, but are difficult for developing country firms to acquire. Developing country firms tend to be locked into production activities, in which they manufacture to the specifications of the lead firm. Since many producers are capable of doing this, competition is intense and returns are low.
- ? *Finding leverage points for policy and organising initiatives:* Understanding the workings of a chain helps to identify levers where policy and/or organising could be used to improve the distribution of gains. Chain analysis can help to answer questions like "Who has the power to change things?" or "Which actors are the right ones to pressure?" For example, activists have used the fact that some chains are governed by lead firms from developed countries to address labour and environmental issues farther down the chain. They recognise that these lead firms are vulnerable to public opinion in their home countries. They also see from their analysis that the same lead firms work closely with their suppliers. As a result, they recognise that, by exerting the right pressure, they can get them to raise their labour and environmental standards. Homeworkers themselves recognise the importance of organising and advocacy work (see box 3.1), but they need data to support their efforts.

? *Identifying funnels for technical assistance:* Multilateral and bilateral donor agencies wanting to provide effective technical assistance to developing country producers are beginning to look at value chains. Their idea is to combine technical assistance with connectivity. The lead firms become the entry point for reaching out to many distant small and medium sized suppliers. These efforts are still in the experimental stage, but they promise to offer a way of ensuring that more of the gains from chain participation reach small producers.

In sum, value chain analysis lends itself easily to dealing with particular issues of concern, such as market access, skill acquisition, labour standards and many others. Once the basic value chain has been mapped out, it becomes possible to examine, for example, the gender and ethnic character of production, the impact of the chain on the production location, or the returns to different types of labour. Once these are known, they can become the focus of advocacy work in both developed and developing countries.

This manual aims to provide the tools for doing the basic analysis. It also emphasises the types of studies needed to support advocacy efforts on behalf of one of the weakest links in the chains, i.e., homeworkers in garment chains.

With an understanding of the general issues surrounding homework and value chains, we turn now to the task of building a framework for analysing garment chains. Chapter 4 examines different types of garment chains. Chapter 5 looks at the impact of changes in retailing on homeworkers. Chapter 6 describes the homeworkers who work in these chains, and chapter 7 takes up the issue of gender analysis in chains.

Box 3.1 Researchers and Activists

I have been doing homebased work since 1985. Then, in a meeting in Jiyan Kurdish Women Centre in 1996, I heard for the first time that homebased workers can organise. I read the booklets and the research papers that I got during the meeting. With the support of a friend who does research in this area, I found the confidence within me about organising. I asked myself, why don't we also organise and ask for our rights. I talked with other female friends who are homebased workers. Later on I met with other women who work for organising. I knew that I was exploited. Many women, including me work a lot and get very little.

Pervin, a homemaker from Avcilar, Istanbul

(HomeNet Newsletter, No. 15, January 2001, p.17)

In West Yorkshire, in the North of England, many people thought that homework was a thing of the past. The West Yorkshire Homeworking Unit carried out small-scale surveys in different parts of the region to find out what work women were doing at home and their pay and conditions. They found that homework was common in many different industries in both rural and urban areas. Generally pay was well below average earnings, and homeworkers rarely received sick or holiday pay or entitlement to pensions. Using these and surveys carried out in other parts of England, the National Group on Homeworking (NGH) has campaigned for legal reforms to ensure that homeworkers in the UK are recognised as workers and are entitled to the national minimum wage.

(HomeNet Mapping Pack 2001, p. 11)

4. Types of garment chains

Since garment chains vary considerably, our understanding of how they work can be helped by grouping them into different types. We look in the following two sections at two such groupings, one based on chains' geographic spread and the other on how they are controlled.

4.1 Geography of garment chains

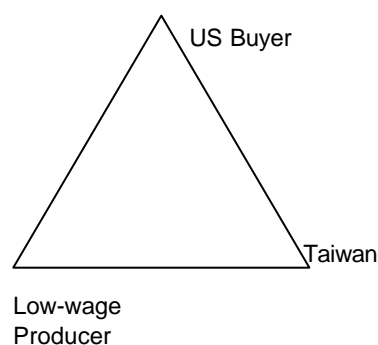
The geography of a value chain is important because it tells the researcher how far s/he needs to go to encompass the full chain. As was mentioned in chapter 2 above, some chains are global, while others are international, national, regional, or local.

Global value chains are those with activities taking place in many countries on different continents. In the case of garments, this may mean that design takes place in London or New York, fabric is sourced from China, trim and other inputs are made in India, and assembly takes place in Mauritius. In some cases, even the assembly of the same or related items can take place in several countries. For example, large buyers often contract producers in different countries to

make identical shirts. It is also not unusual to find a matching skirt and blouse where the blouse was made in one country and the skirt in another. Obviously such globally dispersed production requires very careful planning and coordination. This is a subject that we will return to in the next chapter.

Other chains extend beyond national boundaries, but they cannot be called truly global. One form of international chain involves locating different chain activities in two or three, often neighbouring, countries. A South African company, for example, may design a garment that will use fabric from Zimbabwe, be assembled by a "cut-make-and trim" firm in Lesotho, and sold through one or more South African retailers.

Figure 4.1: Triangle manufacturing



One variant of international production has come to be called "triangle manufacturing" (Gereffi 1999). It came into being in the 1970s and 1980s as a way of taking advantage of low-wage labour and favourable quotas, while at the same time using the experience that had already been developed by many Asian suppliers. Triangle manufacturing begins when a buyer places an order with a manufacturer with which it has previously done business. A typical example is a US retailer placing an order with a Taiwanese apparel firm. In order to fill the order at a competitive price, the Taiwanese firm then shifts some or all of its production to another manufacturer in a low-wage country. The triangle is completed when the finished goods are shipped directly to the original buyer. Such goods are, of course, subject to the quotas and/or tariffs of the manufacturing country rather than those of Taiwan through whom the order was placed. The

Taiwanese manufacturer, however, as the main contractor and recipient of the payment, can ensure its own profitability.

Still other chains are contained within a single nation. The South African garment industry provides a good example. The country's history of isolation means that it developed capabilities in all aspects of garment production, from design to distribution. The country's multi-outlet retailers, such as Woolworth and Foschini, are able to function as design houses and major buyers, contracting for the production of garments from a variety of sources within the country. Some of these national chains involve interfirm linkages similar to those characterising global chains. October (1996), for example, describes how producers in the Western Cape cooperate on joint clothing ranges, with a jeans manufacturer and a shirt manufacturer jointly producing items that will eventually be sold as a set.

Finally, especially in developing countries, many garment chains operate at a sub-national level. In many cases, small firms make garments for customers in the immediate vicinity. Typical examples are producers of school or work uniforms, custom tailors and dressmakers, and those making special occasion wear, such as wedding attire. They source the fabric they use from local wholesalers who have, in turn, purchased from domestic factories. Other inputs, such as buttons, zippers, trim, and facings may be local or imported, but they are purchased from local suppliers. The customers are also local, usually coming from the neighbourhood or at least the same town as the producer.

The geographic reach of any particular chain may match one of these ideal types exactly, or it may differ somewhat. A national or subnational chain may have limited markets in neighbouring countries. Liberalisation of markets has meant that many local dressmakers now have access to imported fabric. The researcher, therefore, must often decide how the chain in question can best be categorised. As with most research issues, the decision will depend on the focus of the research and on the resources available to obtain information about more distant segments of the chain.

In any location, producers are involved in different chains: local, national, and international. So, for example, although we highlighted South Africa's national garment chain, that country also has some producers making clothes for a very local market and others linked to global chains. In

later chapters, we show how to map chains for better understanding of the different opportunities they provide to local producers and workers.

4.2 Control of garment chains

Global chains for fashion garments tend to be buyer driven. They are, in other words, directed networks where buyers are the lead firms. The buyers who control these chains vary considerably, both in the volume of their purchases and in their quality requirements (see Table 4.1).

Table 4.1: Types of buyers, quality requirements, and representative firms

Type of buyer	Quality requirements	Representative firms
Fashion-oriented Companies	Expensive “designer” products	Armani, Polo/Ralph Lauren, Gucci, Hugo Boss, Prada, Harvey Nichols
Department Stores, Branded Merchandisers, and Specialty Chains	Top-quality, high-priced goods	Bloomingdale’s, Marks and Spencer, Saks Fifth Avenue, Neiman-Marcus, Macy’s, Liz Claiborne, Calvin Klein, The Gap, The Limited, Next, John Lewis, Debenhams,
Mass Merchandisers	Good-quality, medium-priced goods	Sears Roebuck, CAN, J.C.Penney, Montgomery Ward, Kaufhof, C&A, British Home Stores, Littlewoods
Discount Stores	Low-priced goods	Wal-Mart, Kmart, Target, Kaufhalle, Woolworths, George/Asda, Primark, New Look
Boutiques and other small importers	Pilot purchases and special items	-

Source: Adapted from Gereffi (1994)

Gereffi (1994) identified five types of buyers in the US market. The first are the fashion-oriented companies whose products carry “designer” labels. Since these companies require high levels of craftsmanship in their garments, they prefer to source from countries with a well-established track record for producing premium-quality clothing, such as Italy, France, Japan, and the newly industrialised countries (NICs) of East Asia. These buyers tend to order in fairly small lots.

The next group of buyers includes department stores, branded merchandisers, and specialty chains. These are the buyers of top-quality, high-priced goods that will be sold under a variety of well-known brands and private labels. As in the case of the “designer” products, quality is a major consideration for these buyers, but they are also interested in fast and reliable delivery. They mostly source from the most established exporting countries, such as the East Asian NICs, Brazil, Mexico, and India. In addition to their concern for quality, these buyers need to consider the capacity of suppliers to meet larger orders.

The third group of buyers consists of mass merchandisers. These large chains sell good-quality, medium-priced goods, mostly under their own labels. They buy from some of the same sources as the second group, but also from low-end producers in the NICs, China, and other Asian countries.

In the fourth group are the discount chains. These place giant orders for low-priced standardised goods to be sold under their own store brands. They buy from low-cost suppliers in both established producing countries, such as Mexico and India, and those on the outer edges of export production, like Kenya or Vietnam. Sometimes they buy directly from these factories, but often they work through intermediaries such as S & H Outfitters (see box 4.1).

Finally small importers are continually searching for new sources of supply among countries just beginning to develop their export production capabilities. According to Gereffi (1994), they serve as “industry scouts”, identifying and testing new sources of supply.

Box 4.1: S & H Outfitters

S & H Outfitters is a US clothing importer, owned by Mr. S.H. Shah. Mr. Shah was born and grew up in Kenya, but migrated to the US in the 1970s. In time, he established himself in the import-export trade and began supplying clothing to some of the large discount chains. When Kenya liberalised its markets and set up export processing zones in the late 1980s and early 1990s, Mr. Shah saw an opportunity for a new source of supply. He contacted an old school friend, who had recently established an export factory in Mombasa. He sent a sample and a set of specifications for a men's sport shirt to his friend, who replied quickly with the required three exact copies. Mr. Shah was pleased that with quality of the copies and placed his first order with his friend's factory. That was the beginning of what has become an exclusive relationship. The entire output of the Kenyan factory now goes to S & H Outfitters and, through them, to some of the largest US discount stores.

The European Union (EU) market is somewhat different from that of the US, but it is also buyer driven. EU buyers are less price-sensitive because clothing prices have traditionally been higher in Europe than in the US. Outlets and, therefore, orders tend to be somewhat smaller. This allows EU buyers to source from countries that have less total capacity, such as Mauritius.

Despite the predominance of buyer-driven chains in fashion garments, it is not difficult to find examples of other types of chain governance in the clothing industry. Knitwear, such as T-shirts and socks, are often produced in vertically integrated knitting mills with sewing units that do the final assembly work. In developing countries with many producers and a large domestic market, the chains for some standard items like men's and boy's shirts are market based or operate through balanced networks. One of the major tasks of value chain researchers is, therefore, to find out how the chains are governed. We will show later how to do this.

5. The new retailing and its implications for workers

Garment retailing is vastly different from what it was a generation ago. In most countries there has been a massive concentration in retailing with chain shops squeezing out the independent shops. The big retailers have made major investments in branding, marketing, communications and new forms of sourcing what they see. As a result, they are very concerned that their suppliers' performance measures up to their standards. The process of selling has also changed. Retailing vocabulary, including terms like lean retailing, mass customisation, 'lots of one', and

just-in-time inventory control, are one sign of this change. Another is the multiplication of selling seasons that has occurred since the 1980s.

To understand the new retailing, it is helpful to contrast it to older systems that rested on mass production and large inventories. Imagine a shop or a department store of a few decades ago. The owner or buyer would place orders for goods based on past experience of customers' preferred styles and sizes. A shoe shop, for example, would order the full range of sizes for a variety of standard and special styles. The women's wear department of a department store would do the same. The main ordering would be done four times a year, to prepare for the usual four seasons of the northern hemisphere. Mass production ensured that large quantities of similar goods were readily available. Since special orders were expensive in terms of shipping and other costs, they were to be avoided. Many retailers followed a 'just-in-case' approach to inventory, holding extra stock *just in case* an item proved more popular than expected, *just in case* different sizes were needed, or *just in case* too many items were defective and unsaleable. Of course this system had its drawbacks. Just-in-case inventories tend to be large, and therefore costly both in terms of storage and the money that is tied up in them. Since in most places, clothing is seasonal, the goods that remained unsold at the end of a season had to be stored until the following year or discounted at end-of-season sales. Either way, the cost to the retailer could be substantial.

All of this has changed. To stay competitive in an increasingly globalized industry, clothing retailers have been forced to cut costs while at the same time providing greater variety. Better inventory management has been an important tool for controlling costs. Just-in-case inventories have given way to 'lean retailing' in which retailers keep as little inventory as possible. Lean systems depend first on information technologies that allow retailers to keep close track of their sales and remaining stocks. When a customer makes a purchase, not only is the amount of the payment recorded, but also the detailed information contained on the bar-coded ticket. This information then becomes the basis for inventory control and reordering.

The lean retailing strategy is taking place against a backdrop of other changes in the industry. One of these is the multiplication of fashion seasons. In an effort to boost sales, producers and retailers have replaced the traditional spring, summer, fall, and winter seasons with six or eight

distinct selling periods. One large Spanish retailer has carried the multiplication of seasons to an extreme. It has moved to a 52-season year, producing a new range of clothes every week!. (Kaplinsky and Morris 2001)

A second change is the distinction between standard and fashion clothing. Standard goods are those that change very little from season to season or year to year. Socks, basic T-shirts, underwear, and 'traditional' jeans are examples of standard clothing. Fashion clothing, as its name implies, changes significantly over relatively short time frames. Women's dresses are the best example, but other items, such as designer jeans, men's dress shirts, blouses, and sweaters can also be fashion items. In managing their inventories, lean retailers are likely to treat standard and fashion garments differently.

The lean retailing strategy has ripple effects back into manufacturing and through the manufacturers to the labour force. We look first at the impact on the manufacturing firms. Manufacturers of standard goods are least affected. Here the retailers' main concern remains what it has always been: getting a good quality product at the lowest possible price. They are willing to buy in bulk because these items are likely to turn over quickly and to be saleable over more than one season. As one writer put it, "If The Gap is going to sell a million blue polo shirts year in and year out, Mexico or China is the place to make them. Lead times may be long and the supply chain inflexible, but you can't beat the price." (*The Economist*, 29 April 2000).

Fashion goods, which can be further subdivided into high and mainstream fashion, are another story. High fashion tends to be price-insensitive and few developing countries are involved in its production. Mainstream style, on the other hand, makes up a significant proportion of retailers' stocks. To control inventory costs, retailers are placing smaller, but more frequent orders. Manufacturers who can deliver quickly are likely to get the orders. This seems to favour domestic producers. American garment makers, for example, increasingly offer electronic ordering, automated distribution centres, and inventory-management systems linked to those of their customers. Some can deliver orders at a few days' notice, something difficult for developing country producers to match. Wherever production takes place, the emphasis is necessarily on speed and quality.

What does all of this mean for workers? First, the continued presence of both standard and fashion garments in the market means that for the immediate future at least, there will be mass-producing factories making that million blue polo shirts for The Gap. These orders will be filled in countries where low labour costs are the chief competitive edge. Lean retailing may have some effect. For example, retailers may decide to buy their very large or very small sizes closer to home in order to reduce the probability of getting stuck with a size that won't sell. But the overall impact on producers of standard garments - and by extension on their workers - may be minimal.

Lean retailing will have a much clearer effect on workers producing fashion garments. Here order sizes will be smaller, so workers will be required to change what they are doing much more frequently. If, as some predict, retailers are willing to sacrifice price for delivery speed and more goods are produced near the point of sale, total volumes produced in developing countries could stagnate or decline. In this case, both factory and homeworkers could find themselves with less work than previously. Even if the work is there, the emphasis on speed is likely to put considerable pressure on workers. Homeworkers, who are paid by the piece, are likely to feel this most keenly.

The emphasis on speed is also likely to change manufacturers' approach to quality. With very short lead times, low quality work is more likely to be rejected rather than reworked. This could further diminish the incomes of homeworkers, whose pay depends on accepted pieces.

6. Homeworkers in chains: types of homeworkers

Garment value chains include a wide variety of sizes and types of firms, linked by both formal and informal relationships. Homeworkers are part of many of these chains. They do both 'making through' of complete garments and 'section work', i.e., one particular process such as fastening on pockets, collars, or cuffs. Some also do specialised work, such as finishing, embroidery, quality inspection, or packing.

6.1 Types of homeworkers: production processes

The International Labour Office has grouped these activities - and the homeworkers - into three main categories (ILO 2000). First are those involved in the craft-based industries that are generally found in rural areas. Examples of craft work include the weaving of textiles on hand-operated looms in India, production of batik cloth in Indonesia, or making of traditional clothing in Latin America. The workers have traditionally been regarded as self-employed because they have considerable autonomy over both production and marketing. They procure their own materials, design and make their products, and find their own marketing channels. Often they involve other family members in the work.

Manufacturing homework differs from craft-based homework in that workers receive raw material from a prime contractor or intermediary and have to follow very strict instructions in carrying out the work. Manufacturing homework retains a craft-based character and uses traditional skills, but the workers are essentially subcontracted to produce specific items that are designed and marketed by others. The production of carpets is an example of the type of production, which lends itself to this form of home subcontracting. In the garment industry, manufacturing homework work consists of 'making through' of complete garments. In Japan, the most expensive kimonos are produced at home by highly skilled women workers. The high quality blouses made by Agnes are another example (see Box 1.2 above). Because of its craft character and the skills required, manufacturing homework is less susceptible to abuses than industrial homework.

Industrial homework is the form of homework that is most fully involved in the globalization of the clothing industry. Industrial homeworkers usually carry out operations, which demand limited skills and are usually paid on a piece-rate basis. Industrial homeworkers assemble full garments from pre-cut pieces; they may also make sections of garments, or carry out specialised activities such as hemming, button sewing, hand embroidery, inspection, or packing. In other words, they carry out some part of the production process, while others - other homeworkers or workers in factories - do the rest. Maria (see Box 1.1 above) is a typical industrial homeworker.

The overall trend towards globalization of production is blurring the lines between these different types of homework. Take, for example, the case of hand embroidered blouses produced in places such as the Philippines, Madeira, and Northeast Brazil. At one time, these would have

fitted neatly into the craft-based homework category. Now, although craft work remains in the form of hand embroidered collars, sleeves, or bodices, other processes take place in factories. In Madeira, for example, design work, marking, cutting, machining, hemming, labeling, washing, and ironing, are factory operations, while the hand embroidery is done by skilled women working at home. The entire process combines aspects of craft and industrial home working (see Box 6.1). In other cases, craft-based homework has begun to resemble manufacturing homework, as traditional industries have come under the control of national and international marketing networks and craft workers have given up much of their autonomy. For example, in the hand-made carpet industry in India, the master weaver no longer freely chooses among traditional and new designs. Instead he has become the intermediary for the major exporters, and must use the results of international market studies to make his designs (ILO 1996).

Box 6.1 Embroidery Homeworkers in Madeira

The island of Madeira is an autonomous region of Portugal, famous for its fine embroidery. Embroidery, which been an industry in Madeira since the 1850s, has always depended on the work of homeworkers. Factory workers cut the cloth, transfer the designs for embroidery onto the cloth, and prepare the materials before the work is sent out to homeworkers. The homeworkers embroider the articles by hand, following the prepared designs. The work is then brought back to the factories where it is recorded, washed, and ironed. Factory workers also finish and pack the garments for shipping.

Source: HomeNet Newsletter, 1995

6.2 Types of homeworkers: worker status

Homeworkers can also be categorised by their relationship to the state and legal system. At one end of the spectrum are registered homeworkers, whose legal status and employment relationship are clearly spelled out. Only a few countries, mostly in the northern hemisphere, have a homework legislation (see Box 6.2). In Austria, for example, homework is a special form of employment relationship. Legislation has regulated working and supplying conditions since 1960, and amendments enacted in 1993 provide benefits in the form of severance pay, family care, and holiday pay. On the island of Madeira, home working embroiders are officially registered and organised in an active union. Such legally protected home working is, however, the exception.

Box 6.2 Homework in Europe

In May 1998, the European Commission adopted a recommendation calling on all European Union governments to ratify the International Labour Organisation (ILO) Convention and Recommendation on Homework. There is now recognition of the fact that homework is on the increase in Europe. Many people thought that homework was an old-fashioned form of employment that would vanish with the development of modern industries. In fact, the opposite has happened. Many manufacturing industries have decentralised their production, using subcontracting chains that extend beyond national boundaries. Many of these subcontractors use homeworkers. The countries of Eastern and Central Europe are favoured for subcontracting because their wages rates are lower than those in Western Europe. Nevertheless, homeworkers are also making clothing in Britain, France, Spain, Germany, Austria, and the Netherlands.

Source: HomeNet Newsletters, various editions

Most homeworkers in both developed and developing countries have no special status under the law. They are, therefore, classified as either employees or independent contractors, depending on the relevant labour legislation and the preference of ‘employer.’ Since many of the enterprises using homeworkers are doing so in order to increase flexibility and reduce costs, their tendency is to treat homeworkers as self-employed. This leaves the homeworkers in a vulnerable position, especially those in industrial homework where isolation and low skills make collective bargaining difficult.

7. Gender analysis

In many cultures making clothing is considered “women’s work” and, in fact, the garment industry labour force is heavily female in most parts of the world (see box 7.1). It is not, however, uniformly so across all job categories. Furthermore, not only do the resources, activities, and rewards available to men and women in the industry as a whole vary considerably, but they also differ from one chain segment to another. For this reason, you may find it helpful to undertake a gender analysis of the garment chain(s) you are examining.

Box 7.1 Homework Is Women's Work

Women are the majority of home-based workers almost everywhere. In Germany, Greece, Ireland, Italy, the UK, and the Netherlands, 95 per cent of known homeworkers are women; in France, 84 per cent; in Spain, 75 per cent. Data from developing countries are often less complete, but it is estimated that women make up the majority of home-based piece-rate workers in Brazil.

Homework often draws from skills that are culturally considered to be female, and are passed on from mother to daughter. Yayie is a Mhong woman from northern Thailand. She told HomeNet, "My mother embroidered clothes for herself and her children and did the weaving. In my childhood I did not have toys; I played with the loom and threads. I learned embroidery from my mother when I was five. I did embroidery for myself and also looked after my brothers and sisters."

Source: Jhabvala and Tate (1996); HomeNet Newsletter (1999)

The two terms - gender and sex - designating the differences between male and female are frequently confused. The distinction between them is conceptually fairly simple. "Sex" is a biological term based on a person's physical characteristics, while "gender" is an abstract category linked to the social realities of male and female members of any society. Unfortunately sex is often confused with gender. Garment producers, for example, often say that they prefer female workers because they have "nimble fingers."⁶ In most cases, their dexterity is less a result of the physical structure of the women's fingers than of their early socialisation as girls who have been taught to sew, embroider, knit, etc. In other words, nimble fingers, if they exist, are not a characteristic of the female sex, but of gender, i.e., the social institutions that govern the way female members of the society are brought up. This may seem like an abstraction, but it is an important distinction because when sex is substituted for gender, women (or men) may be unfairly discriminated against because a learned behaviour has been mistaken for an unchangeable physical characteristic.

In this manual, we are dealing mainly with gender differences, i.e., differences in the social realities of men and women.⁷ When we look at social realities through the lens of gender, we

⁶ For a good discussion of the manual dexterity argument, see Elson, Diane and Pearson, Ruth (1981) "Nimble Fingers Make Cheap Workers": An Analysis of Women's Employment in Third World Export Manufacturing." *Feminist Review*, Spring.

⁷ Sex differences are only occasionally important, as for example when the ability to lift heavy loads is an issue

find that many social institutions affect men and boys differently from women and girls. For example, we may see that the learning materials used in our schools affect boys differently from girls. A study of children's textbooks in Kenya, for example, shows that women and girls are portrayed far less often than men and boys (Obura 1991). More importantly, the pictures and stories about males tend to show them in a more positive light than those about females. Labour regulations provide another example. Introducing legislation to upgrade working conditions can have a perverse effect. If the current workforce is predominantly male or predominantly female, factory owners may choose to sack the minority group to avoid the expense of providing them with separate toilet facilities or other amenities.

Gender researchers are also concerned with the relations between male and female members of society. In this case, we speak of "gender relations." Relations between husbands and wives, between male and female siblings, between boys and girls in school are everyday examples of gender relations. Gender relations are not static, but may change over time. For example, the relationship between husband and wife may change when a woman takes employment outside of the home. When studying gender and gender relations, it is important to recognise that many factors besides gender itself may be at play. For example, the relationship between a female homemaker and the male intermediary delivering and receiving her work is, on one level, an example of gender relations, but it also exemplifies differences in power and status.

Gender analysis is a systematic process of examining gender and gender relations in a particular setting. Its purpose is to help us to understand why development processes often affect women and men differently. The case of small-scale enterprise in many developing country cities provides an example. A survey reveals the existence of a large number of businesses involved in a wide range of activities. It also shows that, on average, those involved in these businesses earn more than they would if they had minimum-wage jobs. When the survey data are subjected to further analysis by sex of the business owner, new insights emerge. The analysis shows concentrations of male and female occupations. Men are more likely to be involved in artisanal activities like carpentry and metal work, as well as in services such as vehicle repair. Women are concentrated in traditionally 'female' activities such as food processing and dressmaking. Both men and women engage in trade, but more women are found at the lower end of petty trade in fruits and vegetables. It may also show that the average wage conceals a wide variation, in

which most women are concentrated at the bottom of the scale and in fact, earn considerably less than the minimum wage. Such an analysis is useful because it allows interventions by government, NGOs, and others to be targeted more closely to those most in need of help. In this case, an NGO may want to develop programmes to help women traders make their businesses more profitable.

The analysis itself can take different forms depending on the purpose for which it is being done. Later in this manual (Chapter 16), we present a model that has been specially designed for use with garment value chains. We also note that other social differences – race, class, ethnicity – may be important for understanding the functioning of garment chains in particular contexts. Factory owners may, for example, belong to one ethnic group, while nearly all workers come from another. Where this is the case, you are urged to apply similar techniques to analysing and understanding the variations in earnings and opportunities.

Part II. Methodology

This part of the manual discusses ways of designing and carrying out research that are particularly useful for examining value chains. It is impossible to include in a manual such as this a detailed treatment of research designs and complex methods such as survey research or participant observation.⁸ We have, however, added an *Appendix*, which gives an introduction to research design and methods. You may also find it useful if you need a refresher.

The main messages of Part II of this manual are:

- ? be driven by the question(s) you seek to answer and not the method;
- ? often the most effective way of answering your question is to use a combination of methods and sources;
- ? chain analysis is mainly about relationships; hear both sides of the story;
- ? feed your analysis back to the stakeholders; it helps to bring about change;

⁸ If you need to dig deeper, consult one or two research methods text books that will give a more detailed treatment of the methods you will be using. If possible, one of these books should be from the country

? mapping gives power: it helps to show up bottlenecks, inequities and leverage points for action.

8. Mapping the chain: first principles

Mapping a chain means giving a visual representation of the connections between actors. In its simplest form it is merely a flow diagram. More sophisticated versions show that some actors (enterprises) differ in size and that some connections are more important than others; and they help to identify bottlenecks and leverage points. Chain maps help to get a quick grasp of complicated realities. Constructing a map, however, is not a quick job. How long it takes depends on how much you already know about the enterprises and workers whose place in the global economy you try to capture.

8.1 What is your question?

In explaining how to construct a map, we assume that you start with very little knowledge about the sector in question. But we assume that you are clear about what you want to find out.

If you do not know what the question(s) is (are) which you are trying to answer, close this handbook and try to work out what you are after. More than that, write it down and then show it to somebody else. If that somebody else understands your question(s) straight away, fine. If s/he only understands it after explaining it for 30 minutes, you do not have a clear question. It may help you to think of a hierarchy of questions. For example, the overall question driving your investigation can be: “What is the scope for local strategies to improve the earning opportunities of garment homeworkers in our region?” The sub-questions might be: who are the main competitors to our region? What competitive advantage do we have over competing regions? How do wage levels in our region compare with wages in competing regions? What would be the effect of a 10 per cent wage increase on competitiveness of local firms? Is competing on the basis of flexibility and fast response compatible with achieving more stable income of homeworkers? How can this be achieved? Would insertion in different chains bring advantages in terms of skill acquisition and income?

or region in which you are working, as such books are more likely than standard northern texts to give

Without a clear idea of what we want to find out (overall question and sub-questions) it will be difficult to decide which bits of reality are important (and need to be mapped) and which bits can be left out. Few of us are as lucky as Columbus. When he embarked on his famous voyage, he did not know where he was going; and when he arrived he did not know where he was; but he “discovered” America!

Constructing a map is not just about getting to our destination but, equally important, enabling others to undertake the same voyage in much shorter time. In other words, good mapping means enabling others to gain insights rapidly and to take decisions, which take account of the complexities, which arise from participating in the global economy.

8.2 Initial and final map

Mapping a value chain can be divided into two stages. First, drawing an initial map which gives the contours of the chain: the main activities carried out locally, their connections to activities elsewhere, the connections to the final market, some initial indications of size and importance. Second, elaborating the final map: quantification of key variables, identification of strategic and non-strategic activities, showing the gender and skill composition in these activities, identifying leverage points for action.⁹

Perhaps it is misleading to speak of one final map. In most cases you will have several maps, for example one map showing the number of enterprises in each stage and another map giving the average earnings in various parts of the chain. Indeed, it is important to avoid information overload. Do not show everything at once. Figure 8.1 is an example of a final map showing the number of workers in each stage of the chain.

You can start reading the map from the top or bottom. It tells us that local producers feed into three different chains. In chain 1, different enterprises occupy the different stages of the chain. Local producers sell via wholesalers to retailers. In chain 2, they sell directly to the retailers who

relevant examples and culturally appropriate advice.

⁹ Chapters 8 and 9 have benefited greatly from the GEMINI subsector approach to small enterprise development. See in particular the overview article by Boomgard *et al.* (1992) and the field manual for subsector practitioners by Haggblade and Gamser (1991). The subsector approach was adapted for research and promotion of womens' enterprises by Martha Chen and collaborators, see Chen (1996).

drive chain. And chain 3 is characterised by vertical integration from retailing back to production. The four line connection means the relationship is between parent company and subsidiary. The more lines (four is the maximum) connect the various stages, the closer the relationship between the enterprises involved. Where there is just one line, as in chain 1, it means that the relationship is 'arms-length'. These differences in relationships are explained more fully later.

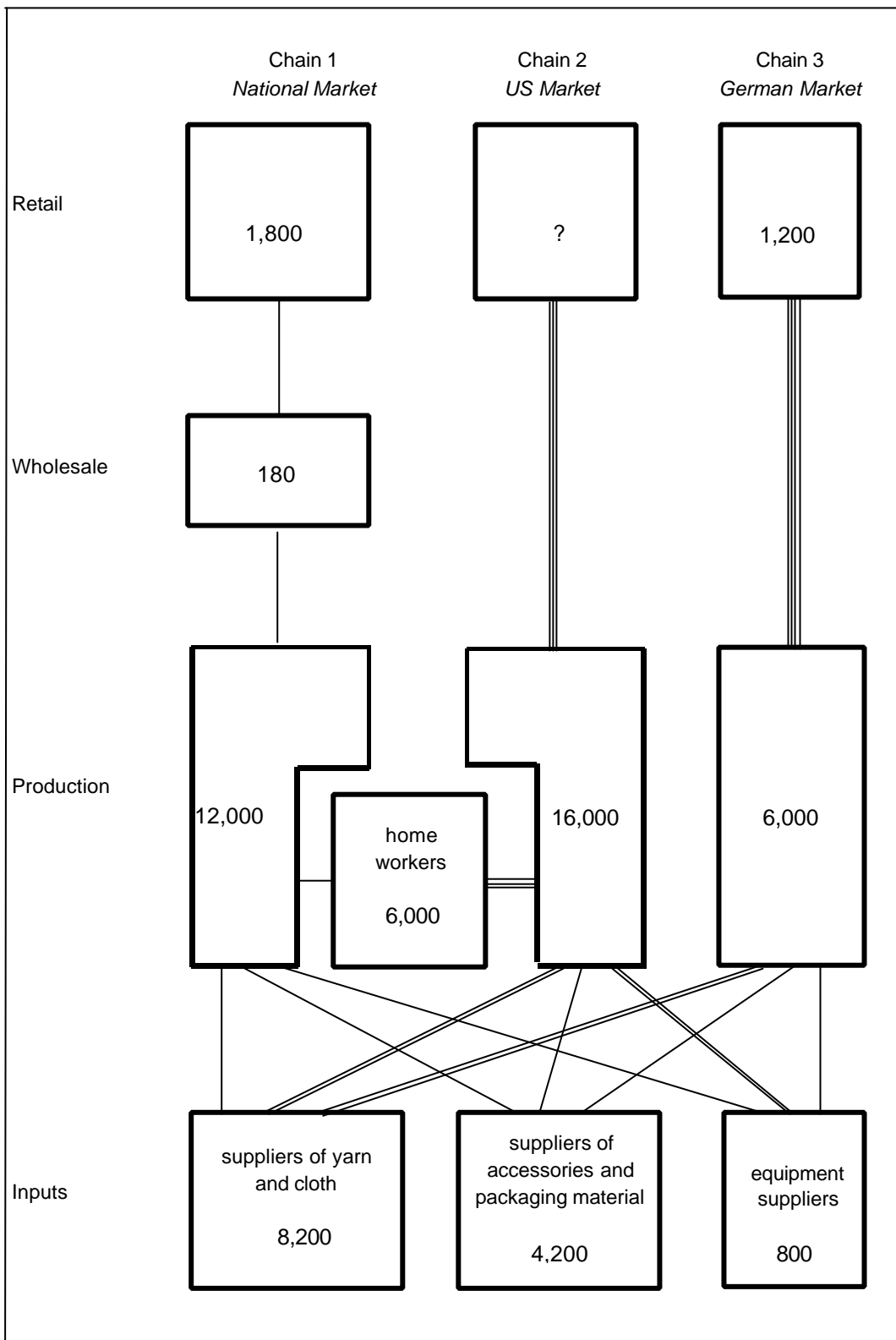
The map also shows - at a glance - that homeworkers are used in chain 1 and 2 but play no role in chain 3. And it suggests that homeworkers make up 15 per cent of total employment of 40,000 in garment production. The same basic construct can be used to show for example number of enterprises, wage levels and many other variables. Different kinds of connections between the various stages can be used to indicate whether the relationships between the various stages consist merely of buying and selling or are characterised by close co-operation, and whether they are symmetrical or asymmetrical. We will come to this later. First, we need to step back and ask how the map is constructed.

8.3 The need for conventions

Constructing a map is a cumulative exercise. So that others can join in, it is important that we have clear symbols for different kinds of actors and flows and for different degrees of importance. Agreement on symbols or conventions also helps to compare maps. Indeed, one purpose of this handbook is to suggest a set of conventions that all WIEGO and related researchers could use. If we achieve this then the workshops, which bring us together, will become more productive.

A value chain is the sequence of activities from the conception of a product to its final consumption. In mapping the chain, we list the activities vertically along the left-hand side, starting with suppliers of materials at the bottom and ending with final consumers at the top. (The design stage will be dealt with separately). Rarely is it possible (or necessary) to list minutely each single activity. As stressed before, what we map depends on the question we seek to answer. So as to avoid excessive detail it helps to group activities.

Figure 8.1: Chain map – number of workers



— = arms length market relationship == = balanced network
 === = directed network ===== = hierarchy (subsidiary)

In garment chains, the main categories are:





- | | | |
|-------------|---|---|
| Retailing | - | sale to final consumer |
| | - | branding, advertising |
| Wholesaling | ? | delivery to retailer |
| | ? | transport to warehouse near final market |
| | ? | consolidating orders from various producers |
| Production | ? | inspection and finishing |
| | ? | pressing |
| | ? | machining operations (assembly) |
| | ? | laying and cutting |
| | ? | pattern making and grading |
| | ? | sourcing inputs |
| Inputs | ? | suppliers of yarn and cloth |
| | ? | suppliers of accessories (buttons, zips, etc.) |
| | ? | suppliers of packaging materials, hangers, plastic bags, boxes) |
| | ? | equipment suppliers |

Each of these activity groups can be subdivided further. More importantly, these activities can be bundled (or unbundled) in different ways. For example, some large retailers buy directly from producers rendering the wholesale function obsolete. Other new activities have emerged, such as the development of brands which is often of strategic importance. The key convention in good value chain mapping is to start with the broad categories listed above and then to provide separate sub-maps of that part of the chain which is of special importance to your investigation. (For examples, see chapter 10). Follow the same principle that is applied in an atlas. It would not be useful to include the map of your city in the map of the world.

The advice to get the broad picture before you narrow down may contradict good pedagogic practice of starting with what you know well before you branch out. Our advice stems from observing research on small enterprises and local networks. In this field most researchers spent far too long investigating the locality and internal relationships thus neglecting the external relationships, even though they often had major influence on local development. Our argument is not to privilege the global over the local, clearly it is the interaction of the two that we need to

understand. Our suggestion is that you grasp the broad picture as early as possible before you invest too much energy in any particular part.

Conventions are also needed for distinguishing between different kinds of relationships. In Chapter 2 we distinguished between four different types of relationships in the chain. Here we introduce symbols for each type:

- ? market-based relationships: firms deal with each other in "arms-length" exchange transactions = 
- ? balanced network: firms form networks in which no one firm exercises undue control over others = 
- ? directed network: firms form networks directed by a lead firm; for example a buyer-driven chain = 
- ? hierarchy: firms are vertically integrated; the parent company controls its subsidiaries = 

The principle behind this choice of symbol is straightforward: the tighter the relationship, the greater the number of lines.

These differences in type of relationship matter. If you are concerned with local improvement strategies and external lead firms pull the strings from outside, there may be severe constraints on what you can do locally. You will certainly need to explore whether this lead firm can be made an ally or whether you need to prepare for conflict.

Or take the case of the homeworkers. Their relationships with the producers in Chain 1 are purely market-based (arms length and very unstable) whereas other homeworkers belong to networks controlled by the manufacturers of Chain 2 who offer greater stability but are also much more demanding in terms of quality and punctuality.

Note that different types of relationship can prevail at different stages of a chain. For example, in Chain 2 of Figure 8.1, local producers find themselves in a tight chain driven and controlled by their buyer but have loose arms-length relationship with the suppliers of accessories. Provided

we have the information, a map helps to portray a complex web of relationships in an easy-to-grasp way.

8.4 Information for the initial map

This section sets out how to obtain the information needed for drawing an initial map. We assume that you have a clear question, which you want to answer. We also assume that you are asking this question with particular producers in mind, for example, the garment enterprises and workers in Nairobi or Ahmedabad.

As set out in the Appendix on Research Methods, it is common to distinguish between primary sources (such as in-depth interviews, questionnaire surveys) and secondary sources (such as official statistics, previous research papers, press clippings). It is also common to start the research by drawing on the secondary sources before collecting your own information. This makes obvious sense. Do not, however, shut yourself into the library until you have read everything that has ever been written on your sector. Do not hesitate, at an early stage, to visit factories of different size and to visit some homeworkers. Ask the owners or managers to explain the production process to you. Ask them where they source their inputs, what problems they encounter in obtaining inputs; ask them about their three most important clients and what problems they encounter in selling their output.

As part of this immersion into the sector, try to interview people who have an overview of the local enterprises and of the chain they are part of, for example, the suppliers of cloth and yarn, consultants, officials of business associations, leaders of trade unions, buyers of finished products. People who used to work in the industry can be very useful as key respondents, either because they feel free to talk about sensitive issues and/or they have lots of time (having retired). Tell them that you are trying to understand how the sector really works: you may find it easiest to start by asking how those enterprises you already know fit into the local economy. Mention early on in the interview that you want to understand the different chains, which the local enterprises feed into. Such interviews with key informants are essential to piece together an overview and draw a preliminary map.

Your main difficulty will be that you obtain a lot of information on the local economy but much less on those parts of the chain which are not local, for example, the distant input supplier or the buyer in foreign countries. There are three ways of dealing with this imbalance in information. First, where the suppliers or buyers are major companies, they are likely to have Internet sites, which give you an overview of their operation. The web site is unlikely to have information on specific links to your buyers, but it will at least give you an introduction to the key player in the chain. For example, a good deal can be learned from visiting the websites of The GAP www.gapinc.com, or Marks and Spencer www.marks.and.spencer.co.uk. Or you can start with infomediaries, which help you to obtain basic information and contact details of importers. For example, the Export Institute provides a guide (against payment!) to 4,900 active garment importers in 120 countries [*check whether it is worth WIEGO investing \$295 in the CD-ROM version*] or The American Apparel and Footwear Association www.americanapparel.org which provides useful import data and an entry point to importers.

Second, the suppliers of inputs or buyers of inputs are likely to visit “your locality” regularly. Ask a local producer whether s/he can introduce you. And/or find out in which local hotel these suppliers and buyers tend to stay and request a conversation over dinner (could be awkward for female researcher seeking information from male respondent). Third, ask collaborators in the countries concerned to collect information on the suppliers or buyers. Such “delegation”, however, only works if one has precise interview questions. Since this is unlikely at the immersion stage, you will probably have to rely on the first and second method.

These distant parts of the chain are the most difficult to grasp, because of both logistical reasons (they are far away) and because of intangibles, such as brands, which are controlled by the buyer. You will therefore find that you are pulled into deepening your knowledge of the local economy while remaining relatively ignorant on those distant actors who govern the chain and who set the parameters, which the local actors have to contend with. The main (implicit) lesson from the literature on buyer-driven chains is that we miss key parts of the story if we remain stuck at the local level.

In summary, the information for drawing an initial map of the chain, comes from (a) exploiting secondary sources, and (b) exploratory interviews. As soon as a preliminary map emerges,

take it with you to your next informant. They will readily grasp what you are trying to accomplish and help you to fill in some missing links, or draw a different map! The key is that such a map, however rudimentary, helps to keep the discussion focussed on the connections and flows, which make up the chain.

8.5 Drawing the initial map

It is tempting to start drawing the map by tracing the local linkages between producers, suppliers, etc. A more effective way is to start by identifying final markets. This can generally be done on the basis of a few interviews with people who have an overview of the industry. Where the final market is outside the country, export statistics are usually available showing countries of destination. The next step is to group the destinations. For example, an initial useful grouping might be a) local market, b) national market, c) exports to neighbouring countries, d) exports to Europe, e) exports to USA. In other cases, it might be important to distinguish between high fashion and standard products sold to the same region or country. The danger is that you end up with too many distinctions. Leave out the least important ones and/or group final markets so that you end up with no more than four or five. Understanding the most important chains well is more important than attaining complete coverage.

In this manual, we give most attention to global chains. WIEGO, as an international network of researchers and practitioners, is particularly concerned with the impact of globalisation. The functional integration of globally dispersed activities brings new opportunities and dangers to homeworkers. The purpose of the manual is to help you unravel the problems and opportunities – and to act upon the findings. You may however, find that in your area, most homeworkers continue to produce for the national market. Not only that, most of the production and distribution chain might be informal, as is frequently the case in, for example, India and South Africa. If this is so in your area, the manual will still be useful, but some of the discussion, for example the learning from global buyers or the use of new leverage points, may not be applicable, at least not without major adaptation.

Returning to our chain maps, once you have identified the main markets, work towards the following:

- ? List the functions (activities) that make up the chain (retailing, advertising, warehousing, shipping, production etc.)
- ? List participants performing each function; obtain rough estimate of number of enterprises and workers involved; list key contacts (for example, if three forwarding agents undertake all consolidation and shipping, the managers of these companies can probably provide you with an excellent overview of the relative importance of various destinations, fluctuations in the course of the year, key players in the distribution system)
- ? On a large sheet of paper, list main final markets across the top and main functions down the left side
- ? With the main axes of the map in place, you can then start drawing the map. The boxes (see figure 8.1) represent enterprises, but since representing each enterprise with a box is not practical, write the number of enterprises (and/or workers) in the box.
- ? The next tool we can employ for drawing the map is drawing lines between enterprises in the different functions. In the first instance, the concern is just to show the flow of materials and services along the chain. We can then indicate the type of inter-firm relationship which prevails in the various chains or parts of chains. As suggested above, one can use very simple symbols (one-, two-, three- or four-line connection) in order to indicate how close (distant) or/even (uneven) the relationship is.

8.6 *Next steps*

In this chapter we have tried to draw an initial map of the entire value chain. In Chapter 9 we try to make this map more precise and show how it can be used for different purposes, for example, to show where male and female employment is concentrated along the chain, or how average earnings differ along the chain. Then in Chapter 10, we turn to drawing sub-maps, that is detailed maps of particular parts of the chain. We will concentrate on two such maps. One is concerned specifically with displaying that part of the production process which involves homeworkers: How many layers of homeworkers are there? How many workers are typically engaged in the domestic establishments? Do they work exclusively for one manufacturer or several? Such aspects can be displayed in an easy and graphic way. Another map to be constructed concerns the design stage: Who makes the designs in the various stages? Is the design controlled by the retailers or producers? Where the design is produced locally where do the ideas come from? Answering these questions and displaying the answers in effective diagrams can be important. Especially if the research explores the possibility of re-positioning local producers in the national or global economy, then it is paramount to understand the design stage. Thus, depending on the specific purpose of the research, different sub-maps become

necessary. Such “zooming in” on particular parts of the chain is often an important complement of the overall value chain map. Chapter 10 will give examples of maps which detail particular stages. In the next chapter 9, we will show how to refine the overall map.

9. Refining the value chain map

The previous chapter showed how to get an initial grasp of how local producers fit into the relevant global and national chains. This chapter is concerned with making the map more precise; precise, not in the sense of documenting the chain in all its details. Precision refers here to quantifying the key variables as much as possible, distinguishing between different kinds of relationships, substantiating in the text what the numbers and arrows in the map mean, and indicating where qualifications are necessary.

9.1 Mapping gives power

The refined map can be understood as a framework for showing the chain statistics. These statistics can refer to the number of enterprises in different activities, number of workers, the percentage of female workers, earnings, and many other aspects depending on the research questions you want to answer. Indeed before starting to refine the map, go back to your initial research questions, first to remind yourself what you were trying to find out when you started this work, second to see whether the initial question needs to be modified or refined. Skipping this step is extremely expensive. If your initial question was too general and you fail to make it more specific, you drift into a much bigger data collection exercise than needed.

Conventionally, data are presented in tables or diagrams. Much of those conventional data are also needed for our exercise. The critical difference is that we enter the data into our map. Employment data becomes so much more meaningful if we see how many people work in the different parts of the chain. Earnings data become so much more powerful if we show how average wages differ in the different parts of the chain. Indeed, the chain as framework for presenting data helps us not only to understand connections and differences, it also lends power to our argument for change. Map 9.1 gives an example: fitting income data into the map reveals at a glance how earnings differ in different parts of the chain.

In conjunction with this manual, we hope to develop a software program in which the various parts of the chain are scale sensitive. For example, where the number of outworkers is higher than the number of factory workers, the outwork box will increase in relative size when you enter the data. For this first edition, however, we go for a simple solution of entering the data into a static chain diagram.

9.2 Getting the data

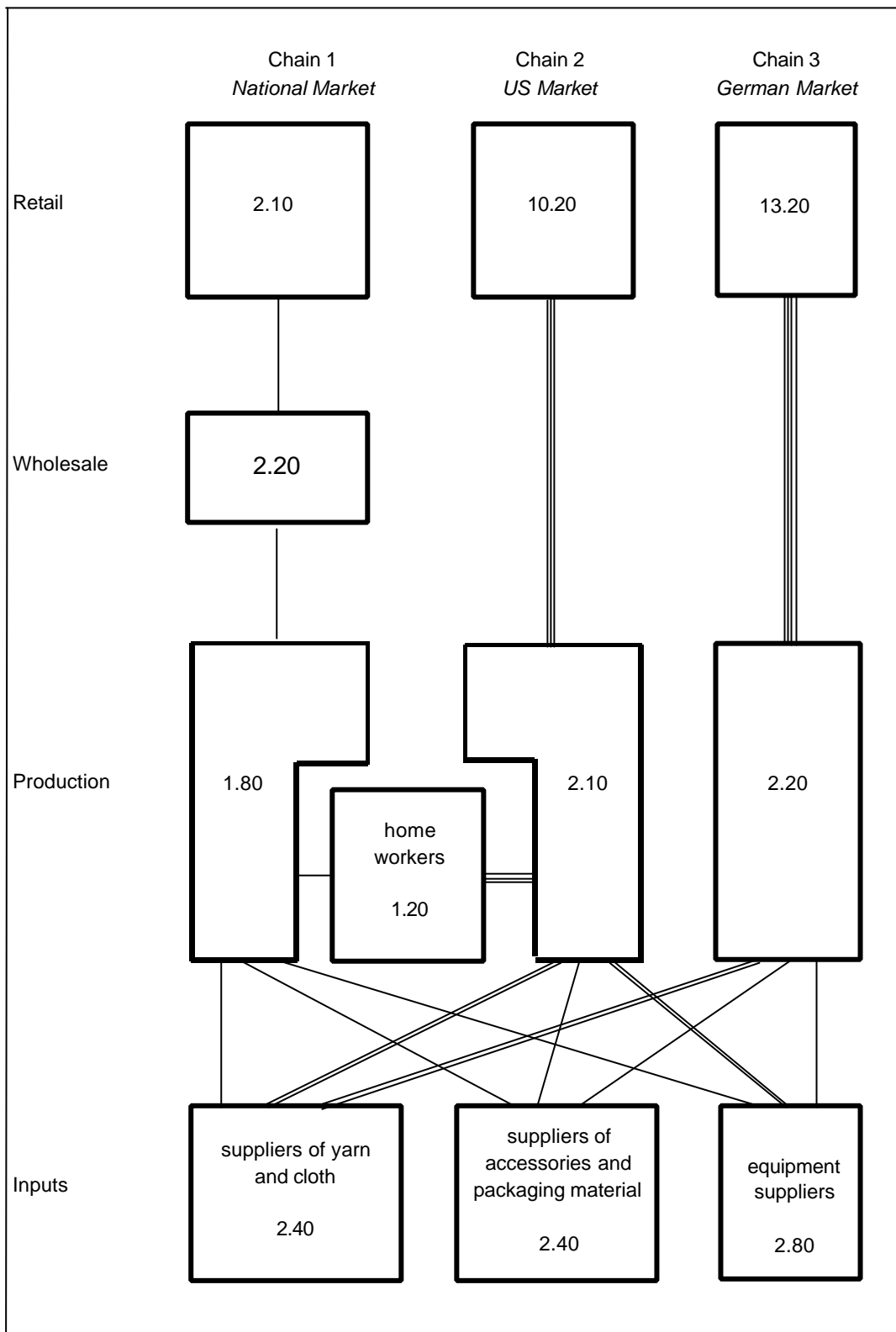
This section shows how to obtain the data that will be put into the map. As mentioned repeatedly, what data you need depends on your research question. The kind of data usually needed include the following:

- ? total sales per chain (domestic sales, export sales and further subdivisions)
- ? number of enterprises per stage/chain
- ? number of workers per stage/chain
- ? skill composition per stage/chain
- ? percentage of female workers per stage/chain
- ? average earnings per stage/chain

Sales per chain

Total annual sales are a good indicator of the importance of the chains we intend to study. Export data, i.e. sales to foreign markets, are usually easier to obtain than data on domestic sales. All national governments have offices which collect and publish trade statistics. In most cases you will find that the data are sufficiently disaggregated in terms of destination and product. A problem arises when you want local (rather than national) export data: for example, how much did the garment industry of Ahmedabad export? Here you have several choices: request special tabulation from the national office, obtain data from the relevant state or local government, or request help of the local business association. The latter is probably the best starting point as it usually keeps such data anyway. The association is also the body to advise you on how to obtain data on sales to the domestic market.

Figure 9.1: Chain map - workers' hourly wage (US\$)



— = arms length market relationship == = balanced network
 === = directed network ===== = hierarchy (subsidiary)

?

If you find that the secondary data are either not available or too unreliable, you have two options. Either you conduct your own survey, obtaining the data from the (sample of) firms directly. Or you obtain estimates of the relative size or ranking of the chains through interviews with respondents in key positions (e.g. head of transport company, association officials, traders).

Number of enterprises

At first sight this may seem the easiest kind of data to obtain but you will soon find that you need to draw on a number of sources, first because some of the enterprises may not be registered and second, because we want enterprise numbers for the different stages and types of chain. Our aim is to collect data for the kind of chain map represented by Figure 9.2.

Let us start with the *garment manufacturers*. Both the Government Statistical Office and the local/sectoral Business Association are likely to have a register. Work out which register is more complete and up to date. Perhaps you need to work with a combination of the two. In order to make these judgements, enlist the help of somebody who has had recent contact with many manufacturers (a consultant, an input supplier, an association official). With the help of one or several of these “experts” you can “allocate” the manufacturers to the various chains. The criterion is which is their main market? (Or if you prefer, you can double count, taking into account also their second most important market. In other words, some manufacturers appear in more than one chain. This procedure is inevitably rough but probably sufficient for most purposes. If you need more precise data, you will need to conduct your own sample survey of garment manufacturers (see Appendix).

A problem which you will almost certainly run into is that the available registers of government manufacturers include establishments which carry out only a particular stage of the production process. Thus some of the homeworkers (i.e. those who have registered their establishment) could well be included in these registers. Again, somebody with first-hand knowledge should be able to help you separate them out. (More on the homeworkers later).

Now we come to the number of *input suppliers*. The procedure to be followed is the same as for the garment manufacturers: start with available registers, then correct the registers with the help of somebody who has first-hand knowledge of the suppliers. If the registers are not

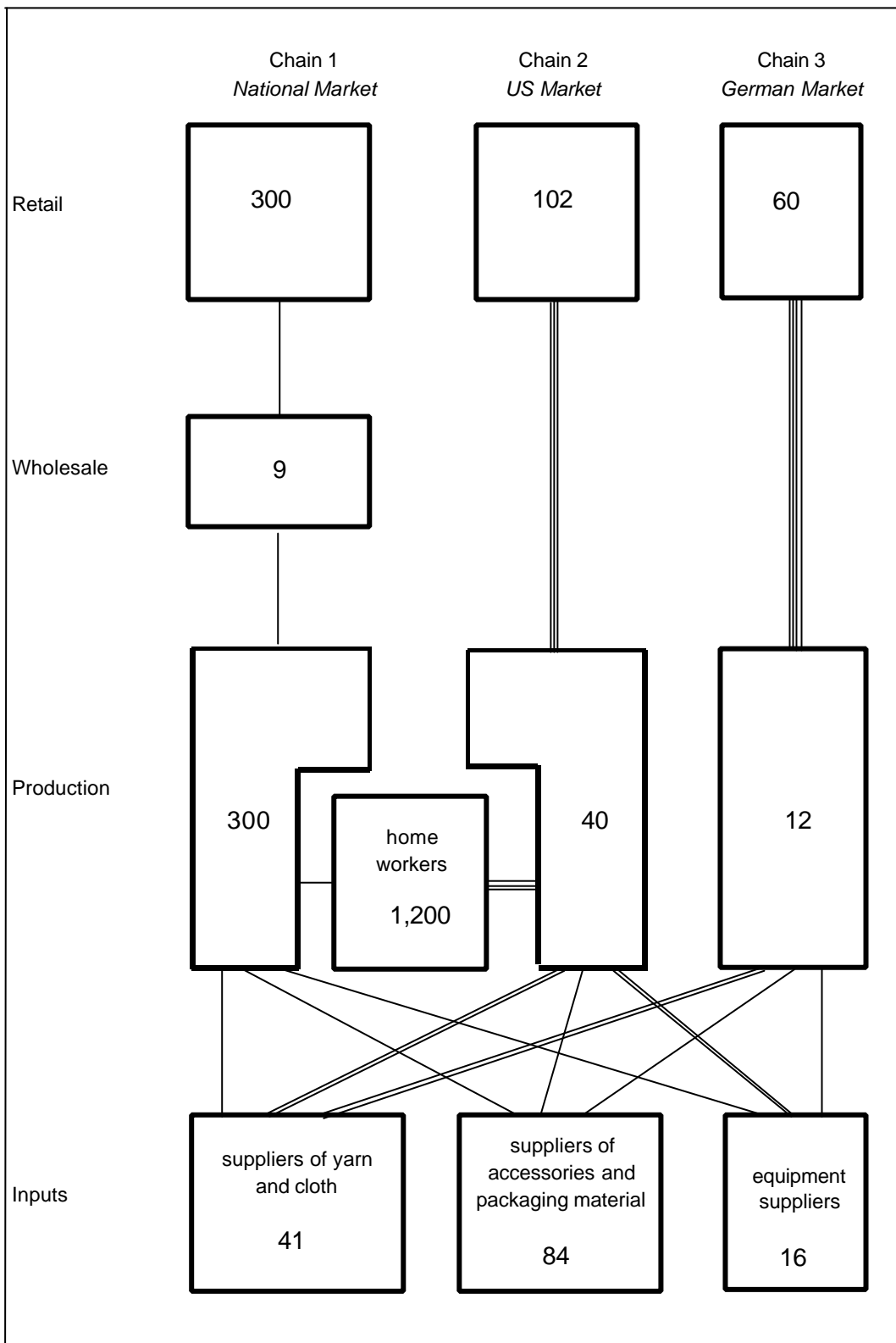
available or too deficient, ask your “experts” to list the number of relevant suppliers from memory. A practical way of doing this is to sit down with two or three garment manufacturers (individually or as a group) and to ask them who their suppliers of cloth, yarn, accessories, packaging, equipment are. Then ask them for alternative suppliers in each of the input categories.

If you are studying well-developed garment clusters, you will find that most of the supplies are produced locally or at least available locally through traders. So the enterprise data to be entered in the map refers to the number of local suppliers. Alternatively you can enter the total number of national suppliers and put in brackets the number of local suppliers.

If a significant percentage of the input suppliers come from abroad, you may need to vary the map (Figure 9.2) itself, representing foreign and domestic suppliers separately and then providing separate numbers for each category. If the input supply is both complex and critical to your investigation, it is best to indicate in your chain map merely whether the inputs come from within or outside the country and then to draw a sub-map which depicts the features that matter to you (see Chapter 10: Detailed maps of particular parts of the chain).

Moving to the other stages of the chain, the number of *wholesalers* is unlikely to be available from a secondary source. The easiest way to estimate their number is to ask a few garment producers and to ask some of the wholesalers themselves. It should not be too difficult to get an overview. Make sure you capture wholesalers relevant to your chains (i.e. no need to include all garment wholesalers).

Figure 9.2: Chain map – number of enterprises



— = arms length market relationship == = balanced network
 === = directed network ===== = hierarchy (subsidiary)

Estimating the number of *retailers* is more difficult. The number of domestic retailers can perhaps be obtained from the retail association but the figure will almost certainly require two corrections which are very difficult to make. The figure will be too high in that it will include many who are not relevant for retailing the products of your chain. The figure will be too low in that it does not include many informal retailers. If it turns out impossible to provide reasonable estimates, give the order of magnitude in the map and explain in the text why more exact quantification is not possible

As regards retailers in export markets, retail associations in these countries will probably provide statistics, but again the question is how many of these retailers are relevant to your chain? In some cases it may be possible to estimate their number by asking the US, Canadian or European importers about the number of their customers. But keep in mind that some retailers import directly.

Clearly working out the number of relevant domestic and foreign retailers can be hugely complicated. The question is whether you need precise numbers. It depends on the purpose of your investigation. As seen in earlier chapters, some of the changes in organising garment production are driven by changes in the retail sector. Thus, understanding the retailing sector in the relevant consumer countries is important. However, very rough estimates of the number of retailers should be sufficient. Above all we need some idea of the degree of concentration. If, in market X, the bulk of the clothes are sold through hundreds of small shops, it does not matter whether their number is 500 or 800, the difference is unlikely to affect the chain dynamics. No single retailer will have direct influence on other parts of the chain. Contrast this with a situation in which three retail chains sell 90% of the output of a chain. This is likely to be a buyer-driven chain. In this case the exact number matters. For example, a shift from three to six retailers could indicate a significant increase in the choices open to local manufacturers. Thus, as in all data collection, it is important to recall what we want to find out before we decide on how much energy to spend on quantification.

Employment

In order to collect data on the *number of workers* we use the same sources and methods as those presented above for working out the number of enterprises. There are, however, two

categories of workers whose quantification presents special problems and therefore need further discussion: casual factory workers and homeworkers.

The extent of *casual factory employment* (within the garment factories) is difficult to assess because they are often not included in the available statistics and employers do not like to provide information since a good number of those workers are often not formally registered. While the employers might be reluctant to be specific about their own employment practices, they might be willing to talk about the industry or the chain in general and give you an indication of the relative size of the casual workforce. You should also try to obtain estimates from the labour union. If you cannot even obtain a rough picture from these sources, drive to a number of factories early in the morning at the beginning of the shift. If there are long queues at the factory gates, they probably indicate that casual labour is being recruited. It should not take much detective work to confirm whether this is the case.

Estimating the number of homeworkers presents a greater problem because they are dispersed over many more locations and establishments. Sometimes it is possible to make rough estimates by using secondary sources. The demographic census in most countries and regions usually includes, under occupational data, the number of garment workers or sewing machinists. Compare this total with the total number of workers in the garment industry according to the industrial Census. The difference gives you an initial idea of the size of the informal workforce, in other words, the total of casual factory workers and homeworkers. Interviews with key informants could then give you the approximate proportions of the two.

In order to obtain estimates which establish the importance of homeworkers by chain, you probably need to use a number of methods. The main one is interviews with several key informants who can claim to have an overview of employment practices in the industry. This would include representatives of the local labour union and of the business association. And, hopefully, you can persuade employers to open up and talk frankly about the use of homework. As mentioned before, often they prefer to talk about the industry or chain in general rather than their own practice. Even if they open up and talk about their own network of homeworkers, they may not know how many people they employ working in their homes. One solution is to ask about the labour cost for one or two typical products and then to ask how much of this

labour cost represents wage costs of internal workers and how much represents the payment of homeworkers.¹⁰ This should allow you to work out the order of magnitude of the external workforce in full-time equivalents.

The problem, of course, is that many homeworkers do not work full-time on a regular basis: there are core and fringe homeworkers, there are homeworkers who work exclusively for one manufacturer and others who have a number of ‘clients’. These and other distinctions amongst homeworkers (remember Agnes and Maria?) are best captured in a sub-map specifically designed to show that homeworkers belong to networks but have many differences amongst them. Later chapters show how to draw such homeworker maps.

Share of female employment

If your research is concerned specifically with gender questions, it is useful to show the percentage of female employment in the various parts of the chain. Estimating this percentage should not be difficult. The sources and methods are those used for estimating employment. Figure 9.3 shows – by way of a hypothetical example – what such a gendered chain map looks like. Its main limitation is that some of the most significant variations can be found within the broad categories used in this map. For example, in the sphere of production you may want to distinguish between the 98% female workforce in sewing operations and the 90% male workforce in the cutting room. These or other more detailed distinctions are best brought out in sub-maps concerned with particular parts of a chain.

Earnings

In order to work out the average earnings in different chains and different stages in the chains, you will need to draw on a range of sources. The wage in garment retailing in the US or European countries can be calculated from the official statistics of the Government’s Labour Office, for example, the US Bureau of Labour Statistics. Average earnings in garment production may also be available from government sources but check them against other sources. Labour unions are the obvious source. Some labour unions have their own research wing; for example, DIEESE in São Paulo, Brazil, collects and publishes detailed data on wages

¹⁰ In Chapter 12, we discuss in more details how to obtain cost breakdowns.

and living cost. Sometimes employer associations are a good source. For example, the South African Clothing Federation collects and publishes wage data. The problem is that these data are often not specific enough for the location and chain in which you are interested. For such disaggregated data you will probably need to enlist the help of the local labour union and corroborate their data with those from a few enterprises in the chains concerned.

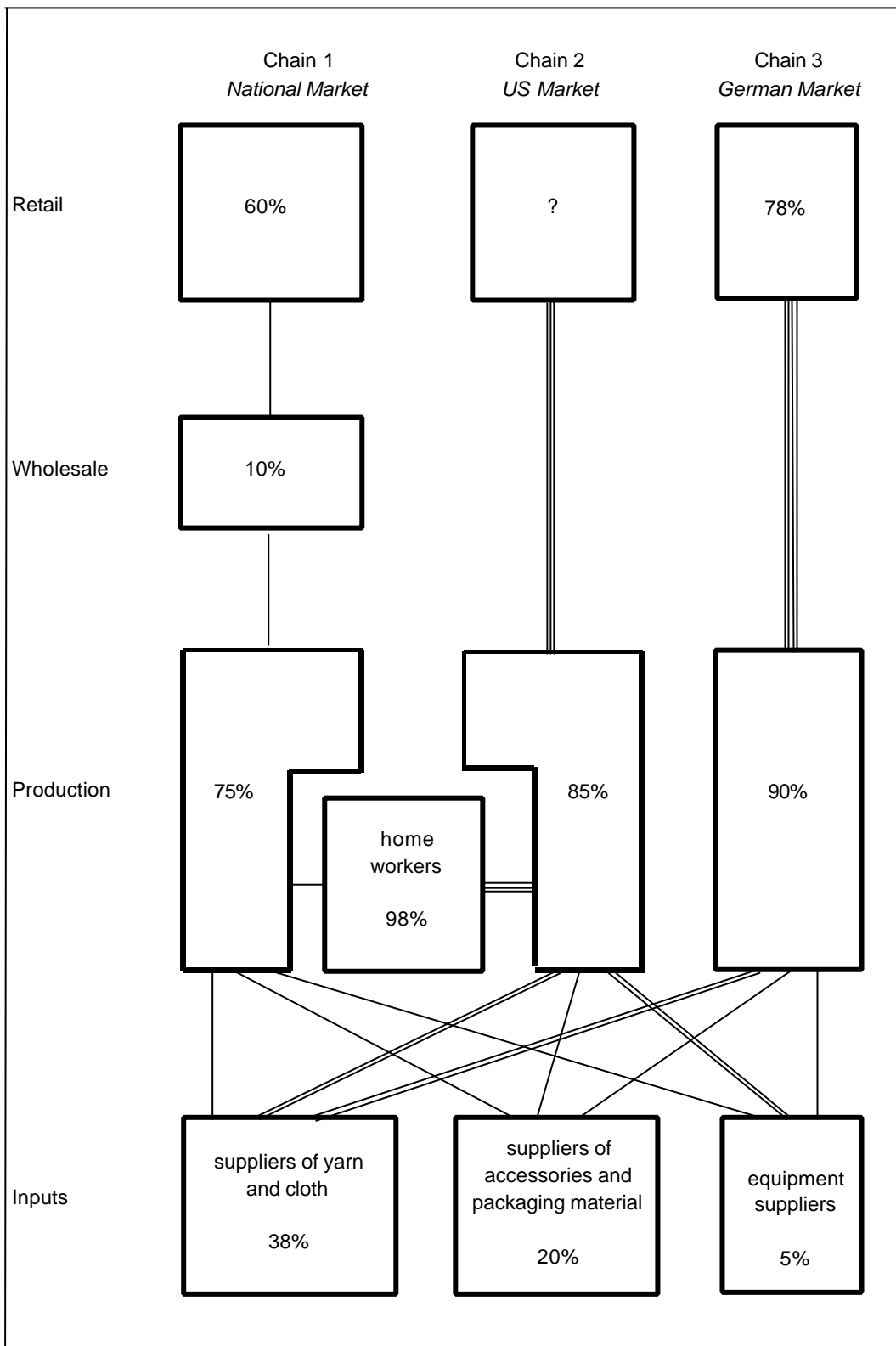
In the case of homeworkers, you need their help to work out the average earnings. Do so with different homeworkers, like Agnes and Maria. You will need the piece rate of a few typical products in order to work out their earnings. A critical assumption concerns the number of hours worked. Since you want comparable data, the earnings presented in the map should be based on the number of hours typical of full-time factory workers. Or you can, as shown in Figure 9.1, show the hourly earnings. This would then need to be complemented with data on the fluctuations in working hours.

A chain map containing earnings data is useful in showing variations along and across chains, but the averages can hide enormous differences. It is therefore useful in commenting on such a map to give the range of earnings in those stages or chains which are of greatest concern. For example, earnings data of homeworkers may show that Agnes earns twice as much as Maria while earnings in the factory may differ by a factor of 4.

9.3 Identifying relationships and leverage points

In Chapter 8 we introduced the symbols that can be used for mapping relationships between enterprises. Sometimes it is possible to depict the type of relationship in the course of the initial interviews. Often, however, one needs to probe deeper. In what follows, we set out how to do this.

Figure 9.3: Chain map - share of female workforce (%)



The most thorough way to judge what type of relationships prevail in the various parts of the chain is to ask mirror questions to both sides: supplier of cloth and the garment manufacturer, the homemaker and the manufacturer, the buyer and the manufacturer, etc. If you find that there are variations in any one link, indicate in the diagram which is the typical or dominant relationship and explain the variations in the text.

The following indicators (to be explored in the interviews) help you to identify the type of relationship. We use the terms 'supplier' and 'customer' to denote the two parties to the relationship.

Indicators of market-based or arms-length relationship:

- ✍ Many customers/many suppliers
- ✍ Repeat transactions possible, but information flows limited
- ✍ No technical assistance.

Indicators of balanced network:

- ✍ Supplier has various customers
- ✍ If supplier has few customers, customer has few suppliers
- ✍ Intense information flow in both directions
- ✍ Both sides have capabilities which are hard to substitute.
- ✍ Commitment to solve problems through negotiation rather than threat or exit.

Indicators of directed network:

- ✍ Main customer takes at least 50% of output
- ✍ Customer defines the product (design and technical specification)
- ✍ Monitoring of supplier performance by customer
- ✍ Supplier's exit options are more restricted than customer's
- ✍ Customer provides technical assistance
- ✍ Customer knows more about the supplier's costs and capabilities than supplier knows about customer's.

Indicators of hierarchy:

- ✍ Vertical integration of several chain stages within the firm

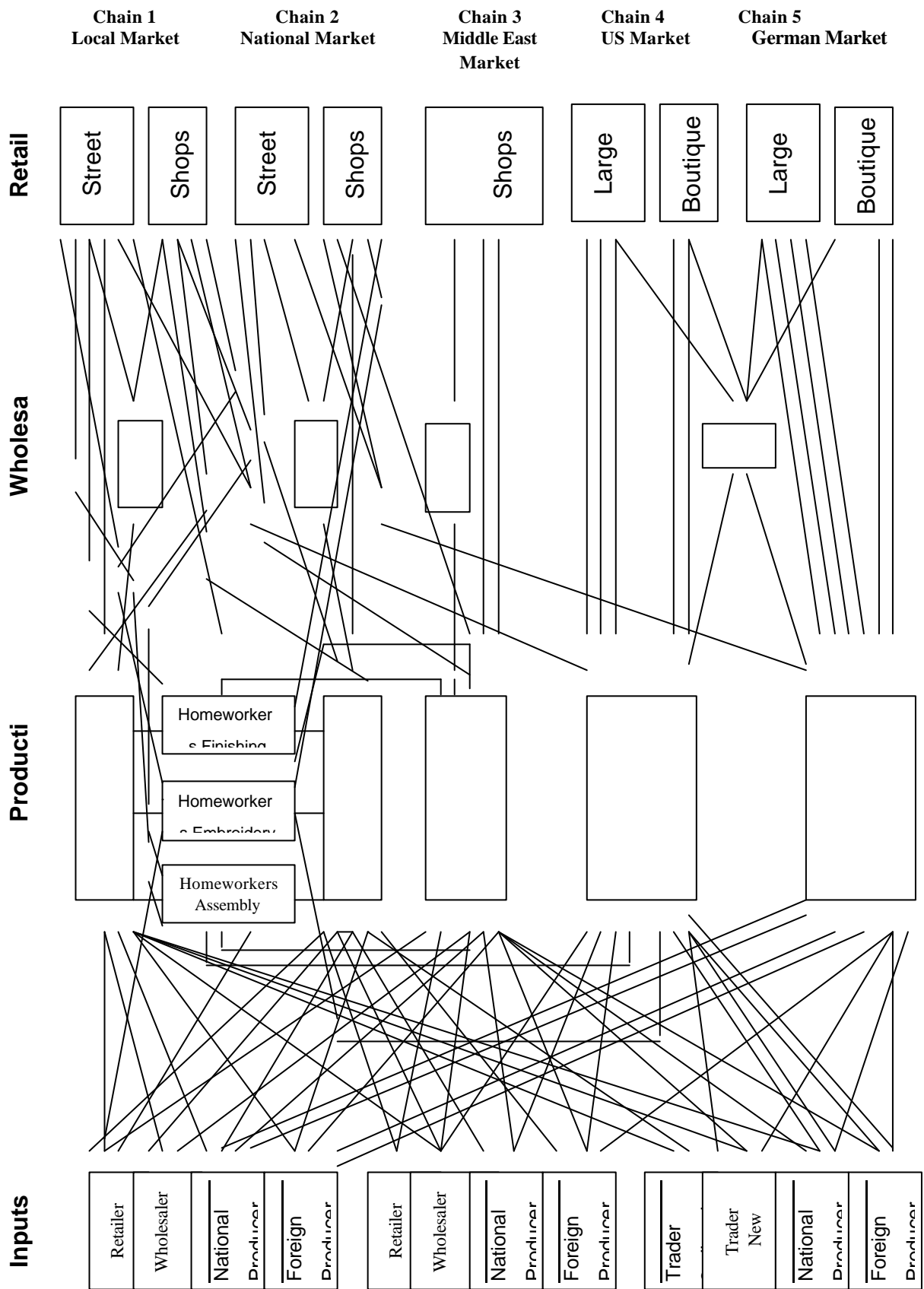
- ✍ Supplying establishment owned by customer or vice versa
- ✍ Very limited autonomy to take decisions at the local level. Having to consult with or obtain permission from 'headquarters'.

Collecting the information for some of these indicators can be very time consuming. So make sure that you actually need the information. Knowing the type of relationships is often important for answering two questions: first, who pulls the strings in the chain? If an external agent, e.g. the foreign buyer, dominates the chain it will be very difficult for local organisations to bring about change – unless they can enlist the support of the buyer. This leads us to the second question: are there convenient leverage points? In other words, is there a point in the chain where a small amount of pressure can generate a big effect elsewhere in the chain? The practical use of such leverage points is discussed later in Part III “Making an Impact”. In this Part II we concentrate on “Methodology”. To identify the leverage point you can use the chain map which includes enterprise numbers. Figure 9.2 gives you the gearing ratio at different points in the chain. For example, if 200 producers confront 4 buyers, the gearing ratio is 200:4. This suggests a potential for leverage. How effective it is, can only be judged from the qualitative interviews. If you are lucky, you find a key informant who can provide you with a summary analysis. If not, you will have to piece together the analysis on the basis of a number of interviews with both producers and buyers.

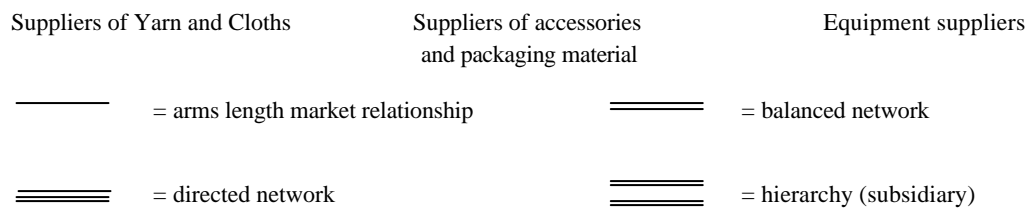
9.4 Avoiding the overly detailed map

The idea of mapping the chains and showing the relationships between enterprises assumes that we can make sense of reality by using a small number of categories (three types of chains, four types of relationships etc). In practice we will often find that reality is messier than that. The patterns are not clear, the variations seem endless. If we try to capture the full complexity we may end up with the kind of chain map shown in Figure 9.4. As you can see, it is excruciatingly detailed.¹¹ It does not enable us to see the key relationships and it would not help us to explain to others how the chains work. Remember that, as researcher, your task is not to document everything you observe. You carry out this research for a purpose and your objective is to unravel the key factors and relationships, which help to explain and improve the situation.

Figure 9.4 Overly detailed map



¹¹ The idea of including an overly detailed map is taken from the GEMINI field manual for sub-sector practitioners by Haggblade and Gamser (1991).



In many cases you will find that you require only a rough idea of the chain(s) as a whole, but need a detailed understanding of a particular part of it. This is the subject of Chapter 10 which gives examples of how to show particular parts of a chain or portray particular features along the entire chain.

9.5 *The research process: a struggle*

In this chapter, we have covered a lot of ground. We have shown how to build chain maps and we have discussed what data need to be collected from whom and how. Knowing what you are after and where you can get it is of course critical. But it is not enough. You also need stamina and luck. Many of the people you want to talk to are very busy and getting the appointment can take longer than the interview itself. Do not give up because you did not succeed on your first attempt. Access to companies can be very difficult, you may need to try several times before you get in. You will probably find that arranging interviews is most difficult at the beginning of your research when you do not know the people in the industry. As the research progresses it tends to get easier, because respondent X provides you with a contact to X, Y and Z. Do not hesitate to ask - at the end of an interview – for help with identifying other informants and making contacts.

Even with luck and persistence, you will probably end up with some gaps in your information. This is normal; piece together what you have. Lots of insights come from piecing together fragments. In assembling the bits – a set of data here, some interview material there – remember that informants have given you their own perspective. Do not take their responses at face value. In drawing your conclusion, you need to step back from the figures and interview quotes.

Keep all this in mind as you go through the next chapters. They explain in more detail how to collect information on particular aspects and how to portray this information effectively.

10. Detailed maps of particular parts of the chain

In a school atlas you expect to find maps referring to different levels: the world, continents, countries and regions within countries. The same principle can be applied to chain mapping. Some maps can provide the overview, showing the entire sequence of value adding activities. Others can capture particular parts of a chain. This chapter give examples of the latter.

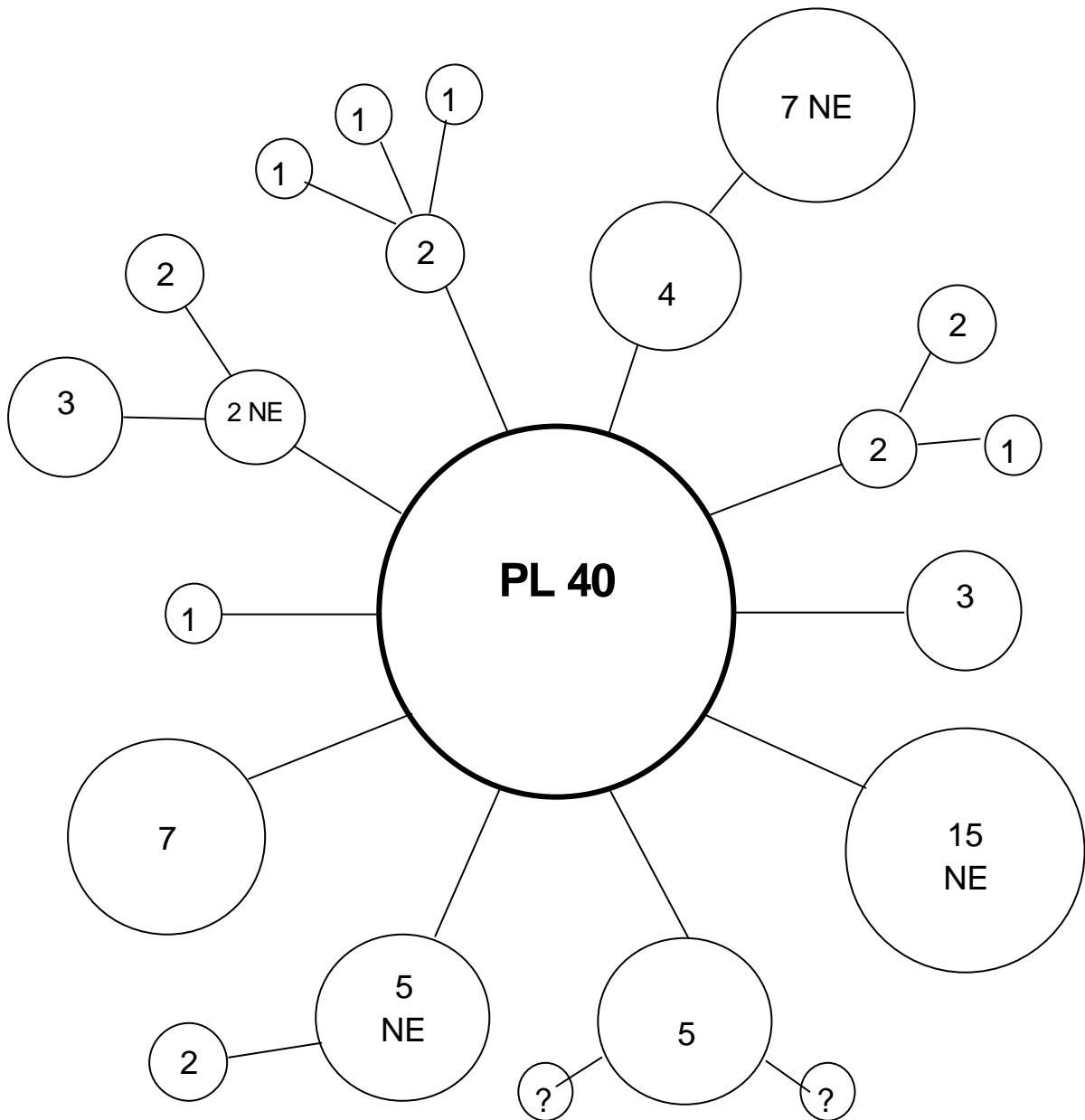
10.1 Mapping homeworkers

The first example refers to our target group: the homeworkers. We have already discussed (in Chapter 9) how to obtain estimates of the total number of homeworkers. Such estimates are difficult to make because of the way homework is organised. Maps help to put across the complexity of this organisation in a simple way. Perhaps the most effective way of doing this is to provide a case study of a particular manufacturer and her/his network of homeworkers. To be relevant, we need to have some confidence that the case we pick is typical of local practice. If there are two or three main patterns of organising homework it would be best to show two or three cases which depict these patterns. In this section we limit ourselves to showing one example. See Figure 10.1. It is the case of a small manufacturer, named PL, who employs 40 internal workers. The number of external workers is difficult to establish for reasons which Figure 10.1 helps to bring out. PL deals with ten sub-contractors directly and more indirectly. And some work exclusively for PL and others also for other manufacturers. The latter are marked “NE” (not exclusive) in Figure 10.1. The number in the circles refer to the number of workers in each establishment. What these numbers do not reveal is whether the work is full or part-time. In summary, the figure shows the multiplicity of relationships and the small size of the establishments, most of which consist of between one and seven people, and some of which pass on work to the next layer of homeworkers.

How does one obtain the information required to draw this figure? Interviewing PL helps but is not sufficient. An excellent method is to accompany PL’s driver when she/he delivers the pieces to be sewn together and she/he collects the finished work. The driver (usually male), being the distributor and collector of work and thus the regular go-between, is a valuable source of information. Provided the driver allows time to ask a few questions in each establishment (how many workers, full/part-time, work passed on to others, working exclusively for PL) it is

possible to collect all the information in a day. You need to recognise that by adopting this approach you behave in a pushy way: you descend without advance notice upon the homeworker and, after a minimal introduction, fire away with your questions. Provided you limit yourself to a small number of simple and factual questions this seems defensible. It is certainly effective. For in-depth interviews with homeworkers you would probably need to introduce yourself in a more sensitive way (see Chapter 13 on ethical questions in researching home-based work).

Figure 10.1 : Network of homeworkers



Returning to the approach proposed here for mapping the network of homeworker, you may find that the driver (usually male), as a distributor and collector of work, is a valuable source of information. He can probably give an overview on seasonality (ask him about the amount of work distributed in the course of year and how it changes month-by-month). The principle, however, is to rely not on one source only but to put your questions to all stakeholders: PL, the go-between, and the outworkers. The main problem is that negotiating access can take longer than the interviewing. And sometimes access will be refused.

10.2 Mapping the sources and power of design

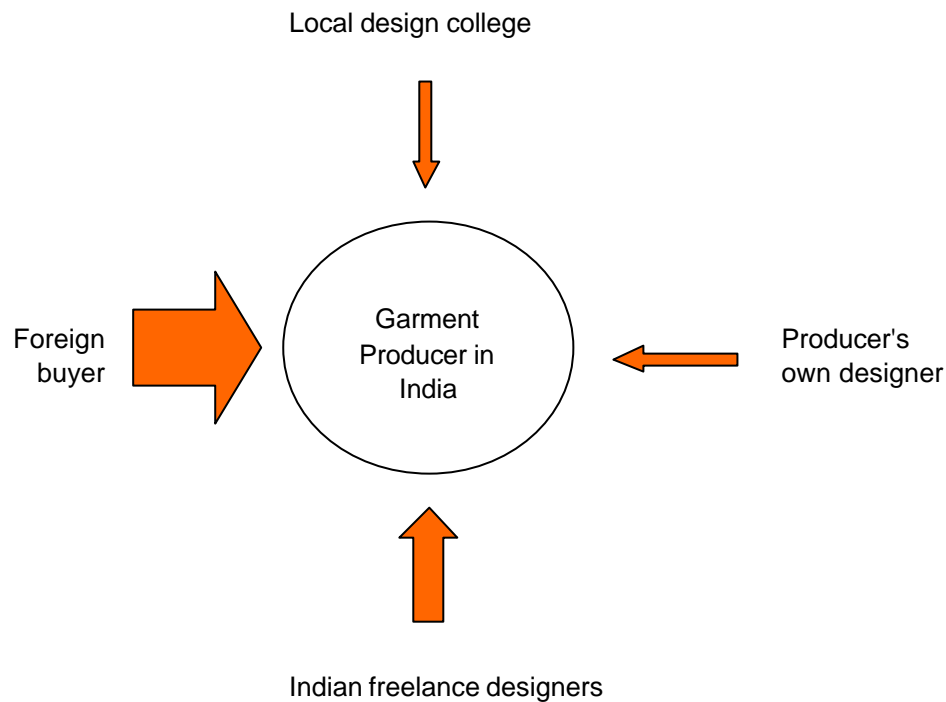
Our second example of a sub-map refers to the design stage. If the purpose of your research is to understand not just the production system but to change it you may need to map knowledge flows rather than just material flows.¹² Knowledge flows are difficult to trace and measure. Trying to map them in a comprehensive way would be a nightmare. However, focusing on particular bits of knowledge and the ability to use it can be strategic and doable. Suppose you recognise that raising employment and income from producing garments in your region requires that local enterprises reposition themselves in the global economy. Pursuing this ambitious objective may require work on various fronts: design capability is one of the most critical ones. It is this design stage which we will focus on in this chapter.

Design issues can be presented as mysterious, accessible only to exceptional talents capable of feeling the pulse of particular target groups (ambitious young women who go for the executive look without compromising too much on comfort; middle-aged men keen to stand out without looking out of line) and translating their ideas into drawings and product specifications. We do not need these talents to dissect the design stage of a value chain. There are some comparatively easy things we can do, for example, show where designs currently used come from. This is best done separately for each of the major value chains which local producers belong to. Thus you may find that, in exports to the US, the design is dictated by the buyer with local producers having at best a say in minor issues of product specification. In contrast, the designs for the exports to Europe may allow a more substantial local input while working within the parameters set by the European buyers. Finally the designs for the domestic market may

¹² The importance of this distinction has been brought out by Bell and Albu (1999).

come entirely from local designers hired by the producers. Often the arrangements are more complex and the ideas and the execution involve multiple local and foreign actors. Mapping helps to bring out some of these complexities while revealing the dominant flows within each chain.

Figure 10.2: Sources of design in global buyer-driven chain



N.B. The width of the arrow indicates the degree of importance.

Figure 10.2 uses fat and thin arrows to show the relevance of various sources for the design. It shows the example of an Indian export manufacturer operating in a buyer-driven chain. The foreign buyer is the main source of new design, but Indian freelance designers hired by the producer make a small input. The producer's own designers and the local design college only play a peripheral role.

10.3 Mapping producer services

You may find that the key to improving the competitiveness and expanding employment in the local industry lies in the producer services. The problem with the chain maps presented in

Chapters 8 and 9 is that they do not include such producer services. You could, of course, add them to the chain maps but you risk ending up with a cluttered diagram.

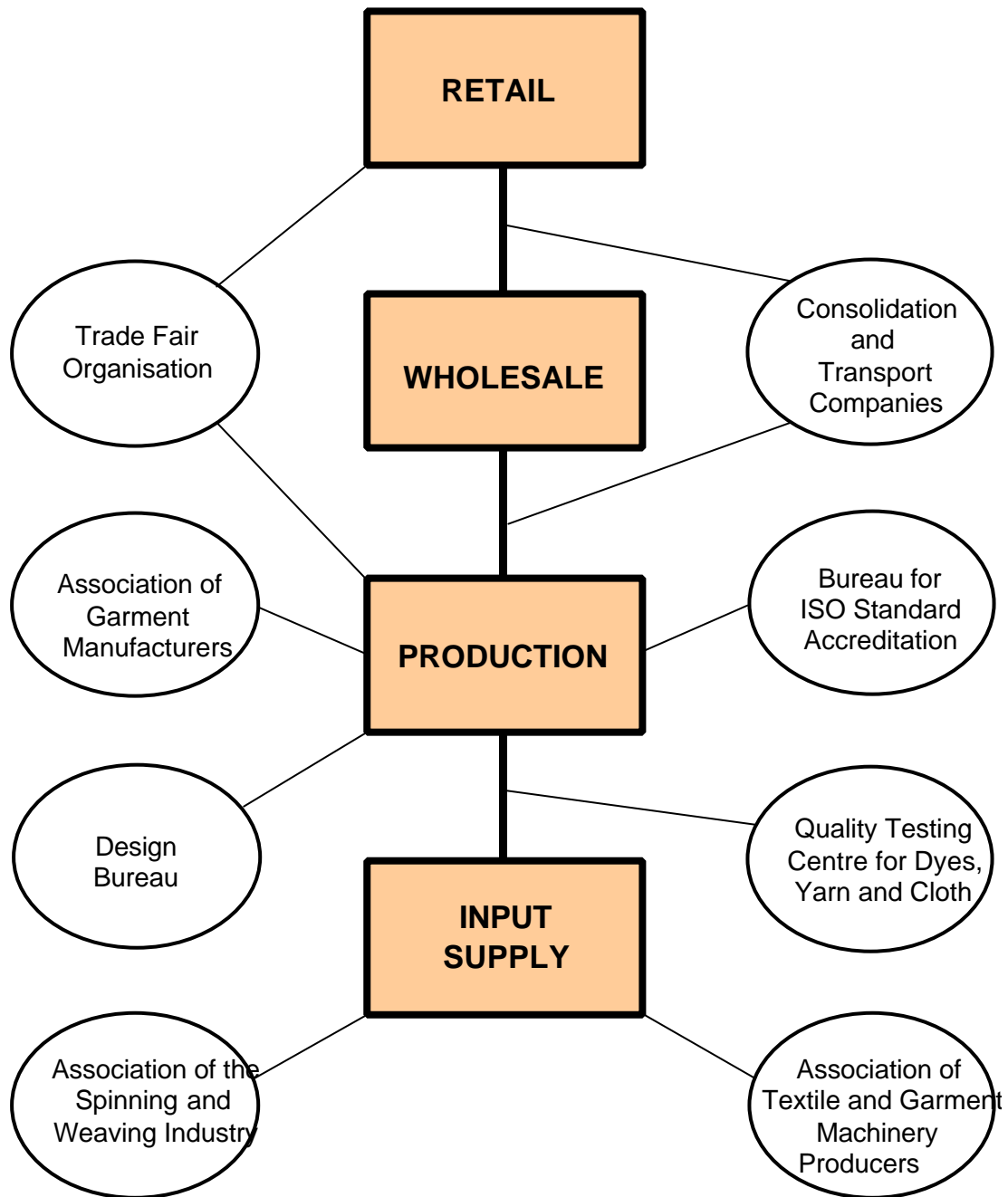
In order to avoid this you have two options: instead of showing three chains you can opt for a diagram which has a simple spine running from Input Supply to Retail (representing all chains) and showing on either side where the various producer services fit it. Figure 10.3 gives an example. In commenting on the Figure you can then explain whether producer services matter for all chains or only some. Alternatively, you can opt for chain specific diagrams in which you can show – using fat or thin arrows as in Figure 10.2 – how important these producer services are for the chain in question. For example, in the export-oriented buyer-driven chain, some of the services may come from the buyer rather than local providers. In contrast, in a chain with more balanced relationships between buyers and producers, the local service providers might be essential.

10.4 Other examples of mapping particular issues or parts of the chain

Many other aspects of a chain can be mapped. What you choose to map depends on the purpose of your study. Suppose, for example, the main concern is to improve the incomes of local homeworkers. One way of achieving this is to get better paying jobs within the same industry. Suppose, for simplicity's sake, that most homeworkers would fall into the lowest skill category, and that this is called 'Machinist 1' in the factories. This means that they might upgrade by moving to Machinist 2, Machinist 3, general supervisor, quality supervisor, etc. Usually this means improving their skills or acquiring new skills that are in demand. To help them, you could develop a map to show what skills are in short supply. As in the previous examples, you will need to gather some very specific information. You might try to answer the following questions:

- ? What skills are used at relevant stages of the chain?
- ? How many workers with those skills are currently working in the different chain activities?
- ? How many more workers could those activities employ?

Figure 10.3 : Producer services for the garment chain



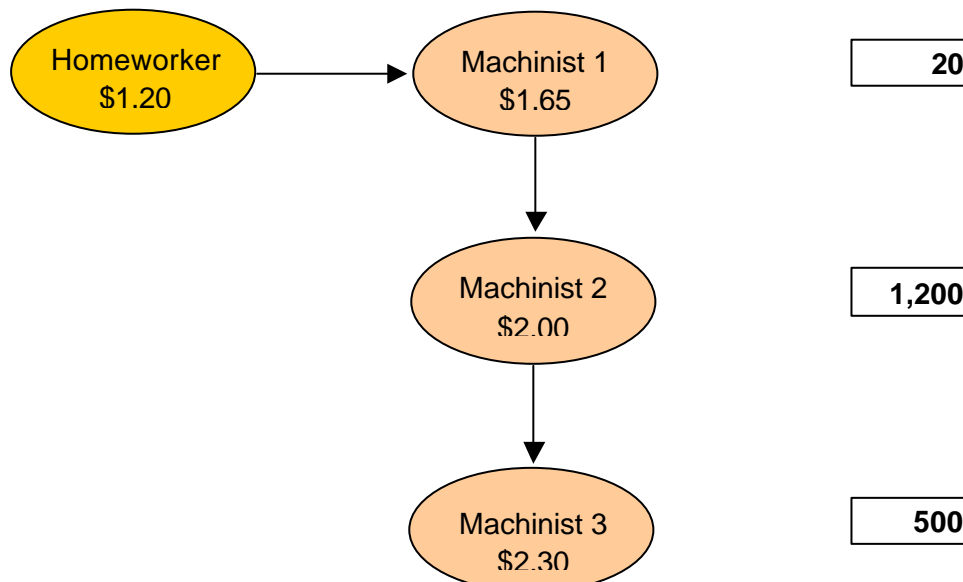
Note: the industry associations in this figure are assumed to provide “real services” such as training, juridical advice, representation in trade fairs or dispute resolution. A similar type of figure could be constructed for a “political mapping” showing the collective actors in the industry: the trade unions of the factory workers in the different parts of the chain, the organisation representing the homeworkers, and the relevant employers’ organisations.

To answer the first question, you have to identify the relevant stages of the chain. Usually these will be stages that are represented in the locality of the workers who are hoping to upgrade. If you are working with homeworkers in Sri Lanka, for example, the skills required for employees of US retailers are probably not relevant. More relevant will be skills needed by the various types of workers in garment manufacturing, supply, or service firms. A good place to start might be to visit several factories to ask about the skill requirements for their various job categories. You might also inquire about the skills needed for auxiliary services such as driving.

Next you need to gather information about how the skills are currently distributed. How many positions are there for each type of skill? Are there unfilled positions? If the industry is expanding, are there likely to be unfilled positions in the future? This will allow you to calculate the present and potential shortfall in each job category together. To highlight the potential for improving workers' incomes, you might match these with the average wage in each category.

You could then develop a skill-shortage map to help you to see how homeworkers might move up the skill ladder. Figure 10.4 shows one way in which this might be done.

Figure 10.4 : Wages and skill shortages



The numbers at the right show the present shortages together with the current average wages. The mapping suggests that there are very few positions inside the factories for workers with 'machinist 1' skills. In other words, it would be extremely difficult for homeworkers to get jobs without skill upgrading. The next level (Machinist 2) is more promising. Jobs are more plentiful and wages are higher. At the third level, wages are even higher, but jobs are fewer and skill requirements considerably greater. So 'machinist 2' seems to be the appropriate level to target.

This information alone is, of course, not enough. The researcher will need to raise other questions to see the feasibility of homeworkers actually getting those jobs and to assess the costs of the proposed skill upgrading. Since our purpose here was simply to show how the mapping can be used to set the stage for further work, we leave the reader to finish the story.

Let us turn from skill upgrading to transport. Suppose your concern is that transport bottlenecks are causing problems for homeworkers. Sometimes deliveries are late; at other times drivers arrive before a consignment has been completed. To understand the problem better, you may want to develop a map that shows the routes and gives the frequencies of early and late arrivals at different points. This map can then be used as the basis for interviews with homeworkers, drivers, and factory logistics officers to help identify the causes of the problems and their possible solutions.

Conclusion

This chapter has zoomed in on particular parts of a chain and sought to map the relevant actors and flows. Which of these maps you need depends on the questions you seek to answer. As they stand, the examples presented in this chapter may not serve the purpose of your investigation but, hopefully, they encourage you to experiment. The main principle to remember is not to include detailed findings of particular parts of the chain in the overall map of the value chains. It would lead to an excruciatingly complicated diagram. The power lies in simplicity and often this simplicity is best achieved if we deal with one issue at a time.

11. Learning from global buyers: tapping the know-how of key actors

Throughout this manual, we assume that your research is concerned with improving the earning opportunities of local producers. Research restricted to the local level would probably show the differences amongst local producers: differences between large and small enterprises, between internal and external (home) workers, and conflicts between enterprise managers (often the owners) and workers. While knowing local differences and dynamics is important, the danger is that it leads to unhelpful conclusions concerning culprits and solutions. Local knowledge is rarely sufficient to understand the causes of current problems or the scope for change. We need to understand the pressures which come from the national and global markets and recognise the opportunities which these markets sometimes provide. This has been one of the central messages of this manual.

Equally important is the recognition that these market forces are embodied in particular enterprises and people: the buyers. As set out in chapters 2 and 4, the buyers are often the key actors in the clothing chain. In fact, the notion of the buyer-driven chain comes from Gereffi's (1994) studies of the clothing sector.

While the number of producer firms and countries has increased recently, there has been a concentration amongst buyers. These buyers are global in the sense that they source from producers all over the world. This gives them an unrivalled ability to compare. This chapter shows how we can tap their knowledge in order to assess the strengths and weaknesses of producers in "your" region and make comparisons with other regions and countries.

Chapter 8, concerned with drawing an initial map, suggested ways of contacting these buyers. Here we assume that the relevant buyers have been identified and contacted. We stress 'relevant' because only buyers who have actually sourced from producers in "your" region (or have at least considered it), are in a position to make the kind of comparative judgement that we are interested in. Our examples refer to buyers who are global in the above sense, but much of the recommended procedure will also be applicable to national buyers, provided again that these buyers source also from other competing regions.

11.1 Preparing the interviews

In preparing the interviews with buyers it is worth remembering a rule which applies to most interviews: you will get the information you deserve. In other words, the better prepared you are, the greater the likelihood that you obtain the sought after information. Informing yourself in advance of what this buyer does and represents is an important part of this preparation. As mentioned before, the Internet can be of enormous help.

Take the case of GAP Inc. The website of this buyer (www.gapinc.com) provides you with information on, for example, GLOBAL MANUFACTURING.

“Gap Inc. works with third-party manufacturers in more than 50 countries, including the United States, to make the products we sell in our stores.

Though we don't own any manufacturing facilities, we developed a Code of Vendor Conduct to ensure the factories we do business with make our clothes under safe and humane working conditions. To do this, Gap Inc. has a global network of more than 80 employees who must inspect and approve factories where orders are placed for the first time, and then monitor those factories on an ongoing basis. They inspect factory conditions, review payroll records, interview workers and meet with factory owners and managers to discuss and correct compliance issues.

Most factories work hard to meet or exceed our requirements. If factories don't share our commitment to maintaining safe conditions and treating workers fairly, we stop doing business with them altogether. Today, we have the most comprehensive internal monitoring organisation in the apparel industry, complemented by independent and external monitoring.

(www.gapinc.com/about/global_manuf.htm – 5th January 2001)

Or take the GAP web page HOW WE RUN OUR BUSINESS.

“At Gap Inc., we never stop moving. It takes a team of more than 140,000 passionate, dedicated and talented employees around the world to deliver the merchandise and shopping experience our customers expect and deserve. Here's a look at how we do it:

Inspiration

From colour to concept, it all begins with inspiration — whether it's people watching on the streets of Tokyo, a flash from a dream or a visit to a local art gallery. At Gap Inc.'s Product Development offices in New York City, designers, product managers and graphic artists create the look and feel for each season's merchandise.

Sourcing

Located around the globe, employees in Gap Inc.'s Sourcing and Logistics group, along with our buying agents, draw up production schedules and place orders with the approved third-party factories in nearly 50 countries that produce our goods.

Marketing

Each brand has its own marketing team headquartered in the San Francisco Bay Area. Our in-house marketing teams create everything from hang-tags and in-store posters to billboards and TV commercials.

Distribution

Third-party manufacturers ship merchandise to our state-of-the-art distribution centres, who sort and redistribute it to our stores. Strategically placed throughout the United States and in Canada, the United Kingdom, the Netherlands and Japan, our distribution centres are the backbone of Gap Inc.'s world-wide operations.

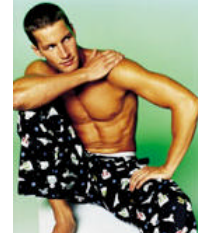
Sales

Sales associates and other store personnel are trained to answer customers' questions about fabric, fit and fashion, and to help them select merchandise that's perfect for them.”

(www.gapinc.com/finanmedia/finanmedia.htm – 5th January 2001)

Add to this GAP's web page FINANCIALS & MEDIA, which starts as follows:

“Three distinct brands. One exceptional company. Gap Inc. is a global company with revenues topping \$11.6 billion and a strong portfolio of brands. Gap, Banana Republic and Old Navy are differentiated by their customer target, merchandise mix and marketing approach, but share a common goal: to deliver customers exceptional style, service and value.



Long-term, quality growth has always been a priority at Gap Inc. – which is why we're constantly improving the way we sell our products, serve our customers and run our business.”

(www.gapinc.com/finanmedia/finanmedia.htm – 5th January 2001)

There is a lot more information on GAP's web pages. Even these short excerpts tell an important story: GAP focuses on the 'intangibles', i.e. design, branding, marketing. GAP outsources the 'tangibles' (production), except the co-ordination of production and related activities (see quoted paragraph on 'Sourcing' and 'Distribution').

Knowing this in advance of the interview helps you to understand the frame of mind of your respondent; and it means that you do not waste valuable interview time obtaining information

which is in the public domain. Instead you can focus on obtaining information which provides a net addition to our knowledge. This is not to suggest that you simply accept the information on the website. On the contrary, knowing the company's declared position (on, for example working conditions or compliance with Codes of Conduct) helps you to probe deep. Equally important, the respondent will take you more seriously if you are well prepared and is less likely to fob you off.

11.2 Conducting the interviews

In what follows, we assume that you want to compare the strengths and weaknesses of your region with that of competing regions elsewhere in the country or in the world. (It does not take much imagination to recognise how important such information is for local employers, workers and policy makers.) Start the interview with simple questions such as: which four countries (or which regions) are your most important suppliers. Ask for ranking of these regions and the percentage (of sourced products) which they account for. If your country (or region) is not amongst the top four, ask for its rank in the buyer's pecking order and percentage of sourced products.

The core of the interview is an exercise in which you ask the buyer to assess producers in the relevant countries (regions) with regard to criteria such as: reliable product quality, price, response time (from order to delivery), punctual delivery, flexibility and innovative design. These are the kind of criteria which buyers themselves use to select their suppliers and place orders. They also have the advantage that they disaggregate the unwieldy but unavoidable notion of "competitiveness". Disaggregating helps to show that, for example, your region might be competitive in terms of price but perform poorly in terms of speed of response and punctuality.

Such differences emerge clearly if you ask your respondent to use a five-point-scale for each of the above criteria. Give him or her a blank copy of Table 11.1 and ask them to place your country (region) and the other relevant countries (regions) in the relevant boxes. This table and the related figures use actual findings from the footwear industries in China, India, Brazil and Italy, but the same techniques can be used in the garment industry.

The resulting information can then be entered into a star diagram (see Figures 11.1 and 11.2) in which each arm represents one of our criteria. (Note that you can reduce or increase the number of criteria.) Linking up the scores then gives you a radar chart of each region. The combinations in which these charts can be used and compared are many. For example, you can compare how US versus European buyers assess your region, using in each case the average score of the respective group of buyers. The key step, however, lies usually in putting the radar chart of your region on that of the directly competing region. It reveals at a glance – to you and your audience – the respective strengths and weaknesses.

Figure 11.1, for example, compares the performance of India and China showing that India's main deficiency lies in quality and punctuality. Or take Figure 11.2 which shows that Brazilian producers out-compete Italian producers in terms of price (no surprise) and punctuality (small surprise), that they can match Italy in terms of product quality (big surprise) but are far behind in terms of innovative design (no surprise). These examples are taken from Schmitz and Knorrings's (2000) paper 'Learning from Global Buyers'. An early version of this paper, including the questionnaire, can be downloaded from www.ids.ac.uk/ids/global/valchn.html. The paper also stresses the limitations of using buyers as a source of comparative information on producers.

The use of this simple and effective technique has been simplified further – with regard to data processing – by recent versions of the software programme *Excel*. Go to Insert ? Chart ? Radar.

Table 11.1 : Weaknesses and strengths of manufactures on a scale of 1 to 5

	Weakness				Strength
	1	2	3	4	5
Regular and reliable product quality		India	Italy	Brazil China	
Price		Italy	Brazil	India	China
Response time (from order to delivery)		India	China	Brazil Italy	
Punctual delivery		India	Italy	Brazil China	
Flexibility: coping with small orders		China	India	Brazil Italy	
Flexibility: coping with changes in large orders			India Italy	Brazil China	
Innovative Design		China India	Brazil		Italy

Figure 11.1 : Performance comparison, India - China

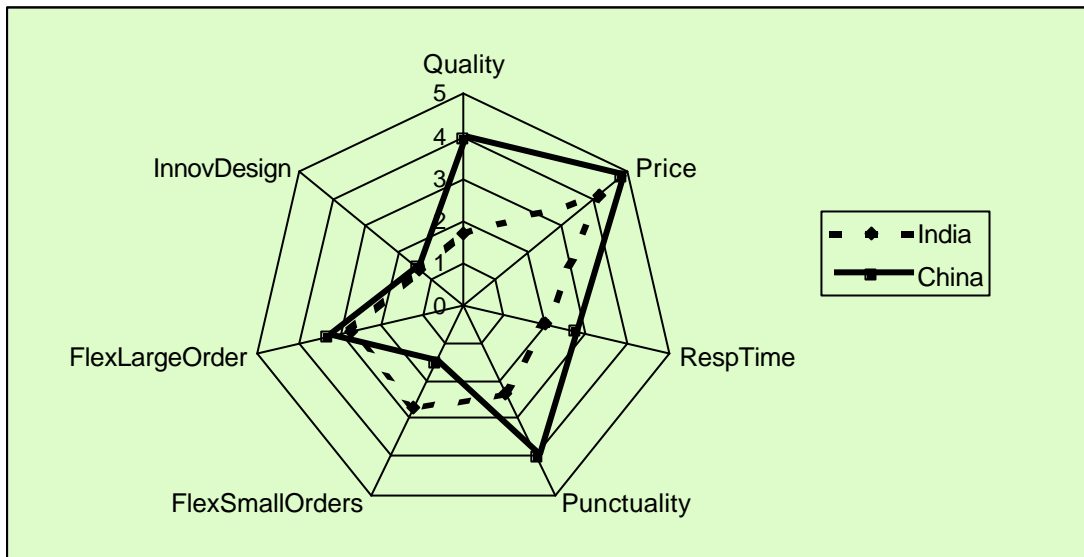
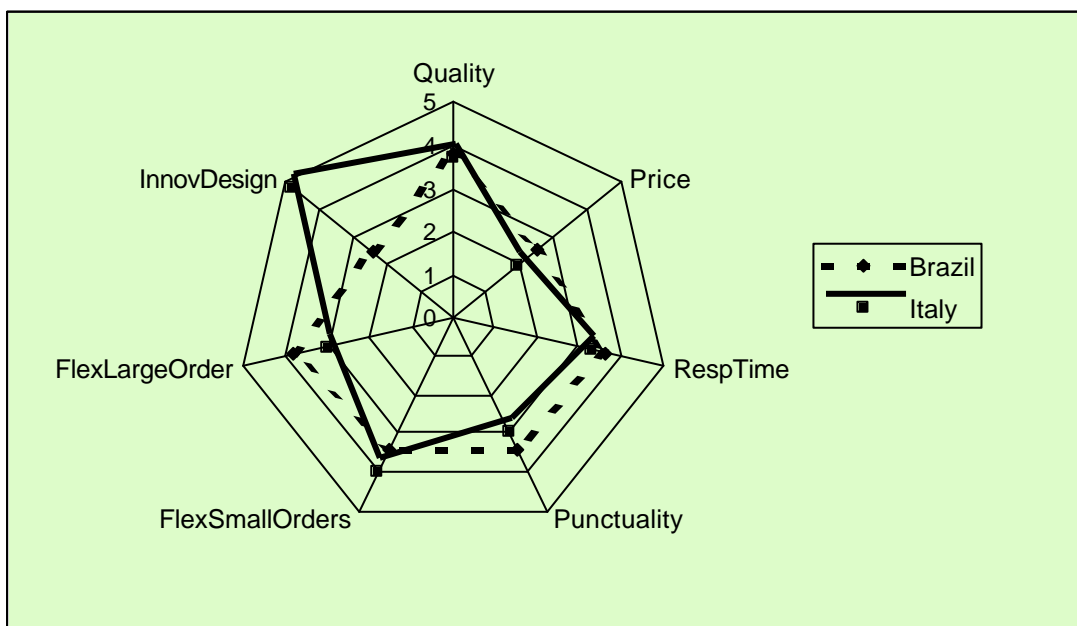


Figure 11.2 : Performance comparison, Brazil - Italy



If the various buyers interviewed come up with very different views on your local producers, then the use of this technique is less straightforward. You would need to find out whether the differences arise because they have different producers in mind. Most buyers select amongst the available producers and the different responses might well be instructive for your purposes. If a

buyer has, say, two excellent and two poor experiences, it may well be worth recording them separately. (You can always average them later if this seems appropriate.) A key point in the actual interview is that the respondents base their scores on their own actual experience. Otherwise you end up recording hearsay and reproducing the cliché.

Having established the buyers' comparative assessment of your region, it is useful to complement it with their view of the future. While necessarily speculative, it can be very instructive to have their answer to the question: "Do you expect that in 5 years from now the percentage you buy from countries/regions X, Y, Z will have increased or decreased? Why?"

Conclusion

This chapter has shown how you can make an up-to-date and comparative assessment of the strengths and weaknesses of your local economy. The use of official statistics can rarely provide such an assessment. This is not to say that such statistics should be avoided or neglected. On the contrary, one of the key messages of this manual is to complement different sources. Including the assessment of the buyers is particularly important in the clothing industry, since it is the buyers who often drive the chain and take the critical decisions on who is in or out of the race. The concern behind this manual is to help ensure that it does not become a race to the bottom.

12. Learning from the manufacturers

Information from the garment manufacturers is essential for some of the mapping exercises discussed in previous chapters. In this chapter we dig deeper and extract information from the manufacturers which help to *explain* what the maps show or why they change. In this we will restrict ourselves to three issues which concern the use of labour: the share of labour cost in total cost (Chapter 12.1), the advantages and risks of externalising operations (12.2) and the use of core and fringe homeworkers (12.3).

12.1 Cost breakdown

If your work is concerned with improving the earnings of garment workers, you are likely to find resistance on the part of the employers. They will argue that increases in wages or piece rates

increase their costs and harm their competitiveness. Indeed higher pay means higher costs unless the workers' performance improves as a result of the better pay. If your research is to help negotiations, you need to know by how much costs would increase if workers wages or piece rates were to be raised by, say, 10%. In order to answer this question you need to know the share of labour costs in total costs.

A cost breakdown is a sensitive piece of information for the manufacturer. Do not expect to obtain it through a sample survey. In-depth interviews with a small number of producers are more promising, but don't start the interview with questions on costs and profits! Once you have obtained the respondent's trust it should be possible to fill in Table 12.1. In the interview, there are two strategies you can follow: you ask the question on percentages of costs and margins (last column in Table) and then apply these percentages to one or two typical products made by the enterprise and then check that the margins given ring true. Or you do it the other way round, you start with a typical garment (ideally one that you have seen being made during the visit) and then work out the percentages. Then do then the same with another product – or, at least, ask whether the same percentages can be applied to many other products made by this firm.

Table 12.1 : Costs and profit margins (per unit of output)

	Value in local currency	Percentages
Materials		
Labour <ul style="list-style-type: none"> ▼ Factory workers ▲ Homeworkers 		
Overheads (machines, electricity, rent, etc.)		
= Costs of production		
+ Profit margin		
= Selling price		

Having obtained this cost breakdown, try to obtain an additional piece of information, namely the share of payments to homeworkers in labour costs and in total costs. Keep in mind that this can vary enormously. For example, a blouse with extensive embroidery often absorbs a lot of

homework, whereas the same blouse without embroidery might be made entirely within the factory. In view of such product variations, it is useful to present the results of your investigation for two or three typical products of the industry rather than averaging all the interview results.

12.2 Assessing advantages and risks of internalising and externalising operations

Given WIEGO's special attention paid to homeworkers, it is important to find out whether in your location the use of homeworkers tends to increase or decrease. You will probably find that there are forces operating in both directions. The pressure to raise quality and speed leads to internalisation, while the pressure to lower costs and increase flexibility leads to externalisation.

In order to assess which force is stronger, it is best to start by establishing current practice. The questions you need to ask the manufacturer are captured in Table 12.2. For each stage of the production process, you ask whether it is 100% internalised, less than 50% externalised, over 50% externalised or 100% externalised. This is a very straightforward question which should not present any problems. More difficult is the assessment of future trends. Ask the respondents whether s/he expects major differences in any of these stages over the next five years. Time permitting, you can then explore whether the forces for internalising or for externalising become stronger. The incentives for internalising are: (a) better quality control; (b) faster and more reliable delivery. The reasons for externalising are: (a) no need to invest in expanding the shop floor, purchasing new machinery; (b) no obligation to pay social security to workers and the State; (c) possibility to tap into the huge pool of flexible workers that cannot enter formal employment due to childcare, studying or other commitments; (d) easy adjustment to changes in demand; (e) fear of unionisation among factory workers.

12.3 Assessing trends in the segmentation of homeworkers (core and fringe)

Manufacturers who seek a major increase in product quality and speed of response do not necessarily have to internalise their operations. They can seek closer ties with their homeworkers such that losses in quality and time are minimised. Closer ties can be achieved by providing advance notice of ups and downs in orders, providing training to the homeworkers in their home, discussing how the connection between internal and external product flows can be

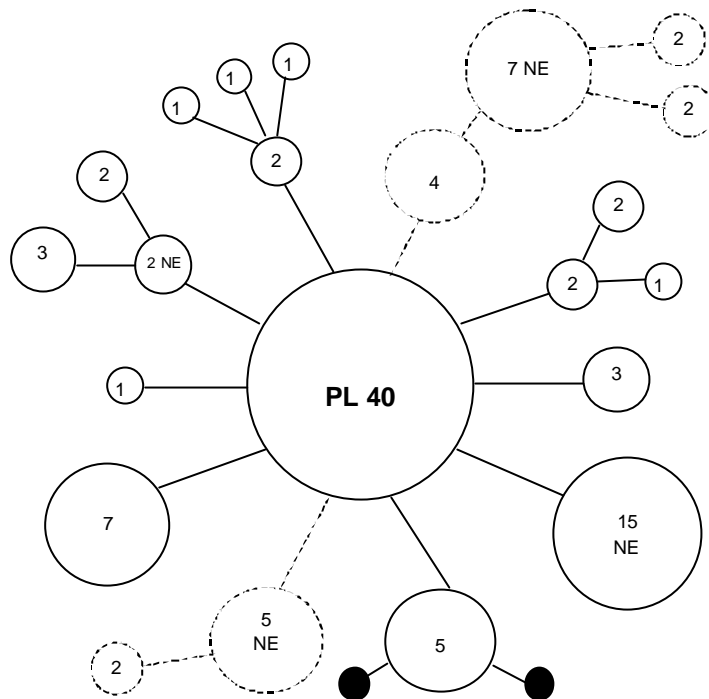
improved. Ask the manufacturer whether they practice this and with what result. Make sure you also ask whether piece rates have changed and payment is made promptly. If there are signs that relationships with homeworkers become closer, ask whether this extends to all homeworkers. In other words, do they have core (regular, high-performance) homeworkers and a fringe (of casual, just-in-case) homeworkers?

Table 12.2 : Extent of externalisation by type of activity

Activities	100% Internalised	< 50% Externalised	>50% Externalised	100% Externalised
Design				
Laying & cutting				
Embroidery				
Assembling				
Pressing				
Inspection & Finishing				

Having obtained the manufacturer's view it is useful to put the mirror questions to the homeworkers (see also Chapters 13 and 14). The manufacturer will probably steer the discussion towards the core homeworkers while interviews with the homeworkers will probably throw more light on the fringe. If a clear difference emerges, you can then map the findings by adapting the homeworker map we constructed in Chapter 10.1. Figure 12.3 shows this adaptation. Homeworkers in the fringe category have circles drawn with a discontinuous line indicating their dispensability.

Figure 12.3 : Sub-contractor network of small manufacturer



Note: The numbers in the circles refer to the number of workers in each establishment. ‘NE’ means not working exclusively for PL in the month of the interview.

13. Learning from home-workers

In Chapters 11 and 12 we asked what useful information we can obtain from buyers and from manufacturers and we showed how to go about it. This chapter focuses on the home-workers as a source of information and draws attention to some of the special problems that arise when interviewing producers who are often not registered and operate under precarious circumstances. A useful “Guide to action research with home-based workers” has also been prepared by HomeNet (2001).

13.1 Comparisons

The purpose of this chapter is *not* to show how to document in detail the on-going struggle of home-workers. In fact, we advise against *describing* in detail their circumstances. There are

already numerous studies from different parts of the world which show similar findings (for Turkish examples, see Esim 1998; Sims et al, 2000; or

<http://msnhomepages.talkcity.com/volunteerst/homebasedworkers/workshop.html>: these workers are often tied to their home in order to care for children or the elderly; the volume of paid work varies enormously; the piece rates which they earn tend to be low; etc. Do not waste your energies on merely *describing* the home-workers' situation. Such documentation offers little that is new. Nor is it of much use for advocacy purposes: you run the risk that it is pushed aside and categorised as whining about a well-known problem.

In order to have an impact, we need to be more analytical and strategic in our data collection. The challenge is to concentrate on comparisons and opportunities for betterment. The first key comparison is between home-workers in different chains. The second comparison is between homeworking for progressive and conservative manufacturers. By finding differences you may be able to show that treating home-workers badly cannot be justified with 'the need to compete', and that treating home-workers well enhances the manufacturer's ability to compete and succeed.

This requires selecting the home-workers (to be interviewed) in such a way that they include respondents working primarily in Chains 1, 2 and 3 respectively. If you find that they have ample experience in two chains, ask them about both. Make sure that you include questions about differences within each of the chains. Ask questions about the conditions offered by the best employers and then ask them about the worst employers. And check whether these differences arise consistently (or at least frequently).

If the comparisons show substantial differences, the research provides ammunition for change: for renegotiating the terms of existing relationships, for switching to the 'better' chains or to the 'better' employers. While this is never possible for all home-workers, the research helps to reduce the asymmetry in information (between manufacturers and home-workers) and nudge the negotiations into an upward direction. The chances for progress are best if progressive employers are identified and brought into the coalition for change. If the comparisons show no significant differences and the home-worker situation is consistently dismal, it is much more difficult to use the research for practical purposes ... unless local industry is a major supplier in

one of the chains and the buyers can be mobilised to use their influence over manufacturers (see Part III of this manual ‘Making an Impact’).

You may find that some homeworkers do not ‘belong’ to any chain. They work for a wide variety of different firms (operating in different chains), sew garments for end users and switch frequently between clients. The chain approach is less useful in this situation, but do not therefore leave out these homeworkers. Find out whether they switch because they are constantly chasing work, in other words, the market for the homeworker is flat, they have little choice and accept whatever comes their way. Or do they switch because they have choices and can afford to pick only those orders which suit them in terms of pay and timing. If the latter applies it is worth finding out whether the better paying customers tend to come from chain W and X, rather than Y and Z.

13.2 Observing

Here are some of the techniques you can use to document the homeworker’s situation in the various chains. Observation can be a powerful teacher. We say more about this in the Appendix (see section A.4). Before you begin to ask questions, you may simply want to observe the daily routine of one or more homeworkers. Box 13.1 describes one way of going about this. It can be helpful to begin by keeping in mind a set of questions. For specific studies, you will need to work out your own, but the following could be useful for a start:

1. What is going on?
2. What is the setting/environment like?
3. Who is participating (age, gender, position/function, status, cliques and isolates)?
4. How often does this happen? How long does it take? Is it typical? Why or why not?
5. How does it compare with what I have seen elsewhere?

By simply observing, you can learn many things about Maria, about the way she interacts with the intermediary, and about the routine of distributing materials and collecting finished work. These observations combined with your informal comparison with other chains can help you to develop a set of questions that you can use to interview Maria and other homeworkers.

Box 13.1: An exercise in observation: Distributing work to homeworkers

What is going on?

I am riding in the front seat of an old van driven by Mr. M, the intermediary who delivers outwork to Maria and a dozen or so other homeworkers in the same area. This intermediary deals with firms in Chain 2 (US market). Today we are delivering large packages of pre-cut pieces of boys' shirts to each of the homeworkers, and collecting the work finished in the past week.

What is the setting/environment like?

We turn off the main road and go about two kilometres into the interior on a rough dirt road towards Maria's home. The road is dry now, but Mr. M. tells me that the last kilometre is sometimes impassable in the rainy season. Maria knows that at such times she must double-wrap the finished goods in plastic and send them with her teenaged sons to a certain point where they will wait for Mr. M.

When we reach Maria's house, we knock at the door. I note that Maria's four-year-old daughter is playing outside. When we go inside, I see the two-year-old sleeping on the sofa in the sitting room. The sewing machine (an old electric Singer) is in the sitting room, next to a large table that appears to double as the family dining table. Finished work is packed into large plastic sacks. Some pre-cut pieces - probably those remaining from the last batch - are in piles on the table. The sacks of finished work are under the table. Although it is mid afternoon, the overhead lights are on because a large tree outside shades the only window.

Who is participating?

There are two participants:

Maria: age - late thirties; gender - female; position - homemaker; status - low;

Mr. M: age - 40ish; gender - male; position - intermediary; status - ?

How often does this happen? How long does it take? Is it typical?

Mr. M. visits Maria every 7 to 10 days. Today, he will set the date of the next visit. Mr. M. first checks and counts the finished pieces (16 minutes) He records the tally (297 accepted, 3 rejected) in his ledger book under Maria's name. Then he repacks the goods, with accepted items going into the large sacks and rejects into a separate bag (4 minutes). He pays Maria for the accepted items and she signs the book next to her name (3 minutes). After dealing with the finished goods, he gives Maria the new work. Again, he records the work under Maria's name. He tells her when he will come back, and we leave (5 minutes). Today's visit took a total of 28 minutes. According to Mr. M., this is typical. Visits take between 20 and 35 minutes, except in the rainy season, when the counting and checking must take place in the cramped quarters of the van, and the new work must be carefully repacked to ensure that it does not get wet or muddy.

How does it compare with what I have seen elsewhere?

Last week I travelled with a different intermediary to visit homeworkers of Chain 3. I note two main differences between Maria's situation and theirs. Maria's sewing machine is old and very basic compared to those I saw last week. I also note that the number of rejects (3 out of 300) is lower than the average I computed for Chain 3 (2.6 out of 100).

13.3 Interviewing homeworkers

Before beginning the actual interviewing, you will have to decide how many homeworkers to interview and how to select them. The number is largely determined by available resources and the aim of your study. In-depth interviewing takes more time, so you will usually do fewer interviews. In a survey, you can gather specific information from many respondents. The choices available to you and the details of sampling are discussed more fully in the Appendix. You will probably want to combine methods.

A good research design for a comparison of chains will usually include two elements:

- ? Some type of survey to gather basic information, and
- ? In-depth interviews (case studies) to probe the issues.

Obviously both methods should be used in the chains to be compared. The survey should include both core and fringe homeworkers (see section 12.3 for more on this distinction), and will usually be carried out using a structured questionnaire. Your case studies will usually be selected either because they are typical of those in their particular chain, or because they illustrate some problem that you want to highlight.

Once you know how many and what type of interviews you will carry out, you can begin preparing for the actual interviews by lining up your questions. Remember that you need to ask two types of questions: those that are factual, and those that are issue based. The factual questions will be handled mainly in the survey, and include such things as age, experience as a homeworker, other experience, years working for particular manufacturers or intermediaries, etc. You will also want to ask about key features of the relationship with the manufacturers: advance notice of ups and downs in orders, training, technical assistance, piece rates, prompt payment. Once you have all the questions you think you should ask, prune the list. Remove any question that is not really necessary. This will keep the interview sharp and focussed.

Case study interviews will deal more with issues. Here you want to discuss particular difficulties the homeworker has experienced. You might, for example, enquire into the latest conflict and

how it was resolved. Although case study interviews can be longer and more free-flowing, you still want to maintain your focus on the specific issues covered in your study.

In carrying out the interview, be aware that the homeworker may be uncomfortable answering certain questions. She may fear retaliation from the manufacturers, or she may feel vulnerable because of her questionable legal status. To help overcome problems of trust, the researcher may want to spread her interviewing over more than one visit. Nevertheless, the sensitivity of homeworker research makes it especially important to be aware that, like many professionals, researchers are bound by a code of ethics.

13.4 Ethical questions in researching home-based work

The cardinal ethical precept in any type of research is “Do no harm.” Research should never cause injury - physical, psychological, economic, or any other - to the people being studied. Two further principles flow from this. One is that participation in a research study should be voluntary and based on informed consent. The other is that participants’ privacy must be safeguarded. Simple and straightforward as these seem, they can be difficult to put into practice. In this section, we discuss some of the ethical issues that can arise in carrying out research on home-based work.

If you reread the account of the research visit to Maria’s home, you can see some of the ethical issues it raises (see Box 13.1). First, the researcher arrived at Maria’s home with the intermediary. This could be confusing to Maria. In her culture, one always welcomes a visitor warmly. To refuse to do so would be extremely rude. Yet in this situation, to welcome the visitor is to allow herself to be observed as part of a research process. The researcher in this case must take time to explain the nature of the research to Maria in clear and simple language and to find out whether she is willing to participate. This may be difficult because both Maria and the intermediary are accustomed to getting right down to the business of checking and counting finished garments. Ideally the process of explaining the research and obtaining consent should be completed before the visit, but that may not be feasible. Maria may not have a telephone, and she may not read well enough to understand a written explanation. Nevertheless, it is up to the researcher to develop procedures that ensure that Maria’s participation in the study is voluntary.

Researchers - or more often, their research assistants - are frequently tempted to 'encourage' participation in studies by using subtle forms of coercion. Sometimes it is a promise of some direct gain: 'co-operative' homeworkers will be given more business or higher rates. Sometimes it is a veiled threat of being dropped from the list for failing to participate. Not only are such tactics against the principle of free participation, but they also frequently cause problems for researchers working in the same area at a later time.

A major concern in the protection of respondents' interests and well-being is the protection of their identity. This is all the more important in situations where revealing their responses might injure them in any way. There are two ways of protecting the identity of respondents. One is anonymity and the other, confidentiality. A respondent is *anonymous* when the researcher cannot identify a given response with a particular respondent. Anonymity is often used in mail surveys to protect respondents' identities. In interview research, it is not possible to speak of anonymity. Instead researchers promise *confidentiality*. Although the researcher knows the identities of the respondents and can match particular responses with the names of people who gave them, the researcher promises not to make this information public. Since developing country research most often involves personal interviews, this manual pays particular attention to issues of confidentiality.

By promising confidentiality, the researcher not only agrees not to publish any information that could be identified as coming from a particular individual, but also promises to guard against any leakage of information that would link a respondent with information given. The researcher is responsible to put into place systems that protect confidentiality. The controls usually put on survey data offer a good example. At the data collection stage, the researcher instructs research assistants on the practical aspects of confidentiality. They are taught to explain confidentiality in their self-introduction to the potential respondents. They are also told that they as well as the researcher are bound not to discuss respondents' answers outside of the research team. Once data have been collected, the confidentiality of survey responses is protected by numbering questionnaires, keeping them in a secure place, and strictly limiting access to the file that matches the numbers to the respondents' names.

14. Comparing the views of global buyers, local producers and their homeworkers

Comparisons of the views of buyers, manufacturers and homeworkers help to discover differences in perception and identify problems that need to be tackled. This chapter shows an example using a tool that facilitates the comparison: Star diagrams (or Radar Charts)¹³.

When gathering information from the respondents, it is important to keep in mind the tool that will be used to display the results of the comparisons. If you use ‘Star diagrams’ or ‘Radar Charts’ (as they are called in the software program EXCEL) you will need to apply one set of ‘mirror’ questions to both parties you want to compare. The formulation below is directed to producers, but can easily be adapted to buyers. The scale used in this question is from 1 to 5.

Set of ‘mirror’ questions for producers:

a) “On a scale of 1 (not important) to 5 (very important), what are the requirements placed on you by your main customers? *Please tick the relevant column.*”

	1	2	3	4	5
Improvements in product quality					
Reductions in prices					
Faster deliveries					
Reliable deliveries					
Compliance with global labour standards					
No Child Labour					
Variety of Lines/Collections					
Increasing flexibility					
Innovative design					

b) “Using the same scale of measurement, how do you rate **your** performance in terms of attending your customers’ requirements? *Please tick the relevant column.*”

	1	2	3	4	5
Improvements in product quality					
Reductions in prices					
Faster deliveries					
Reliable deliveries					
Compliance with global labour standards					
No Child Labour					
Increasing flexibility					
Variety of Lines/Collections					
Innovative design					

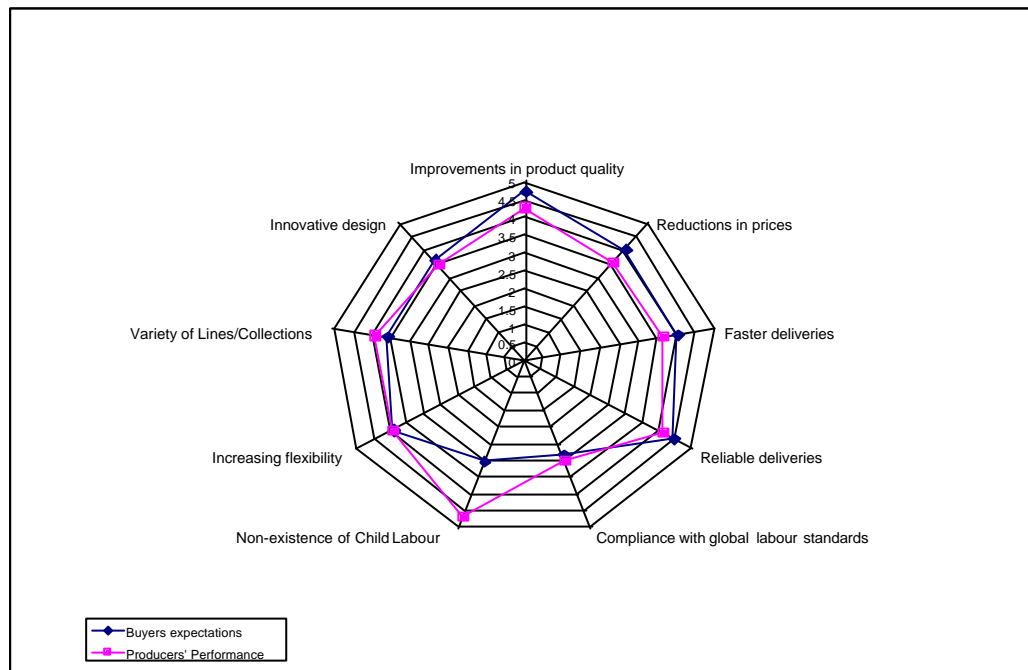
¹³ See also Chapter 11, which uses this tool to compare performance profiles of different countries.

After averaging the responses of various producers, we obtain the following results:

	Buyers' expectations	Producers' performance
Improvements in product quality	4.70	4.23
Reductions in prices	4.00	3.54
Faster deliveries	3.97	3.63
Reliable deliveries	4.38	4.10
Compliance with global labour standards	2.85	3.03
No Child Labour	3.02	4.70
Increasing flexibility	3.93	3.93
Variety of Lines/Collections	3.60	3.90
Innovative design	3.62	3.47

Plotting them into a radar chart gives Figure 14.1. As we can see from the diagram, producers feel that they are satisfying their buyers in most aspects, even exceeding some of them like the variety of lines/collections and the avoidance of child labour. Particularly in sensitive issues like the last one, sometimes is good to be suspicious about radical results since it could signal fear of the respondent to tell the truth (that they do use Child Labour, for instance).

Figure 14.1 : Expectations of buyers and performance by producers *from the producer's point of view*

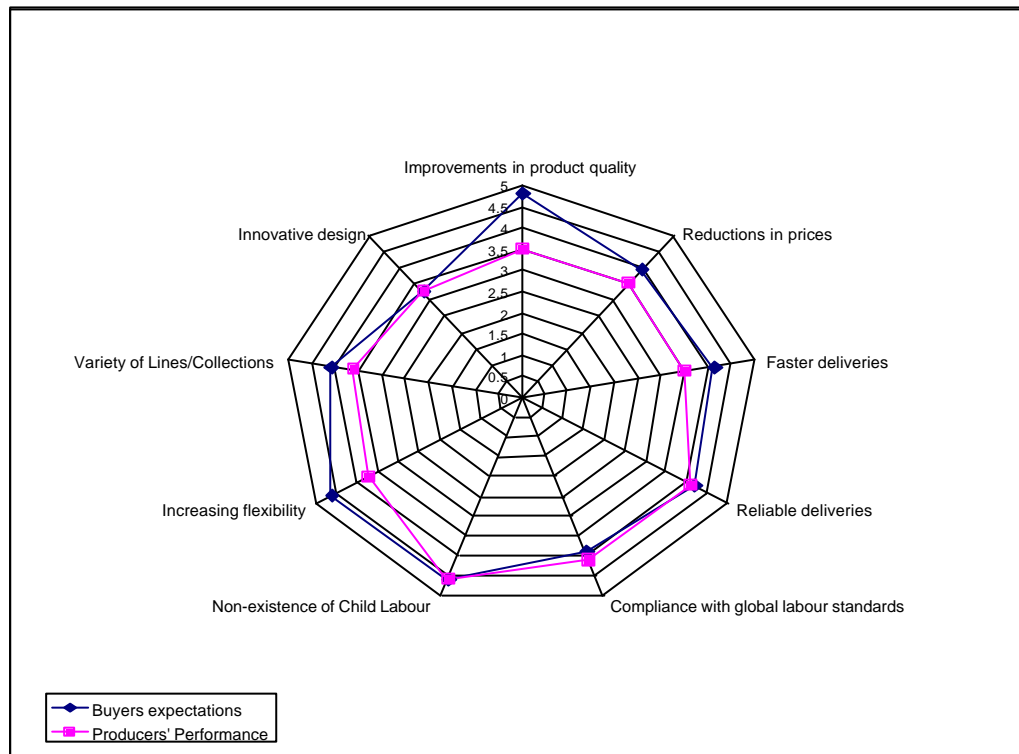


The results obtained from the producers can then be compared with the results obtained from asking the same set of ‘mirror’ questions to the buyers and see how their perceptions differ or coincide. In the diagram below, we can see how contrasting these results may be:

Figure 14.2 suggests that the buyers think that their suppliers are falling short of their expectations in many of the items considered in the question. That gap of unsatisfied expectations creates a space for other suppliers in other regions/countries to compete for the buyer’s attention and eventually displace the traditional supplier.

Therefore, this type of diagram can also serve the purpose of assessing if (and how much) the supplier knows what the buyer expects from him/her. Likewise, this exercise is useful to highlight aspects that producers need to improve if they want to keep their place (or even improve it) in the value chain. This type of comparison can also be used to identify differences in expectation/performance between manufacturers and their homeworkers.

Figure 14.2 : Expectations of buyers and performance by producers *from the buyer's point of view*



15. Working with public agencies

The title of this chapter recognises that you will need to work with public agencies in the course of your research. The reasons are obvious: first, public agencies provide data on trade, production and employment; the importance and limitation of this data source was discussed in previous chapters. Second, public agencies influence the earning opportunities of homeworkers, directly or indirectly. This occurs in numerous ways, through regulations (e.g. registration requirements), policies (e.g. trade policy), direct assistance (e.g. provision of training) or harassment (e.g. extracting bribes). And there are numerous public actors, ranging from municipal organs, to national ministries, to international (multilateral) organisations like the ILO or the Commission of the European Union. There is a danger that you leave out the impact of these institutions and that you let them off the hook, if you focus too hard on the actors in the chain and the relationships between them. You may find that it is important to conduct a policy or institutional analysis. This would mean comparing the policy pronouncements with the reality

on the ground. Showing the gaps would be a useful start for engaging the relevant institutions in a discussion on changing rules and provisions.

Whether you investigate particular policies and institutions and which ones you focus on will depend on the questions you are trying to answer and the specific context in which ‘your’ home-workers are operating. General guidelines on what to cover and how to conduct the research are therefore hard to give. The purpose of this chapter is to give some examples of issues on which you may need to work with public agencies. As in previous chapters, keep in mind that these issues should be researched on the basis of various sources; in other words do not just collect data and views in public agencies but also from those affected by their action.

- ? What are the registration requirements for home-workers? What are the costs and benefits of registration?
- ? The formalisation requirements vary from place to place. Try to obtain the help of a public agency in listing the costs (in terms of time and money) of complying with the regulations. Documenting how long it takes you to obtain the necessary information might in itself provide a story.
- ? You may also need to know whether compliance is monitored. And if yes, what are the costs of non-compliance. This will require talking to both inspectors and inspected (homeworkers).
- ? How are home-workers considered in local labour legislation? Are there labour laws that push women into homeworking?

A key question is whether and how homeworkers are treated in local labour legislation. Are they classified as independent contractors, employees, informal workers, or – more likely - are they simply ignored? If homeworking is common in your area, there will probably be someone in the Ministry of Labour (or its equivalent) who can point you to the relevant legislation and explain homeworkers’ rights under the law.

Labour laws are usually intended to help workers, but as we saw in section 7.1, they can sometimes have a perverse effect. In that example, government was revising its

regulations to improve workplace conditions. One of the new requirements was separate toilet facilities for male and female workers. If the workforce is mainly male, as it is in many African countries, then such legislation can encourage factory owners to avoid hiring women as regular factory workers and may result in their being used as homeworkers instead. Thus, indirectly the law encourages homeworking. To give another example: some countries still have a law barring women from working the night shift. Employers who want the flexibility of assigning workers to different shifts will, in such cases, prefer to hire male workers. Women who are left out of factory work may then take up homework as their only option.

? Which local support organisations exist? How effective are they?

If these are important questions for your study, you may want to map the relevant institutions. It would probably help here to distinguish between those organisations which are relevant to the various garment chains (e.g. certain sections of the Ministry of Industry, the garment manufacturers association) and those organisations that deal with the specific concerns of home-workers (e.g. a project of UNDP/UNICEF or a local NGO).

In many cases, you will simply need to fill in the gaps in what you already know about organisations and agencies in your area. Key informant interviews are probably the best means of doing this. If you know a good deal about homeworkers, but lack information on the factories, you may start with a knowledgeable person in the relevant business association. Sometimes the garment workers' union can also be a good source of information about the factories. Sometimes the same people will also know whether there is a homeworkers' association, where it is located, and who is the best person to talk to. Often, however, you need to tap different sources for these. Since most homeworkers are female, NGOs or even government agencies focussing on women can be helpful. In Kenya, for example, most women's self-help groups are registered through the Ministry of Social Services. This makes this ministry a very useful source of information about women's activities, even those not directly under its jurisdiction. Of course in some countries, e.g., India and Pakistan, there are important NGOs dealing

specifically with homeworker issues. If you are working in such countries, you would surely include these among your interviewees.

- ? Is there a local industrial policy for fostering the clothing industry? What form does it take? Is it targeting particular chains?

These questions are best investigated through open-ended interviews with the relevant local government officials (Secretary of Industry) and Business Associations. If your research ultimately aims to contribute to a local industrial strategy, it is worth considering an action-research approach developed by Jörg Meyer-Stamer. He calls it PACA – which stands for participatory assessment of competitive advantage – and draws in all stakeholders in identifying problems. The idea is to generate local ownership of the analysis and the recommendations and then involve these stakeholders in the implementation. For details see www.meyer-stamer.de/paca.html.

- ? Does national trade policy hold back or enhance the prospects of the local garment industry? Which chains are affected? Are there trade regulations which limit the use of home-work?

In some cases, homework may be limited by trade regulations. In Kenya, the Manufacturing Under Bond scheme, which offers benefits such as duty-free inputs to factories that export all of their production, puts strict limitations on the movement of materials or work-in-process outside of the factory. The duty-free materials must remain in a bonded factory, and can only be moved from one place to another under the direct supervision of a customs official. This makes the usual homework delivery and work system impossible for such factories.

- ? How does the trade policy of the importing country affect the prospects of local industry?

Answering this question may be critical to assess the prospects of particular export chains. For example, the US government grants ‘Most Favoured Nation Status’ to China but not to neighbouring countries like Vietnam. The official source would not provide this information in such a straightforward way. It is more likely to read like this. “The United States has granted permanent MFN status (now known as Normal Trade

Relations NTR) to most countries internationally. However, a short number of countries do not have NTR status, they include: Afghanistan, Cuba, Laos, Montenegro, North Korea, Serbia, and Vietnam. Also, select nation's NTR status is reviewed annually. These include: Armenia, Belarus, Bulgaria, China, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan.” You may wish to check with the United States Trade Representative's office to find further information on the NTR status of the countries you are most concerned with; see www.ustr.gov/. Up to date information on such matters should also be available from the embassy of the importing country concerned, or you may find that the Manufacturers Association provides such information routinely to its members.

- ? How does multi-lateral trade policy of importing countries affect the growth prospects of local producers?

The Multi-Fibre-Agreement (MFA) is particularly relevant here. The MFA protected developed countries against imports from developing countries. This system of protection is being gradually dismantled over the period 1995 to 2005. The impact of developing country exporters will vary: Asian exporters are likely to gain and African exporters are likely to lose (see 'Trade Protection in the Textile and Clothing Industries', Trade and Investment Background Briefing No.4, IDS-Sussex 1999).

Another, more recent example is the US Government's Africa Growth and Opportunity Act (AGOA), which extends duty-free import status to African countries that meet certain requirements. The Act is still fairly new, so it is difficult to assess its impact. If it works as anticipated, it should make African garments more competitive on the US market. For more information on AGOA, see www.agoa.gov.

In order to assess the impact of such multi-lateral trade regulations, it is usually best to start by drawing on the general assessments prepared by others (see, for example, www.ids.ac.uk/tradebriefings or www.ids.ac.uk/ids/global/trdpol.html or www.nsi-ins.ca/ensi/research/index.html) and then to enquire whether the relevant government ministries or manufacturer associations have worked out the implications for the chains which you are particularly concerned with. If you draw a blank, ask the Economics

Department of your nearest university for help, but make sure that they have worked on these issues in a disaggregated way and focus on the product groups which matter to you.

In conclusion, this section has reminded us that value chains function in a context that is influenced by public agencies through their regulations and policies. The public influences are many and the assessment of each of them can take a long time. Make sure that you investigate only those rules and policies that are likely to impact on the results of your chain analysis. Where you decide to investigate, you will often want to work with the public agencies concerned but do not treat them as your only source of information. The sequence of methods/sources to be considered is: a) drawing on secondary material; b) interviews in relevant public agency; c) interviews with business association, trade union or NGO; d) interviews with affected industrialists or home-workers.

16. Applying gender analysis to garment chains

Gender issues have surfaced throughout the previous chapters. This chapter draws together the various insights and shows how to deepen gender analysis, presenting a model that has been especially designed for use with garment value chains.

There are four steps to the model (Table 16.1). The first three are designed to give different types and levels of information about women and men. In the last step the researcher applies the information to the particular garment chain under study.

Table 16.1: Steps in gender analysis of garment chains

Step	Tasks
1 Basic information	Gather basic information about those you intend to study <ul style="list-style-type: none"> ? Demographic data (e.g., age, sex, marital status, education level, training) ? Labour force data (e.g., years in present job, previous experience, rate of pay, benefits, working conditions) ? Roles in household, community, garment industry
2 Context	Gather comparative information: <ul style="list-style-type: none"> ? Demographic and labour force data for country as a whole; ? Demographic and labour force data for the garment industry in other producing countries. ? Women's and men's roles in household, community, garment industry
3 Institutional assessment	Gather information about: <ul style="list-style-type: none"> ? Rules: How things get done ? Activities: What is done ? Resources: What is used, what is produced ? People: Who is in, who is out, who does what ? Power: Who determines priorities and makes the rules
4 Application	Use results of first three steps to answer questions such as the following: <ul style="list-style-type: none"> ? What is the burden of work for women/men in this segment of the industry? ? Do women/men have the resources required to work in this segment of the industry? What is lacking and why? ? What are the material rewards and/or costs for women/men in this segment of the industry? ? What are the intangible rewards and/or costs for women/men in this segment of the industry? ? What are the prospects for advancement for women/men in this segment of the industry? ? To what extent do women/men determine the priorities and/or make the rules governing this segment of the industry? ? How do the positions of women/men in this industry compare with their positions in industry in general in this country? ? How do the positions of women/men in this industry compare with their positions in the garment industry in other countries?

Source: Adapted from Mikkelsen 1995, Kabeer and Subrahmanian 1996

The first step is to gather basic information about those you intend to study. If you are doing a full chain analysis, you would include participants at each level of the chain. The basic information is of three main types:

- ? *Demographic data* such as sex, age, marital status, level of education, and level and type of training;
- ? *Labour force data*, such as years in present job, previous experience, rate of pay, benefits, and working conditions; and
- ? *Information about their roles* in the household, community, and garment industry.

The first two groups of information are basically quantitative. Some data may be available from company records. For outworkers, you may have to gather the information yourself. Some of the 'role' information may also be available in personnel records, but most likely you will have to get much of it through interviews with workers or knowledgeable individuals.

The second step is to gather additional information to enable you to make comparisons. You may want to compare workers in this industry with those in the country as a whole, or with garment workers elsewhere. To do this, you need data on those groups. In some countries, they may be available from labour force surveys or a government statistical data base.

The third step is an institutional assessment. This aims at telling you how things are usually done. The fourth step is the application in which you use the results of the first three steps to answer the questions that prompted your gender analysis.

To make this somewhat abstract explanation more concrete, we offer an example (see Table 16.2). The example is a hypothetical chain segment covering manufacturers in a developing country exporting men's and boys' shirts to the US market. The chain includes suppliers, producers, and various types of intermediaries, but for the sake of simplicity, the data in the figure are for producers only.

Table 16.2: Results of Step 1 of Gender Analysis (Producers Only)

Gender composition of workforce	<p>Top management: 90% male Middle management: 80% male Support staff (secretaries, drivers, etc.): 50% male Supervisory staff: 70% male Factory production workers: 80% female Outworkers: 100% female</p>
Age	<p>The mean age for male workers is 35.4 years; the mean age for female workers is 38.9 years.</p>
Remuneration	<p>Overall ratio of male to female earnings: 3:1 (based on wages and benefits, excluding outworkers) 4.2:1 (including outworkers' estimated monthly earnings) Ratio of male to female workers within labour categories ranges from 1.6:1 among top management to 2.5:1 among factory workers</p>
Education	<p>Male workers average 12.2 years of schooling, compared with female workers who average 8.3 years. Outworkers, who are 100% female, average 5.2 years of schooling. The intermediaries who deal with these outworkers are, on average, secondary educated. Within the broad categories of management, supervisory workers, and factory production workers, there is no significant difference between male and female education levels.</p>
Training	<p>Men are twice as likely as women to have had specific managerial or technical training. Men had a wide variety of training, including management, accountancy, textile design, machine maintenance, computer aided design, and sewing/tailoring. Women, on the other hand, were mainly trained in either secretarial work or sewing. Only a few women reported managerial training, and none had been trained in machine maintenance or computer aided design.</p>
Experience	<p>Total work experience: Male: 14.1 years Female: 18.3 years Garment industry experience: Male: 12.5 years Female: 17.2 years.</p>
Promotion	<p>Promotions generally occur within the broad employment categories, e.g., factory workers progress through specific job groups and some eventually become supervisors. Men who reached supervisor did so in an average of 7.2 years; women took an average of 8.5 years. We found only 10 instances of factory workers or members of the support staff becoming managers. Nine of these were men.</p>
Hours worked	<p>Women and men in most jobs work the same hours. Only in factory work was there a significant difference: Male: 52 hours per week, Female: 45 hours per week.</p>

In step one, the researcher gathered the information given in Table 16.2. The data are broken down by sex, and include the composition of the workforce, its age breakdown, remuneration, education, training, experience, promotion patterns, and hours worked. The gender data show that top and middle management are mostly male; support staff are half male, half female; supervisory staff are mostly male; while production workers, both in the factory and the outworkers are overwhelmingly female. The data also show differences in mean age, remuneration, education levels, training, previous experience, patterns of promotion, and average hours worked per week.

Once the basic information has been gathered, the gender analysis moves to step 2 (see Table 16.1). In this step, the researcher attempts to put the information about the chain into a broader context. The nature of the context will depend in large part on what the researcher is trying to achieve. If, for example, it appears that female workers are more disadvantaged in the garment industry than in other industries in the same country, the researcher may want to make 'industry as a whole' or 'manufacturing industry' the context. In this case s/he will probably use sources such as government statistical data to gather the same kinds of demographic and labour force information for the comparison group. Alternatively, the researcher may believe that the bigger problem is that female garment workers are worse off in this country than they are in other countries competing for the same markets. In this case, s/he may choose 'the garment industry in competing countries' as the comparison group.

When the reference group has been decided, the researcher sets about gathering the same information for that group as was collected for the chain. As indicated in Table 16.2, this would include gender disaggregated data on workforce composition, age, remuneration, etc.

With the comparative information in place, the analysis moves to step 3, the institutional assessment. The literature on institutions and their organisational forms suggests that they vary considerably from each other and across cultures. Despite their differences, they can be analysed in terms of their common components. We identify five elements for this analysis: rules, activities, resources, people, and power (see Table 16.1):

- ✍ The *rules* tell us how things get done. In addition to formal rules and regulations, rules in the institutional sense cover norms, values, traditions, customs, and informal practices. They can be explicitly stated or simply understood as the way things are done in this place.
- ✍ The *activities* are what is done. In gender analysis, it is important to know what men do, what women do, and what is done by both men and women. For example, in a particular garment factory, men may do the cutting, women the ironing, and both men and women the sewing. In another, only men work the night shift while both men and women work the day shift.
- ✍ The *resources* are the process's tangible and intangible inputs and outputs. Such resources may be human (labour, education, skills), material (food, assets, land, money), or intangibles (information, political clout, goodwill, contacts). The analysis examines what men and women put into the process as well as what they receive in return for their activities. One commonly used type of gendered resource analysis looks at male and female workers' inputs in terms of education, skills, and labour, and the resulting monetary rewards. This is the sort of analysis that underlies many of the findings of "unequal pay for equal work".
- ✍ Gender analysis also looks at *people*, not so much as individuals, but as they fit into different categories. Each category represented in a value chain can be broken down into male and female: managers, support staff, fashion designers, production workers, homeworkers, traders, transporters, etc. It then becomes relatively easy to identify institutionalised patterns of inclusion and exclusion, as well as opportunities for progress.
- ✍ Finally, gender analysis has to do with *power*, i.e., with who determines priorities and who makes the rules. Power is rarely equally shared throughout an organisation. Some have much more power than others. They have the authority to interpret or even to set goals and objectives. They also have very practical power to assign workers to shifts, to determine the length of each shift, to set production targets, and to discipline those who fail to abide by the rules. Those with little power may find themselves on the receiving end, with little choice but to comply. One of the tasks of gender analysis is to examine how such differences in power are distributed between men and women in the chain.

The final step of the analysis - at least in terms of its logical sequence - is the application to the particular research question at hand. The questions given in step 4 of Table 16.1 are typical of the questions usually asked, but the list is far from exhaustive. It is important to note that this step is last in the schema, the questions it contains actually drive the first three steps of the analysis. The kind of basic and contextual information needed depends on the questions you are addressing, and so does your institutional analysis. Since time and resources are almost always at a premium, you will be able to gather only so much information, and obviously you should focus on what you need to answer your questions.

17 Conclusion: big and small changes

Part II of this manual has shown you different ways of collecting and presenting data. Your reaction might be: 'I can't do all this!'. And our response is 'you don't need to'. You will not need to carry out all the steps we have gone through. Which ones you need to adopt depends on the question you seek to answer.

In our attempt to take you through a range of methods, there is one thing we have not dealt with: *change*. The way value chains are organised changes all the time, some actors may become more powerful, others less powerful. Hard-fought gains made in time of growth might disappear in times of recession. A distant buyer decision to source from your region might open up opportunities that were not considered before. The implication is a simple one: if a lot of time passes between conducting the research and acting upon the conclusion, you may need to go back to your key respondents and ask what has changed over the previous, say, 12 months. The most effective way, however, of coping with change is to use the participatory approach, which is explained in Part III.

This applies in particular if the change comes from the group of people you are working with, the stakeholders. Much of the manual takes the organisation of the value chains as given and is concerned with improving the position of workers in a (grudgingly) accepted structure. You may, however, find that the manual helps you to challenge this structure. Indeed we have emphasised that seemingly powerful corporations are often vulnerable and we have shown how to reduce asymmetries in information along the axis: global buyers – local manufacturer workers. If better information and new insights help to bring about major change, that would be

wonderful. Much of the following Part III however is about making small changes. To be more precise, these changes would affect buyers and manufacturers in a small way but would represent major gains for the homeworkers.

Part III. Making an Impact

In Part II we discussed how to gather the data, analyse the information, prepare our maps and present our findings. Let us assume that we have done all this and have identified the problems. What next? The next step – using your analysis to make an impact – is the hardest part of the process. It is also the most critical. In this section, we offer some suggestions on how to do it. The main messages of this part of the manual are:

- ? Take the problem back to the main stakeholders and involve them in finding solutions.
- ? Homeworkers need to be organised if they are to participate in finding and implementing solutions.
- ? Find the most effective points of intervention. Using distant leverage points can help to bring about local improvements.
- ? Learn from what others have done, but remember that, in the end, *your solutions* will have to flow from *your analysis*.

18. Using a Participatory Approach

Finding solutions that will actually work is difficult. Many users of this manual already know from experience that homeworkers, contractors, factory owners, labour unions, and NGO activists all see problems differently. What appear to be good solutions from the point of view of one group may be totally inadequate from another's perspective. The best way forward is to take the problem back to the main stakeholders and involve them in finding solutions.

In some cases, stakeholders will already be involved because you used a participatory approach to carry out your research (see Appendix A, section A.7 for more information on participatory research). If so, you can use the stakeholder feedback mechanisms that are already part of your process to examine your findings and find possible solutions. You might, for example, already

be working with representative groups of homeworkers, sub-contractors, and factory owners. You will certainly want to involve them again at this stage. You might start by feeding back your findings to each group separately. This will allow you to tailor your presentation to the group. You may want to use different presentation methods for factory owners and homeworkers. You may even use different languages. Separate groups will also allow freer discussion. In the relative safety of a familiar group, it is easier to surface solutions and work out the ways to achieve them.

Even if you have not used participatory methods in the earlier stages of your research, you will want to involve the main stakeholders in the search for solutions to the problems identified. This is an extremely important step in your process. Presenting your findings in person is a great way to be sure that they are well understood. It also offers one last chance to check your data. You can encourage participants to tell you if you have missed something important or misinterpreted any facts. More importantly, engaging stakeholders in the search for solutions will build support for whatever action is finally taken.

Once you have discussed solutions in separate groups, you are ready to move towards action. If your separate groups have reached similar conclusions, your job will be easy. A small working group can iron out the differences and set a timetable for implementing the proposed solutions. If – as is more likely – the proposals from the separate groups show significant areas of disagreement, you will have to work harder. You may bring the groups together to try to negotiate their differences.

Direct discussion and negotiation is an ideal way to build a mutually agreeable course of action, but unfortunately, it will not work in all cases. Sometimes the most powerful actors are located in distant parts of the chain, making it virtually impossible to get them to a meeting. In other cases, homeworkers lack the organisation needed to participate well in a general meeting. You may need to start by helping them to organise. In still other situations, you may conclude that the best strategy is for your organisation to act as an intermediary between the different groups of stakeholders. We discuss all of these possibilities in the following sections. Before deciding to use any one of them, remember to tailor them to your particular circumstances.

19. Supporting Collective Action

A key concern of this manual is finding ways to improve the earning opportunities of poor workers. Enabling them to organise is one strategy that can draw on the research tools we have been discussing.

Organising efforts face two major hurdles. The first is homeworkers' invisibility. Not only are they unseen by the wider world, but they are also largely unknown to one another. Before they can form an organisation, they must get to know each other. The research we have been suggesting – especially the type of 'horizontal mapping' proposed by HomeNet (www.gn.apc.org/homenet/) – can start the process. Organisers often begin with only three or four contacts, allowing these to "snowball" as homeworkers refer them to their friends. A brief questionnaire and/or the HomeNet photo pack can provide the meat for these initial conversations. Once some information has been gathered, it can be fed back to the interviewed workers at a group meeting or in a simple leaflet. This will help the workers to realise that they are not alone, and can be the basis for forming a support group.

In Santiago, Chile, for example, AnaClara, a women's training centre, began investigating the extent of homework in various parts of Chile (HomenNet 2001). As in other countries, the official statistics revealed little of the extent of homeworking or other informal work. AnaClara organised a small survey team and trained women to go out and talk to these workers. The study revealed that in some areas almost every household had people involved in informal work. Many women were doing homebased work for the garment and print industries, while others made things to sell to friends and neighbours or in local markets. After the research, AnaClara invited the women who had taken part in the survey to a national meeting at which homebased workers decided to start their own organisation.

Even when they manage to come together, homeworkers such as those identified by Ana Clara face a second hurdle. Collective action often fails because the organisers make what appear to be unrealistic demands. They draw up a laundry list of problems and ask for action without considering how the employer can finance the changes. Their requests are quickly dismissed, and the morale of the group broken. The beauty of value chain research is that it can reveal those points in the system where change is possible. By analysing the vertical structure,

participants learn who controls the chain, where the profits are, and what changes in homeworker earnings and/or benefits are likely to cost. This helps them to know, not only whom to approach, but also how to frame their requests.

For instance, the study may yield figures similar to those found by CAFOD in a Bangladesh factory. In this case, workers earned an average of 51p for sewing a ski jacket that would later retail for £100 (Green 1998). Chapter 9 of this manual shows how to make a more detailed cost breakdown. Armed with such a breakdown, AnaClara organisers are in a good position to argue that wages could be raised substantially with little impact on the final price.

In some cases, homeworkers are already organised, but they need specialised help in lobbying for their rights. The Fair Wear Campaign in Australia provided that kind of assistance to homeworkers who were fighting the removal of legal protection that came under the cloak of a major industrial relations review. The government and employer groups wanted to drop three clauses in the existing legislation. Two of the clauses ensure that homeworkers receive the same pay as factory workers, and that their working conditions are equivalent; the other clause lays down procedures for monitoring subcontracting chains. The homeworkers prepared statements and were ready to testify in court to keep the clauses intact. The Fair Wear Campaign assisted by preparing submissions and giving the campaign a public face by making sure that homeworkers were seen in the public galleries during the hearings and at protest actions in the street.

Collective action is not always about lobbying or bargaining. Sometimes homeworkers with particular skills need to be organised to gain access to new markets. Prae Pan, an organisation of hand-weavers in northeastern Thailand, helps its members to develop their skills and to seek alternative markets. The name Prae Pan means “many kinds of fabrics.” It was given to the organisation in 1997 when it began to be run by the weavers themselves, but the group started nearly twenty years earlier with an NGO focussed on women’s issues of health, education, and empowerment. Approximately two hundred fifty weavers living in seven villages are members of Prae Pan. The weavers made natural-dyed cotton and silk cloth. The group has received strong support from several NGOs for training in design, product, and market development. The group

runs its own shop, has its own label, and uses distinctive wrapping materials. It has clearly mastered the basics of marketing. Value chain research could help Prae Pan to move further. A careful study of the national and export value chains for hand-woven cotton and silk fabric should be able to identify promising new markets and should also help the weavers to price their products appropriately.

20. Mobilising Around Codes and Standards

Concern over sweatshops and other social issues has produced a new global activism. Under pressure from environmental groups, labour activists, and others, multinational firms are trying to show the world that they are taking their social responsibility seriously. In the clothing industry, competition for contracts from major buyers is often tied to low pay. This can create a “race to the bottom”, in which firms and countries try to outbid each other by offering lower wage rates and fewer benefits. Activists see global standards as one way of stopping this downward spiral. In this section, we present some general information about standard setting and then go on to give examples of their use in two particular cases: occupational health and safety and child labour. Then we explain how value chain analysis can help to make effective use of codes and standards.

20.1 Using Codes and Standards

Using codes and standards to improve workers’ wages and conditions generally involves setting standards and then using some certification mechanism to attest to compliance. The certification institution generally has two key components: a set of rules, principles, or guidelines, and a reporting or monitoring mechanism. Analysts have categorised these certification processes into four groups, according to who produces the guidelines and conducts the monitoring:

- ? *First-party certification*, in which a single firm develops its own rules and reports on compliance;
- ? *Second-party certification*, in which an industry or trade association develops a code of conduct and establishes a reporting mechanism;
- ? *Third-party certification*, in which an external group, often an NGO, imposes rules and compliance methods onto a particular firm or industry; and

? *Fourth-party certification*, which involves government or multilateral agencies setting standards and ensuring compliance.

The actual monitoring may take place by a single group, as suggested by the types of certification listed above. Alternatively, responsibility for monitoring may be given to a mixed group. HomeNet advocates the use of tri-partite boards, composed of government, employers, and homeworkers. Such boards are especially useful in ensuring that new laws are well implemented. In such cases, the board may develop the registration system for workers and contractors, monitor the payment of wages, and take responsibility for provisions in the law related to social security and welfare benefits. In India, for example, the Kerala Coir Workers Welfare Fund is a tri-partite board that implements schemes for pensions, medical treatment, children's education, disability benefits, and accidental death and maternity benefits.

Not everyone agrees that monitoring procedures are having the desired effect. Some see them as pre-empting the functions of the state or the traditional labour unions (see box 20.1). Even if they are helpful, most cover only the first tier of suppliers. Very small workshops and homeworkers are likely to fall through their nets, unless the efforts of monitoring agencies can be supplemented by the kinds of research suggested in this manual. This means that, as part of their background work, the researchers need to find out whether the chain being studied has standards and/or certification processes. If so, what type are they? How effective has the monitoring been? Researchers may then want to talk to someone from the monitoring group, both to learn more about the process and its possible implications for homeworker issues, and to begin to build a working relationship.

Box 20.1: Union Sundown?

When, in 1996, Gap Inc. allowed labour and human rights organisations to monitor working conditions in the Mandarin International factory in El Salvador, the occasion marked a milestone in the transnational anti-sweatshop movement. Suddenly, codes of conduct were no longer enough, corporations also had to ensure the implementation and monitoring of those codes. Moreover, the decision provided a major boost for southern NGOs seeking to enhance rights. Private monitoring of clothing manufacturers had been prevalent in USD factories since the early 1990s, but the Mandarin case was the first time human rights groups in and from the south monitored maquiladora factories

Yet, independent monitoring organisations have encountered scepticism from an unexpected source. Many labour leaders in the US and in some Central American and Caribbean countries feel threatened by non-union groups overseeing factory conditions. They believe that NGOs are usurping the proper function of unions by defending and advocating worker rights. ... Because they believe that government labour ministries should carry out the work of monitoring groups, other detractors argue that monitoring favours the process of privatisation.

But such fears have proven unfounded. Independent monitors ...vocally demand stronger state action to protect workers.... Independent monitors verify that corporations uphold labour rights, and this vigilance helps foster a working environment more amenable to collective action by workers. ...In this sense, monitors do not replace or undermine traditional unions. Indeed, the best monitors are the workers themselves. But the sad truth is that workers in the south often have been denied the right to organise and monitor their rights. Most efforts to unionise end in firings....

Independent monitoring will not solve all the problems in Maquiladora factories. But workers who face precarious conditions must be creative and use all the tools at their disposal. And where no tools exist, we must invent them.

Carolina Quinteros, Executive Director of the Independent Monitoring Group of El Salvador

Carolina Quinteros, Executive Director of the Independent Monitoring Group of El Salvador

In most cases, the factory workers will be the main concern of the monitoring group. In most cases also, the wages and working conditions of the factory workers will be better than those of the homeworkers. It will be very important to make clear that redressing homeworker grievances should never be at the expense of gains already achieved by factory workers. Both are entitled to fair pay, and careful analysis of the value chain should reveal how this can be achieved for both groups of workers.

One way to ensure against unhealthy competition between home- and factory workers is to include both in the same labour organisation. In Toronto, homeworkers are associate members

of the clothing union, UNITE. The union has lobbied to get provincial level laws with specific provisions to protect homeworkers. As a result, homeworkers in Ontario are entitled not only to the minimum wage, but to an additional 10% allowance to cover their work expenses. The homeworkers' association organisers make sure that homeworkers are informed about their rights and help them to negotiate for the full rate of pay.

20.2 Occupational Health and Safety

Occupational health and safety is one area where standards exist. The ILO's Convention on Homework says that national laws and regulations governing occupational health and safety should apply to homeworkers (see box 20.1), but in many places this is not the case. Occupational health and safety continue to pose particular problems for homebased workers. The nature of the work and of the homeworkers themselves partly explains why this should be so.

Box 20.2: National Occupational Health and Safety Regulations Apply to Homework

National laws and regulations on safety and health at work shall apply to home work, taking account of its special characteristics, and shall establish conditions under which certain types of work and the use of certain substances may be prohibited in homework for reasons of safety and health.

(ILO, Convention on Homework, no 177, article 7)

Long working hours and cramped working conditions make homebased workers especially prone to accidents and stress-related illnesses. Accidents are much more common when workers are tired. Tiredness and stress also cause physical illness. A study conducted in the ready-made apparel industry in Australia showed that carpal tunnel syndrome resulting from long hours of repetitive motion is much higher for homeworkers compared to workers in the workplace (HomeNet Guide 1999). Lower-back pain and high incidence of arthritis of the neck, shoulder, wrist, and fingers among homebased workers have also been reported. These are caused by the combination of long hours and poorly arranged work places.

Many occupational illnesses directly related to homebased work go unnoticed because of the hidden nature of the work itself. Unless the workers themselves report their illnesses, they are

likely to remain unknown. Yet for most, there is little incentive to report, since they are not eligible for sick pay or health benefits.

Homebased work is predominantly done by women and children, who usually do not have enough information about how to protect themselves. Women may not realise the importance of proper chairs, lighting, etc. until they begin to experience pain. Even then, they may be too ready to dismiss their discomfort as 'old age' without recognising its relationship to the work they are doing. Both adult and child workers risk accidents from unprotected machinery, breathing problems from inhaling lint or glue, eye strain from poor lighting, and many other work-related conditions.

Not only the workers, but also other family members, are exposed to the hazards and dangers of homebased work. For example, HomeNet has reported studies in the UK showing that the dust from the threads and yarns used during homebased work can cause asthma in babies.

The researcher who seeks to improve conditions, would be looking for two types of information. The first is the actual health and safety situation of the target group of homebased workers. What health problems are homeworkers experiencing? To what extent can these be traced to their work? What health and safety risks are apparent in their workplaces? The second is information about the national laws and regulations on safety and health at work. Since there is no universally applicable standard, but rather a convention that calls for applying national codes, this information is critical. Comparing the requirements of the national code with the actual health and safety situation of the homeworkers is likely to reveal differences between law and practice. You may then want to use the data gathered in mapping the chain to estimate the costs of bringing the workers' health and safety situation up to the national standard.

The question you are trying to answer is: What increase in piece rates would be necessary to bring home-workers' health and safety conditions up to the standard required for other workers in this country? Let us take a simple case where there is only one discrepancy between factory and home-worker standards. Factory workers are supplied with masks to reduce their inhalation of lint while sewing. If home-workers want masks, they must buy their own. Since the

factory workers get a new mask each morning, the extra cost can be easily calculated. By dividing this amount by the number of pieces usually produced in a day, you can estimate by how much the piece rate would have to go up if this standard were implemented.

Box 20.3: The “No Sweat Shop” Campaign

On International Women’s Day in March 2001, the “No Sweat Shop” label was launched in West Melbourne, Australia. The label, a world first, is a corporate industry initiative. The Homeworkers Code of Practice Committee, which oversees the Code, consists of the Australian Business Limited, the Textile, Clothing and Footwear Union of Australia (TCFUA), the Council of Textile and Fashion Industries of Australia, and the Australian Industries Group. Clothing companies that have signed the Homeworkers Code of Practice promise to ensure that their clothing lines are made under fair and legal conditions. When they have produced all the evidence required for accreditation, clothing companies will be allowed to display the “no Sweat Shop” label on their garments. It is hoped that snowballing consumer demand for the label will persuade more companies to become part of this ethical initiative. Its promoters believe that the “No Sweat Shop” label has the potential to improve working conditions for thousands of homebased workers in the textile industry.

For more information visit: www.NoSweatShopLabel.com or write to Homeworkers Code of Practice Committee, 2nd floor, 132-138 Leicester Street, Carlton Victoria 3053, Australia. Telephone: (0)3 929 16640, Fax (0)3 9348 1779.

Source: HomeNet Newsletter 2001

Once you have this information, what do you do with it? You may be able to bring about a change simply by bringing the convention and your compliance information to the attention of those employing the homeworkers. This may work in the case of the masks because the cost of implementing the standard is likely to be very low. In other cases you might have to use a different strategy. Employers may not be receptive, or your chain analysis may have revealed that local actors have little room for independent action. You might take your findings to the global retailer who controls this particular chain. Alternatively, you might liaise with the ILO in your country to see what pressure they might be exerting on the national government to enforce standards. Or you might link up with Australia’s “No Sweat Shop” campaign (see box 20.3).

20.3 Child Labour

Assume a fairly common situation: the UK buyer is happy with the performance of their Indian garment producer, particularly with the combination of low price and high quality, but that buyer

does not want to be associated with garments which involve the use of child labour. The use of child labour has come to light and the consequent negative reputation effect is beginning to harm the competitiveness of the local industry. The chain analysis shows that child labour exists in various parts of the chain, but is only significant in the home-working segment.

What to do? Just asking the home-workers to stop involving their children in the production process is unlikely to have much effect as the child labour make an important contribution to family income. Furthermore, in this rural community children of ten years or more are expected to be working unless their parents are wealthy enough to send them to school. Asking the manufacturer to switch to other home-workers may help 'to teach a lesson' to manufacturers and home-workers, but will it help the child-workers if the already poor families lose a source of income? Your research might help to bring about an effective solution by making child labour a chain issue and by providing critical information on costing.

As in the case of occupational health and safety, you need to calculate the impact of changing child-labour practice on home-workers' piece rates. A critical question might be: What increase in piece rates would be necessary to allow the home-workers to 'release' their children from work and send them to school? Working this out (and checking it out for two or three cases) should not be difficult. Then choose two or three typical garments and work out the increase in cost per garment to the manufacturer. This should be easy if you have obtained the cost data from the manufacturer (see section 12.1). A further step in the calculation is to work out the absolute and percentage increase to the final sales price to the consumer. For that you may need the help of the buyer or of an overseas collaborator who can check the prices in the shops. You may even be able to check prices on the Internet, but this remains a rare option. In all likelihood the calculations will show that the increase in producer price and retail price is tiny, yet the effect on the use of child labour could be big.

Working out the cost data is one thing; making effective use of it is another. It may require mobilising the entire chain. Doing so effectively requires that you respect certain principles: a) recognise that all actors (manufacturers and traders) operate in a global market characterised by increasingly severe competition; profit margins are often very small; b) do not blame producers or buyers personally for the use of child labour in their chains; remind them (if required) that

being associated with child labour undermines their ability to compete in European and North American markets and that being associated with initiatives which eliminate the use of child labour enhances their ability to compete.

In such projects of exerting chain pressure for good causes, NGOs have a mixed record. Most NGOs are very good in raising the flag and alerting to problems such as child labour, but few are able to contribute to a solution. In the UK, the government has provided a forum that facilitates constructive solutions: the Ethical Trading Initiative (see www.ethicaltrade.org).

21. Helping home-workers to switch chains

We saw in Chapters 9 and 10 that different value chains often have different wage rates, even for the same type of worker. In our example, homeworkers earned an average of \$1.20 per hour, but this average hid considerable variations. Switching from lower to higher paying chains (or manufacturers within chains) is not always easy because competition is usually stiff and greater skills or even specialised equipment may be required.

Finding out what is required for homeworkers to join the higher paying chain would be one of the aims of your investigation. Suppose you have done this part and have learned that homeworkers in chain 2 are only expected to do straight sewing, and that this type of sewing requires only the most basic model of industrial sewing machine. Homeworkers in chain 3, on the other hand, require a better sewing machine and an additional machine: a button hole maker. Both machines are costly – even if purchased second hand. To switch chains, therefore, the homeworkers will have to invest in equipment. The problem is that homeworkers in chain 1 are poorly paid and, as a result, tend to have little or no savings. Unless, like Agnes, a homeworker can get help from a spouse or other relative, she may not be able to buy the new machine that would let her switch chains. So what can she do?

In many developing countries, micro-finance institutions (MFIs) are helping business people to finance their operations. The Grameen Bank and BRAC in Bangladesh are probably the most famous of these programmes, but others exist in many places. You may already be familiar with the micro-finance programmes operating in your area. The typical micro-finance programme operates through an NGO and offers group-guaranteed individual loans. In other words,

individuals can borrow only if they belong to a group of other borrowers who agree to guarantee that each member's loan will be repaid. These loans often have little or no grace period. Borrowers must start to repay almost as soon as they receive their loan. Some micro-finance programmes are offering individual loans secured with individual collateral. In Kenya, for example, the Cooperative Bank's Small and Micro Credit Unit makes individual loans that can be secured by the micro-entrepreneur's own business assets.

You may want to investigate what types of credit schemes are available so as to guide the homeworkers in their search for a programme that would be suitable for them. Alternatively, you might, at this stage, involve the homeworkers in the research by suggesting that they visit the micro-credit providers to find out for themselves. In some cases, especially when local micro-finance institutions have not lent to homeworkers in the past, the researcher may need to turn activist. If the MFI is unfamiliar with the nature of homeworking, or if its present clientele consists mainly of petty traders or shopkeepers who are repaying their loans in weekly instalments, its management may need to be convinced that this is a group worth considering. Perhaps more importantly, the MFI management may need to be encouraged to develop new loan products that fit homeworkers' particular situation. For action research concerned with improving the quality of micro-finance services, see www.ids.ac.uk/impact/index.html.

22. Spreading Best Practice

In chapter 12 we sought to find out whether some home-workers are treated better than others and whether good practice can be found in particular chains and/or traced to particular employers. In this chapter we discuss – by way of examples – what is meant by 'good' or 'best' practices and what can be done to make them more common. The suggestion is to use a positive approach and to show that treating homeworkers well pays economic dividends. This is different from a negative 'name and shame' approach. In extreme cases this may be the best way to proceed, but 'naming and shaming' should be the response of last resort. The problem with this approach is that it scorches the field for subsequent investigations. Research receives a bad name and employers and home-workers will refuse access, fearing that the researcher's main aim is to report trouble spots.

22.1 Advance notice of ups and downs in orders

The rationale for the positive approach comes out of chain thinking. In order to compete in advanced country markets or the upper segments of the developing country markets, high quality and fast response are critical. Quality and speed cannot be achieved by the manufacturers on their own. However excellent their internal operations, they need the co-operation of their suppliers, including the home-workers. Some manufacturers have recognised this and offer their home-workers technical assistance and advance notice of ups and downs in orders. The latter is particularly important because it enables the home-workers to prepare for extra-intensive periods and to make corresponding arrangements (preparing additional workers; hiring child care) and conversely to look for work elsewhere in lean periods. Giving such advance notice makes a huge difference to the homeworkers' prospect of stabilising their incomes and gaining some control of their daily lives.

Where the researchers identify such good practices and find that they contribute to the success of the firms and the chain, they can draw attention to them through reports in the local press, radio, and TV. Make sure, however, that all involved agree because presumably you promised confidentiality in your interviews. Where employers are found to be progressive in some respects (e.g., advance notice), but not in others (late payment), the researchers can discuss the results with the employers concerned and offer good press coverage provided they improve in the areas which they neglected. But make sure that this is the outcome of a negotiation and not blackmail! The latter would close doors to future investigations.

22.2 *Provision of child care facilities*

Of course you may find in your research that the sheep (employers) are neither black nor white, but all grey. Let us assume that they all have a problem of providing consistent quality and that your chain analysis shows that this problem can be traced to the home-working stage. A very common problem is that home-workers' ability to concentrate is prejudiced by their need to keep an eye on their children while carrying out their paid work. Quality inevitably suffers in the process. Provision of child care would be the answer. If there are no local role models, you could try to find – through the WIEGO network – role models from other regions or countries. Provided they are well documented and show a clear message, this may help you initiate local discussions about moving forward. The message on which you focus needs to have local applicability.

Box 22.1: Where to start?

Faced with homeworkers' many problems, activists often wonder how to begin to help. HomeNet, the International Network for Homebased Workers, has found that issues of child care, community services, or social concerns are good starting points. They meet less resistance than issues of pay and working conditions. This is important because in their initial stages or organisation, homeworkers are in a weak bargaining position. Furthermore, working with the employers to provide community based services can both unite the homeworkers and open dialogue with the employers. For advice contact homenet@gn.apc.org or SEWA (Self Employed Women's Association), Ahmedabad, India, Fax +91 79 550 6446.

Child care can be a good starting point for homemaker-employer discussions (see Box 22.1). Given that home-workers are often clustered in particular districts, the problem could be alleviated by offering child-care facilities that are co-funded by the employer.

22.3 *Sick leave*

Another common problem is illness. As discussed in the early chapters of this manual, homeworkers are typically paid on a piece-work basis and are rarely given any social security benefits. This means that when they are sick, for example, they are not paid because they do not have sick leave (see box 22.2). Since homeworkers are just as much production workers as

those in the factories, fairness – and ‘best practice’ – would dictate that they be given similar benefits.

Box 22.2: Lucy

Lucy is a skilled machinist who sews cushion covers for a well-known furniture manufacturer in England. She has over twenty years of service with the company. She first served a four-year apprenticeship to learn her trade, then worked for a number of years in the factory. Twelve years ago she transferred from doing on-site work to homework. Lucy uses machinery owned and maintained by the company. She earns rates of pay somewhat above the UK minimum of £3.60 per hour. Despite this, she is not treated as an employee of the firm and has no entitlement to paid holidays, sick pay, overtime pay, or any of the other terms and conditions of employment enjoyed by on-site machinists.

Source: HomeNet Newsletter 2000

Getting a sick-leave benefit accepted will involve discussion and negotiation with factory owners, first to see what is possible and then to work out the practical details. The issue of sick leave is complicated, especially since, as we have seen, many homeworkers work for more than one factory. Your negotiations are more likely to be successful if you show that you appreciate such practical problems. Your likelihood of success will increase if you can also show that the cost of giving sick leave is low and that the system you propose will not easily be abused.

Let us start with what value chain analysis can tell us. The analysis will have already revealed the pattern of core and peripheral homeworkers in your particular chain. It will also have shown the difference in wage rates between the home and factory workers, and perhaps the proportion of the final cost of each garment attributable to homeworkers’ wages. As in the previous section, you may need to supplement this information with data on retail prices in the overseas market. You can marshal all of this information to build your case for the benefit. You will first want to estimate the cost of giving homeworkers some minimal level of sick leave, say one day per month. What would adding this amount to the cost of a garment mean in percentage terms? How is such an increase likely to affect the final retail price? If you can show that the increases are small, you crossed the first hurdle.

Next you will need to deal with the practical details of how a sick-leave benefit can be administered. If some factories in your area already have such a benefit, your work may be fairly easy. If not, you may be able to link with some in other places, but here you have to be careful because benefit systems are closely tied to labour laws and do not always transfer easily from one place to another. If you can find no examples, then you may have to devise your own. You should do this with the help and advice of someone who understands the personnel systems of factories like the ones you are approaching. This will help you to avoid coming up with a totally unworkable proposal.

Your biggest challenge will be negotiating with the factories in such a way that you exert pressure without alienating them. One way to do this is to go with a draft proposal rather than an ultimatum. The advice given in chapter 19 on child labour applies equally here. Recognising the pressures that the producers face – both the direct cost pressures and the related pressure to keep their operations as uncomplicated as possible – will go a long way in enabling your message to be heard. Be prepared to modify your original proposal to accommodate the factories' practical concerns. You may, for example, have to settle for a benefit that applies only to core homeworkers or that is available after so many months of work.

22.4 A WIEGO catalogue of best practice

WIEGO, as an active global network of researchers and activists, could make a major contribution to the spread of best practice in employing home-workers. This requires that in our research efforts we pay particular attention to the positive cases and document them in such a way that they are self-contained and can be used by colleagues to improve local practice in other regions or countries. To this effect, we need to establish a web-site, which provides ready access to these cases. For each case one would need an effective one-page summary and a more detailed account of how it works and how it came about. Particular attention should be given to the economic rationale for the good practices (so that they do not come across as charity appeals), to their importance for the chain as a whole, and to the use of leverage (or interdependence in the chain) to bring about change. The ultimate aim must be to bring the cases together in the form of a text book for use in business schools and technology institutes, which provide courses for current or future managers in the garment industry. Trade union

colleges training future labour leaders would be another target group for such best practices in employment of home-workers.

23. Conclusion

We have established the background for value chain analysis, provided the methodological tools for carrying it out, and offered some examples of how using the method can have an impact on the earning possibilities of homeworkers. Now it is up to the reader to carry the process forward. We urge you to:

- ? Use the methodology.
- ? Train others to use it.
- ? Come up with your own variants and improvements.
- ? Above all, create your own stories showing how the analysis has led to changes in workers' lives.

Value chain analysis is a powerful tool for understanding global markets. We hope that our readers now feel equipped to use the methods we have presented to analyse a particular chain. Even if you are not yet fully at ease with the methodology, we urge you to attempt your own chain analysis. By using the methodology, you will develop your skills. Refer to this manual when you are unsure of what to do next. For additional materials make use of the websites listed at the end of this manual.

Busy activists rarely have time to carry out a full research study. If you are one of these, you will want to involve others in your work. A good way to start is to use this manual as a textbook for training others in value chain methodology. Training should be 'hands on', including both classroom instruction and supervised fieldwork. The introduction to this manual includes some suggestions for using the material for teaching. Those suggestions can be the starting point for preparing your teaching outline. You will, of course, have to tailor the material to the education and experience levels of your particular trainees. Lectures, however, are not enough. Those being trained should have opportunities to practice what they are learning. You may arrange to have them accompany more experienced researchers to see how the data are gathered and processed. Later you may send them out on their own. Be sure, at this stage, to provide for debriefing sessions to allow trainees to report on their work and get constructive feedback.

As you use the methodology and train others to use it, you will no doubt see ways to make it fit your situation better. Don't hesitate to adapt the methodology to your own needs. Develop your own interview guides or questionnaires. Find other approaches to getting the information you need. Create new maps or diagrams for presenting your data. Devise creative ways of presenting your findings to stakeholders. This manual is, we hope, a useful general guide, but your situation is unique. Do what you need to do to make the methodology fit your reality.

We invite readers to share their experiences with us so that future editions of the manual can be even more useful. Tell us about homeworkers in your area. What do they do? What are their conditions? Are they more like Maria or Agnes? Or are they different from both of these? What problem were you trying to address in carrying out your research? What did your analysis show? Did you have any problems with the methodology? How did you adapt the methodology to your circumstances? What happened as a result of your study?

In inviting you to tell us your experiences, we are also encouraging you to create your own stories that can be widely shared. Some stories will be individual, like the stories of Agnes and Maria. They can be 'before and after' stories, showing how value chain analysis led to changes in the life of an individual homeworker. Some will be stories of firms. You may be able to tell the story of a factory or a buyer who, because of your value chain analysis, gave new recognition to homeworkers. Still others will focus on how your analysis affected government, an NGO, or a distant donor. If you have used the manual to work on and with factory workers, this will also be of equal interest. We have not focused on factory workers but many of the methods and insights can be used to study and improve their situation.

This manual – and value chain analysis itself -- is a tool. We believe that it is a tool that can be used for the benefit of homeworkers, not only in the garment industry, but wherever people's homework feeds into national or global markets. Homeworkers should enjoy wages and conditions at least as good as similar workers in factories or formal workshops. Progress in this direction is being made, but much more remains to be done. We urge you to use the tool, train others to use it, sharpen it, and then share the stories of how the analysis has changed homeworkers' lives.

APPENDIX

Research Methods

Designing a research project involves organising the collection and analysis of data to provide the information that is needed. The researcher must choose from among many available research methods those that best fit the project's questions and objectives. Often more than one method will be used in a single study. This chapter provides an overview of key issues in research design and then briefly discusses the main methods that you are likely to use for data collection.

A cardinal rule in research design is that *what you want to know determines the way you carry out your research*. If I want to know how wages of factory workers vary between two regions, I need quantitative information that I can best get either by consulting published statistics or by administering a survey questionnaire. If I want to know more about homeworkers' feelings of loneliness and alienation, I will choose a different method - perhaps in-depth interviews of a few respondents. In practice, however, the choice of method is less straightforward than this. This appendix looks first at why researchers often use more than one method in a given study and then goes on to examine some of the most useful methods for value chain research.

A.1 Principle of combining different methods

Researchers often use several methods in a single study. The main reason for using multiple methods is that most studies, even fairly small and well focused ones, require a considerable amount of information. Some is background information that is needed to put the study into its proper context. This may include data on the country's economy, the history of the industry, or something about the ethnic makeup of the population. Then there is the information needed to address the particular questions of the study at hand. Here the research questions guide the choice of method. Questions aimed at qualitative or intangible realities, such as perceptions, feelings, or ideas require a different method from those whose answers are more easily measurable. When, as is often the case, the study has both types of questions, multiple methods are called for.

A second reason for using multiple methods has to do with the reliability of available information and the importance of that information to the research. Two examples will illustrate this point. In

both cases you want a list of export factories in a given region. In the first case, you are going to use the list as a sampling frame for choosing a random sample of firms to interview. In the second, you plan to use the list to provide some general numbers in the background section of your report. If the ministry of industries is known to keep excellent data on all of its factories, you have no need to worry about using multiple methods in either case. You simply get the list and use it. If such reliable information is not available, however, you have to decide what to do. Complete information is very important in the first instance, where the list is needed as the basis for random sampling. In this case, you would probably use considerable time and a number of different methods to piece together a complete list. In the second case, you might choose to use the best available list, perhaps with a footnote explaining the limitations of the data.

Still another reason for using multiple methods is to check the results of different methods against each other. A survey of factories may, for example, indicate that garment workers put in a maximum of 48 hours per week. Realising that factories elsewhere under-record working hours, you may decide to test this finding by interviewing union leaders or others knowledgeable about industry practice. The use of several different research methods to test the same finding is sometimes called *triangulation*.

A.2 Use of secondary sources

Usually much more has been done around a subject than is immediately evident. Using available materials well gives the research a good start. It also saves time - not only your own time, but also that of the respondents.

Documents are the most commonly referred to type of secondary source. They include research and other official and unofficial studies and reports; statistical reports; topical and area-specific articles from journals and newspapers; archival material; aerial and satellite photos and maps; films, videos, and other relevant audio-visual documentation. Mikkelsen (1995) adds folklore - mythology, oral tradition, local and topical stories, proverbs, and poetry - to her list of secondary sources.

Accessing relevant published and unpublished documents can be a major challenge, especially in developing countries. Many documents are in offices rather than publicly available places like

libraries or bookshops. The researcher must first find out that they exist, then learn where they can be found, and (often) finally persuade their keepers to release them.

A second challenge lies in deciding how to use secondary sources once they have been obtained. Generally secondary sources are used in two ways. At the beginning of a study, they help the researcher to become familiar with what has already been done. In this way, they help to avoid duplication of effort and they influence the choice of research design and methodology. Inexperienced researchers can be tempted to short-circuit this phase of the research, so as to get to the field where they assume the real research takes place. Once they have access to documents, they photocopy everything that could possibly be of use and set it aside for future reference. The problem with this is that having the photocopies gives a false sense of security, which encourages the researcher to postpone reading the material. A better approach is to read and photocopy selectively. The first step is a cursory reading of each document to identify the most important. Some documents may have only a paragraph or two that is relevant. These can be noted and returned quickly. Those that have more pertinent information can then be read carefully. A good quality technical report may not only give a detailed picture of the industry but may also have information about relevant contacts who might be worth following up. These are invaluable if identified early in the research process.

Secondary sources are also useful at the data analysis and report writing stage, when it becomes possible to compare your findings with those of other researchers.

A.3 Interviews with key informants

Interviews with key individuals are an important part of every research project. Key individuals are people anticipated to have particular insight or opinions about the topic under study. They may include specialists, such as academics who have studied the industry or the chair of the manufacturing association's textile committee. They may also include government officials at national or local level, or officials of important organisations such as a national women's group or garment workers' union. Key individuals can also be ordinary people. A woman who remembers when the factories first began putting out work can be an invaluable resource. Key informants are often identified in a sequential process, beginning with the obvious official types and continuing by asking each interviewee who might provide additional information.

Formal informant interviewing requires considerable preparation. It takes reading and thought to decide what questions to ask. The trick is to get the information you need without wasting informants' time by asking for things that you might just as easily obtain elsewhere. Work out carefully what you want to ask, and in approximately what order. The informant may shift from one topic to another so that the list is not covered in the order planned, but topics can be ticked off as they are discussed so that all are covered. Try to put informants at ease and encourage full discussion of each topic. Encourage precision and specific examples where answers are vague or rhetorical. As a general principle, let the informant carry the discussion. Say as little as possible yourself; you have come to listen. Your opinions, if injected too soon, could bias the informant's responses. An interview should not last too long. A carefully planned interview can usually be carried out in 30-60 minutes; only in exceptional circumstances would a single interview go beyond two hours.

Listen critically. The material supplied by informants is not always fully reliable. Piel (1995) suggests a series of questions to ask yourself:

1. How does the informant know this - from personal experience, a report, or merely opinion?
2. To what extent is the report affected by the informant's position in the community, personality, etc.?
3. Does this account serve his/her personal prejudices or commitments? Is this what should have happened rather than what did happen?
4. What evidence do I have that this person is usually accurate? Is the report internally consistent? Does it agree with what others have said?

Sometimes you can test the value of what the informant is saying during the course of the interview by asking probing questions. When you feel that to do this would be inappropriate or would break the relationship you are trying to establish with the informant, you might just note your questions and hesitations for future reference.

Recording a formal interview is not over when you thank the informant and say goodbye. A full report should be written while the details are still fresh in your mind. The report will include all available information about the informant as well as his/her responses to the questions asked.

You may also want to include your observations of the setting and notes on the informant's reliability.

A.4 Observation

All good research includes some element of observation. Much can be learned by observing what people actually do, how they do it, and the setting in which they do it. Observation involves all of the senses: sight, hearing, taste, touch, and smell. The careful observer will consciously study specific aspects of the reality that appear relevant to the research project. While waiting to interview a factory manager, for example, a researcher may look at the reception area to see if it appears prosperous or down at the heels, observe certificates or even calendars hanging on the walls, listen to the tone of interactions between the boss's secretary and those who visit the office, feel the coolness of the air conditioning, etc. Sometimes, as described in chapter 13 in the text, you will want to undertake a more formal exercise of observation.

In that example, the researcher used the four questions as the framework for writing fairly detailed observations about the process of delivering and receiving homework. She tells what is going on, describes the environment, names the participants, and gives information on the length of this particular transaction and the frequency of its occurrence. If this is an early stage of the research, she might not yet be sure how to name the status of the intermediary, so she simply puts a question mark.

The researcher's field report, written after the visit, would include all of this information. It might also include a sketch showing the layout of the room in which Maria works and/or a map of the area indicating the location of all of the outworkers. The report would include some analysis of the observations, addressing questions such as:

1. How does the setting/environment affect what is going on?
2. What does this transaction mean to participants? To non-participants?
3. Is this linked to the value system of the participants or the community?

In answering the first question, the researcher might note that during the rainy season, Maria's sons miss school on average once a week and that Maria also must spend extra money to buy

the plastic for wrapping her goods. She might also note that Maria must watch her young children while she works. She might deduce that the fact that the workroom is also the family's sitting-cum-dining room means that Maria must have to clear away the work every evening and set up again in the morning. Finally, she might observe that the darkness of the room means that Maria must burn electricity throughout the day.

Since the presence of an outsider often changes people's behaviour, researchers tend to look at observation in terms of the extent to which the observer is inside or outside of the group. Some observers are totally outside the group or situation, as in the case of the social psychologist watching through a one-way window. At the other end of the spectrum is the participant observer who is or has become a member of the group being studied. A value chain researcher could, for example, work for a time in a garment factory or as an outworker in order to observe first hand the conditions of work and the interactions within the chain. Alternatively, workers could be trained to observe and record their observations on certain variables.

A.5 Questionnaire surveys

The premise of the questionnaire survey technique is a simple one: if you want to know something about people, why not ask them? We learn about the finances of the household by asking a member of the household; we learn about a person's hopes for her children's future by asking her. Of course there are other methods of learning about household finances or a mother's hopes and dreams, but the advantage of the survey is that it can provide direct answers relatively cheaply from a large number of people.

Yet if the basic premise of the survey method is simple, the operations involved in using a sample survey research design are not. Sampling, writing a questionnaire, and administering it to respondents are complex processes that must be handled very carefully. Failure to do so puts the researcher in danger of obtaining misleading or useless results. We will, in this section, lay out the basic elements of the survey method. At the same time, we remind you that, unless you are an experienced researcher, you would be wise to supplement this material with the more detailed treatment provided in the relevant chapter(s) of a good research methods textbook.

A.5.1 Sampling

The survey method relies on sampling. Questionnaires are usually administered to a relatively small group, or sample, of a given population. This is because if you can learn something about a large group by studying only a few of its members, then you have saved time and money. What is necessary is to be able to generalise from the sample to the population. Another way of putting this is that the sample must be *representative* of the population. This means that the sample must be similar in important ways to the population it represents. This, in turn, requires that you first define the population and then ensure that your sample shares its major characteristics.

Let us suppose, for example, that you are trying to get information on the work habits and time spent by homeworkers in the garment producing region of your country. You would need to be sure that the makeup of your sample in terms of age, education, ethnicity, years of home working experience, and other critical variables is similar to that of the whole population. If it is not, you could get skewed results. If, for instance, the homeworkers in your sample are older or better educated than average, they may give different answers to certain questions than would be obtained if the whole population could be surveyed. In responding to questions about how caring for children affects their work, older respondents may express different views simply because their children are older.

Getting a representative sample is, therefore, very important. The best and safest route to a representative sample is some sort of probability (random) sampling technique. Such techniques are based on the laws of probability: the chance of any element being in the sample can be worked out mathematically. The most basic form of probability sample is the simple random sample, in which each element has an equal chance of being selected. A sampling frame that lists all the population elements is necessary, since all must have a chance of being included. If, as suggested above, you want a simple random sample of homeworkers in the garment-producing district of your country, you would first have to obtain or create a complete list. You next have to decide what size sample you want, and then make your selection.

Obtaining or creating the sampling frame can be the most daunting part of survey research. Since homeworkers are rarely registered in developing countries, you will most likely not have a ready-made list. What you do to create one will depend on your time and resources. One way

is to take a physical count (census) yourself. Since homeworkers are essentially invisible, you would have to visit every household in the region to locate all of them. Taking a census is a very expensive and time-consuming endeavour that is beyond the reach of most researchers.

Another commonly used method is to piece together the sampling frame from a number of sources. If you need a list of garment manufacturers, you may need to get many partial lists. The membership list of the manufacturers' association probably contains the largest and most prosperous firms. The ministry of industry may also have a list. Organisations such as the garment workers' union, the chamber of commerce, and the exporters' association may have their own lists. Smaller firms, however, may be on none of these lists. To find them, you may have to go to the areas where they are known to operate and make your own list. Or, if you know that smaller firms make certain kinds of products or sell through certain types of outlets, you may find them by talking to their customers. In Nairobi, many small firms make uniforms and we were able to get their names by surveying uniform users such as hotels, security firms, banks, fast food outlets, and petrol stations. Of course, lists constructed in this way must be carefully checked to eliminate duplications before being used for sampling.

Another way around the high cost of creating a sample frame is to use a multi-stage sampling model. By sampling in stages, you can reduce costs and still obtain a reliable sampling frame. The number of stages can vary. In a typical three-stage model, the first stage is some large and easily identifiable grouping, the second is a sub-group of the first, and the third is the unit that will actually be interviewed.

Table A.1 illustrates the process for a case where the study region is divided into administrative districts which are further subdivided into wards. There are ten districts containing 95 wards and over ten thousand households. Let us suppose that the researcher has decided that she wants a sample of approximately 500 households, or 5% of the total. To use a simple random sampling process, she would need to list all 10,450 of them before making her selection. The sample thus selected is likely to be scattered all over the region, making interviewing expensive in terms of both time and transport cost. By choosing multi-stage sampling, she can reduce both the cost of assembling the sample frame and the cost of conducting the interviews. How does she do it? She first puts the numbers of the 10 districts into a basket and selects three. These three districts

contain 29 of the total 95 wards. She lists the 29 wards and again selects, this time choosing five. These five wards have a total of 503 households. Since this is very close to the desired sample size, she includes all of them in her sample.

Table A.1 : Example of multi-stage sampling

Stage	Unit	Number		Selected
		Total	In selected unit	
1	District	10	10	3
2	Ward	95	29	5
3	Household	10,450	503	503

Sometimes it is not feasible to use probability sampling. Non-probability sampling does not require a full sampling frame and is often cheaper and more convenient. The fact that the individuals are chosen in a non-random fashion, however, means that one must be very cautious in generalising from the findings.

Accidental, purposive, and quota sampling are the main types of non-probability sampling. An accidental sample includes anyone who is handy: a teacher samples her class, or interviewers are sent out to question anyone they meet on the street. The trouble is that the people chosen are seldom typical of the population. Interviewers tend to select people like themselves. Young males will disproportionately interview other young males, for example. They will also choose 'easy' respondents and quickly abandon attempts to interview those who would rather not participate. All of this injects bias into the sample. Purposive sampling involves choosing sample elements because they fill certain criteria. This method is often involved in selecting case studies. One or a few individuals (or firms or communities) are selected because they are considered either typical or outstanding examples of the variables with which the research is concerned. The case studies of Maria and Agnes in this manual are an example of such selection. Purposive sampling also runs the risk of bias. This is less serious when it is used for selection of a few illustrative case studies than it would be if the method were used to construct a larger sample from which the researcher might be tempted to generalise the findings.

Quota sampling is another form of non-probability sampling frequently used in settings where it is difficult to obtain a sampling frame. The quota is the exact number or minimum number of units to be selected. In quota sampling, interviewers are told to look for certain characteristics, but they are not told precisely whom to interview. So, for example, a value chain study might include consumer interviews to determine attitudes towards clothing from certain countries. Interviewers might be sent to shopping malls to do 100 interviews divided according to

✍ *gender*: 50 men and 50 women;

✍ *age*: 40 from the 'under 30' group, 40 between the ages of 30 and 60, and 20 over 60;

✍ *education*: 50 with high school education or less and 50 with more than a high school education.

The result is a series of accidental samples, but since the parameters are controlled, the result is more likely to be representative of the population than is possible with an accidental sample.

A.5.2 *Questionnaire writing*

Before beginning to write the questionnaire, you need to think about its eventual administration. A questionnaire that will be distributed and filled by the respondent is necessarily different from one that will be administered in a face-to-face interview. Interview questionnaires tend to be favoured in developing countries for a number of reasons. Low education levels mean that many people would have difficulty completing a questionnaire alone. Many societies are multilingual, and it can be difficult to determine the respondent's preferred language in advance. In many countries unreliable postal systems make it unwise to count on questionnaires sent through the mail either arriving or being returned. Finally, in many societies there is a clear preference for face-to-face over written communication. Nevertheless, a questionnaire that is completed by the respondent is sometimes appropriate, even in developing countries. If you need detailed personnel data or financial information from a company, it is usually better to arrange to have an official complete a questionnaire, rather than to expect him/her to supply the information in the context of an interview.

Once you have decided how to administer the questionnaire, you can begin the task of putting it together. Questionnaires are likely to get the best results if they are short and contain straight-

forward, easily answered questions. Questions are usually standardised to provide quantitative data, though qualitative questions are often included. The appendix to this manual contains a sample value chain questionnaire. The sample is intended to help you to develop your own questionnaire. It is not necessary - or even advisable - to use it exactly as it is. Once you have put together what you feel to be a good draft questionnaire, you should pre-test it. If you are an inexperienced researcher, you might do two rounds of pre-testing: the first with a colleague or friend who may help you to identify the most obvious trouble spots, and the second with persons like those who will be your eventual respondents.

A.5.3 Questionnaire administration and coding

If you will be using interviewers, the pre-testing will be preceded by a training session in which you review general and specific interviewing guidelines and ensure that the interviewers are familiar with the questionnaire they will be administering. The general guidelines are those contained in Box A.2 below. Specific interviewing guidelines pertain to your particular study. You may set guidelines about the normal length of the interview, how many interviews you expect completed in a day, how many times an interviewer should return to a reluctant or missing respondent before requesting a replacement, and so forth.

Once questionnaires have been completed, they will need to be coded so that they can be entered into a computer for statistical analysis. Closed-ended questions - i.e., those with a list of possible responses - are usually pre-coded on the questionnaire. Depending on the questionnaire design, it may still be necessary to go through the questionnaires and write the numerical codes for each question in the designated space on the form for ease of data entry. This is a task that is often done by interviewers after all interviews have been completed.

The coding of open-ended questions requires more attention and researcher involvement. Unless the survey is so large as to make this impractical, it is usual for all open-ended responses to be listed. The researcher then reviews the list and prepares a set of categories. The categories depend to a large extent on the purpose of the study and of the particular question. A question soliciting reasons for using a particular supplier may, for example, in one context have responses reduced to only two categories (economic reasons and social reasons) while in another, up to ten categories might be needed. Given that today's computer programmes make it fairly easy to

collapse many categories into a few, it is probably better to have too many rather than too few, at least at the initial stages of analysis.

A.5.4 Data analysis

Data analysis is the process of bringing order, structure and meaning to the mass of information collected. In many ways, the quantitative analysis of data resulting from the survey questionnaire is the easiest. Once the data have been entered into the computer and the resulting data files checked for errors - a process called 'data cleaning' - you are ready for the first level of analysis. This involves producing frequency distributions of all of the variables. The review of the first printout of frequencies often reveals a few more data problems that require cleaning. When these have been taken care of, you can move on to the next level of analysis, which usually consists of a set of cross tabulations and analyses of mean values. In a value chain study, for example, you might base this analysis on the destination of firms' exports. You might want to examine key variables such as the numbers of homeworkers, pay levels, benefits offered, and homeworkeer complaints for firms exporting mainly to the US, compared with those exporting to Europe and other destinations. To do this well, you will either need a fair knowledge of statistics or a competent data analyst who has this knowledge.

Box A.2: General rules for interviewing

Appearance

As a general rule, the interviewer should dress in a fashion similar to that of the people he or she will be interviewing. Whatever the style of dressing, interviewers should be neat and well groomed.

Demeanour

Interviewers should be pleasant. They should introduce themselves, state the purpose of the research, and request an interview. If an interview takes place in the respondent's place of business, the interviewer should make it very clear that the demands of the business take priority and that he/she is willing to wait and/or come back later. If a potential respondent is reluctant to be interviewed, the interviewer should try gentle persuasion, but should never be demanding.

Familiarity with questionnaire

The interviewer must study the questionnaire very carefully, question by question, in order to become thoroughly familiar with it. Ultimately, the interviewer must be able to read the questionnaire items to respondents without error, without stumbling over words and phrases, and in as natural a manner as possible.

Language

If a questionnaire is to be administered in a language other than the one it is written in, the researcher and interviewers should discuss and agree on the translation. It is especially important when there are multiple interviewers that all use the same wording in all versions.

Following question wording

Interviewers must resist the temptation to rephrase questions in their own words. If the respondent clearly misunderstands the intent of a question or indicates that he/she does not understand, the interviewer may attempt to clarify. After the clarification, however, the interviewer should repeat the question as written.

Recording responses exactly

Whenever the questionnaire contains open-ended questions, it is important that the interviewer record that answer exactly as given. No attempt should be made to summarise, paraphrase, or correct bad grammar.

Probing for responses

Sometimes respondents will respond to a question with an inappropriate answer, or they will give a very short answer to an open-ended question that was seeking their opinion. When the reply is inappropriate, the interviewer may probe by repeating the original question. When the answer seems too short, the interviewer may ask questions like "How is that?" or "Can you add anything to that?"

You will also need to analyse the qualitative data. Qualitative data analysis seeks to make general statements on how categories or themes in the data are related. Qualitative analysis differs from quantitative in that it is often done throughout the process of data collection rather than after it has been completed. The analysis involves a continuous process of organising and reorganising all material, including the researcher's own notes, in order to create categories, themes, and patterns. Some of these categories and themes will have emerged from the initial literature review; others will become evident in listening to key informants or reading the responses to open-ended survey questions. Writing is an important aspect of qualitative data analysis. Writing up a case study, for example, forces the researcher to analyse and be precise about how the facts about a case firm or individual support or do not support a particular research hypothesis.

A.6 Case studies of selected enterprises and networks

Value chain research can be enriched by the inclusion of selected case studies of individuals, firms, and networks. Case studies are especially appropriate to investigating "how" and "why" questions. The in-depth interviewing usually used to develop case studies allows the researcher to probe more deeply than might otherwise be possible. The process of developing a case study also allows new insights to emerge and be followed up, making it especially useful in exploratory research. The case study itself, when included in a research report, puts flesh and blood onto what can otherwise appear to be dry data.

Case study methods involve systematically gathering enough information about a particular person, social setting, event, or group to permit the researcher to understand how it operates or functions (Berg 1998: 212). It is not actually a data-gathering technique in itself, but a methodological approach that uses several data collection tools. A case study of a firm might be built up by supplementing the basic firm data collected in a survey with a series of in-depth interviews of key personnel, factory visits to observe and ask detailed questions, gathering of historical and product information from the company's website, and analysing material from key informant interviews. As the story grows, it is written, edited, and rewritten. The story may also be annotated - with either conventional footnotes or marginal notes - in order to document key

points in the findings. The final write-up of a case may range from a page or so to more than 50 pages, depending on its purpose and the researchers' resources.

Case studies of networks require the additional dimension of studying the relationships among actors as well as the actors themselves. A network is generally defined as a specific type of relation linking a defined set of persons, objects, or events. Since a value chain is essentially a network of producing firms and their related suppliers, distributors, and service providers, the techniques of studying networks are pertinent here. The researcher can examine the nature of the relationship between actors on any number of dimensions. He/she may, for example, ask whether the relationship is horizontal or vertical, i.e., between actors at the same level of the value chain (e.g., producer-to-producer), or between actors at different levels such as a producer and its suppliers. Alternatively the researcher may be interested in the origins of the relationship. Did the two parties go to school together or meet through a business association? Or the researcher may want to know about the content of the relationship. Is the relationship between producers and their distributors simply one of market exchange in which goods are sold? Or is the basic exchange relationship also the occasion for passing along market information? Value chain researchers are often especially interested in power relations. Who sets the rules that others in the chain must follow? Who exercises the greatest power over what is produced and how it is priced?

The first step in network analysis is to specify the boundaries of the network. The need for this is obvious in the case of social networks, but even in value chain analysis the boundaries must be set. In the analysis of a garment chain, for example, will the vertical dimension go back only to textile firms or all the way to yarn producers or cotton growers? Will relations with all suppliers be studied or only with those supplying major inputs?

The next step is to decide how to select network members for study. A snowball method is often used. The researcher identifies a sample at a given level - say garment producers - and then snowballs outward to get those firms' suppliers, distributors, and service providers. If time and resources permit, the snowballing can have more than one starting point. You could, for example, start with two samples, one of garment producers and another of textile firms, and trace the relations from both sides.

The third step is data collection. Many of the methods of collecting data already described are suitable for gathering network data. The important thing to remember is that in addition to the basic questions about the respondent or firm being interviewed, two other types of questions must be asked: questions about the relationship of that actor to others known to be in the network, and questions aimed at identifying previously unknown network members.

The final step is data analysis. The general techniques of quantitative and qualitative analysis are also applicable to network data. In addition, many analysts make extensive use of matrices, maps, and other diagrams to capture the nature, direction, strength, and complexity of individual relations and entire networks. Our chain maps in chapters 8-10 are examples of such network maps.

The research methods described thus far can all be called 'conventional' methods. All, to a greater or lesser extent, involve one or more researchers who seek information from and about other people and situations. Even participant observation, as it is usually carried out, falls into this category because the researcher originates outside of the situation being observed. These are, however, not the only types of research. In the next two sections we take up two other approaches to research that deserve special mention: participatory and feminist research methods.

A.7 Participatory research methods

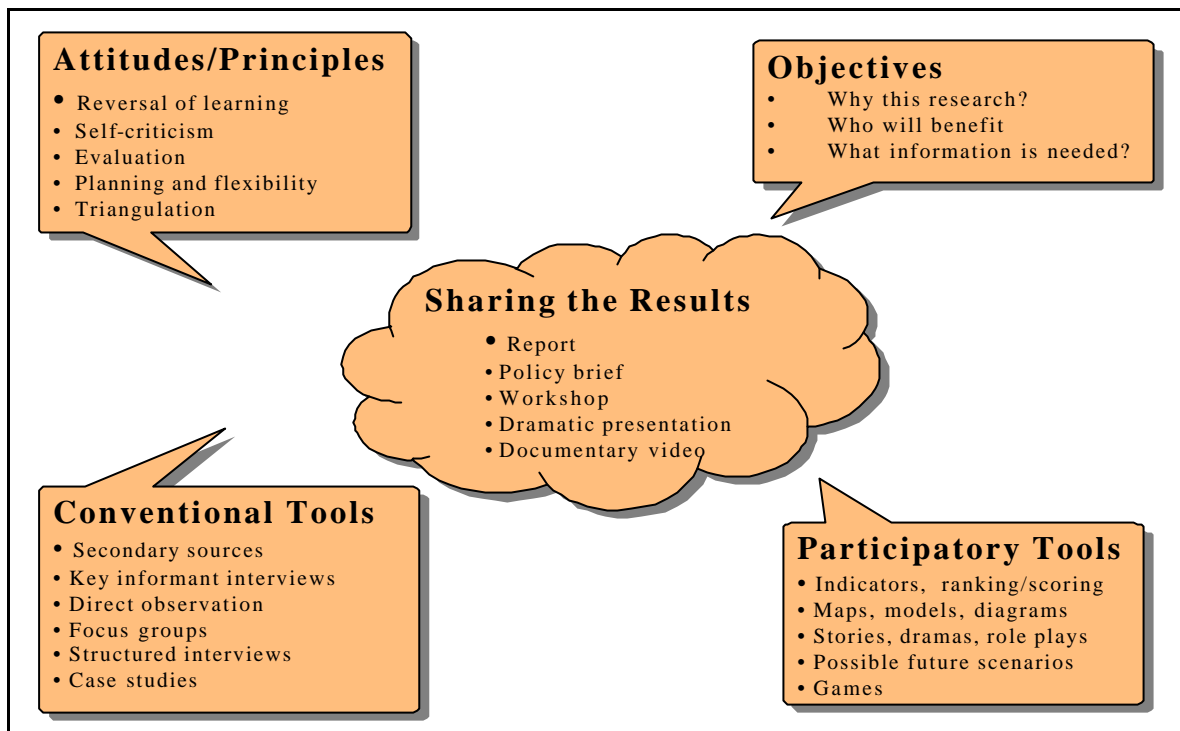
Participatory research replaces the expert-driven, extractive approach of conventional research with methods in which data collection and analysis are largely carried out by local people with professional researchers acting as facilitators. The approach recognises that local people are the ones who know most about their own livelihood systems and have the most to gain or lose in any development effort. This means that they should be active participants in the selection, design, planning and implementation of programmes and projects that will affect them.

The advantages of participatory research are fairly obvious. Members of the local community often have an easier time getting sensitive information than external researchers. They are also better able to judge the accuracy of situations described by others. Furthermore, people who have been involved in the research are more likely to own its findings and recommendations. At

first glance, it seems that participatory research should be more cost effective because it does not require, for example, the paid research assistants usually needed to administer a survey. This ‘advantage’, however, is more apparent than real, because mobilising local people and facilitating their research uses a great deal of relatively expensive researcher time and energy.

The key to participatory research lies in its underlying attitudes and principles (see Figure A7.1). In a reversal of the usual roles, researchers become learners and research ‘subjects’ become researchers. The readiness to listen to and learn from those being studied is critical. The role reversal prompts discussion, but the discussion is only fruitful if the ‘experts’ are ready to listen to what is being said. Also important are constant self-criticism and evaluation of the process. Participatory processes are still evolving. More importantly, they must be continuously adapted to local situations and cultures. This calls for constant re-examination to see that the methods being used are achieving their aims. While participatory research must be planned in advance, researchers must also remain flexible and ready to change if particular techniques are not working well. Finally, participatory research relies heavily on triangulation, or multiple strategies. Studying the same phenomenon from different perspectives and/or using different methods offers additional insights and, perhaps more importantly, provides opportunities to reconcile differing results. For example, when external researchers and community members investigate a particular problem, like child labour, they may uncover different issues. If the differences become the subject of a later discussion, the two groups of researchers can learn from each other, thereby strengthening the study findings and recommendations. In other cases, certain data may be gathered using both conventional and participatory methods. Here again, the comparison of results can show real or apparent disparities that can prompt discussions that are very useful for the final outcomes of the study.

Figure A7.1: Participatory Research Process



Like most research, a participatory study begins with the setting of objectives. Those initiating the research, whether ‘outside’ researchers or members of a particular local community, need to state why the research is needed. A newly-formed homeworker association might want to identify the different value chains that are receiving their members’ work, or a micro-finance NGO be looking to see how many homeworkers would like to start own-account businesses. The objectives specify who will benefit from the research. This is especially important in participatory studies, because these are the people who need to be incorporated into the process. In addition to the general objective(s), most research projects will also have specific objectives that spell out the main types of information that needs to be gathered. For example, the homeworker association mentioned above might ask: What factories in the area use homeworkers? What items are the homeworkers making? Are there intermediaries between the factories and the homeworkers? To whom do the factories sell the items made by homeworkers? Do they sell directly, or do they use traders/exporters?

Once the objectives are clear, the researchers need to decide on their data gathering tools and techniques. Although participatory research is probably best known for the creative techniques

that have grown up around it, many studies actually draw their tools from both conventional and participatory methods. In the conventional toolbox, the researchers have available the secondary sources, key informant interviews, focus group discussions, structured interviews, and case studies described elsewhere in this appendix.

The specialised tools fall into several categories. Those in the first group are analytical, and include indicators and ranking or scoring techniques. Indicators may be local, national, or global. Local indicators are especially important. For example, the homeworkers you are researching may refer to the 'difficulty' of doing certain sewing jobs, and they may say that pay is tied to difficulty. If you are investigating the fairness of the pay scheme, you may ask the homeworkers to teach you to distinguish a 'difficult' task from an 'easy' one. You may find that sewing around a curve is an indicator of a difficult task, while tasks using straight sewing are considered easy. You can take the process further, if necessary, by ranking or scoring the common tasks or bundles of tasks.

Another group of participatory techniques are those that are primarily visual. This group includes mapping, making models, and drawing diagrams. You may, for example, involve the homeworkers in drawing maps which show who they work for. This may show how they receive the work from two manufacturers directly and also from one intermediary. You would then ask them to extend the map and show how they fit into the network of the intermediary. This will give you their perception. Discussing the maps in a group may also provide an opportunity for the homeworkers to make suggestions on how the flow of work can be improved and how they can help each other to remove bottlenecks.

Still another group of techniques consists of stories, dramas, and role-plays. Researchers may use stories and folklore from the local culture to kick off discussion of issues to be researched. Sometimes new stories are written using material generated by group discussions and interviews. In this case, the professional researcher usually sets the structure of the story, but encourages the local participants to tell it in their own way. Similarly, dramas and role-plays may also emerge from the participants' experience. Homeworkers may be encouraged, for example, to dramatise their interactions with the driver who brings and collects their work. The drama may capture the reality in much more detail than is usually possible in a question-and-answer interview.

Finally, some researchers use games or scenario building to elicit information. Games are tricky because it is sometimes difficult for participants to see their purpose. An obvious use of games is in research involving children. They can be used as energizers to keep child participants focused on a task, or they may be a data-gathering method in themselves (see Johnson, et al. 1998 for methods to use in participatory research with children). Games are often used in adult research as well. For example, researchers use games of chance to assess participants' attitudes towards risk-taking. Scenario building is another technique that is available in the participatory toolbox. Scenarios are possible future conditions. Participants can develop their own scenarios in response to questions like: How would you like to be working two years from now? Or, how can the homeworkers and the factories work together better? Alternatively, researchers can provide a draft scenario. Either way, the participants are asked to discuss the possible futures and plan for the one they prefer. Sometimes, all discussion is done in a large group including representatives of all stakeholders; at other times, initial discussions are held in small homogeneous groups. The advantage of the latter process is that more vulnerable groups, such as homeworkers, have an opportunity to formulate their hopes and discuss plans together before facing other stakeholders.

The entire process, from attitudes and objectives to the various types of tools, feeds into a sharing of results. The sharing may take the conventional forms of a research report or policy brief, but participatory research often uses more creative ways of bringing the results to those who need the information. A workshop with plenty of time for reaction and feedback is one form of sharing. Researchers – both professionals and those from the community – explain the results, using charts and pictures. The group then discusses the input, either in small groups or in a large plenary session. The group's questions and concerns should be carefully noted for future use. Sometimes, either as a separate exercise or within the workshop setting, results are presented in dramatic form. Suppose, for example, the research revealed the need for homeworker representation on the union benefit committee. A brief drama showing homeworkers, factory workers, and company representatives bargaining over a key benefit issue might be an effective way of communicating this, especially in situations where homeworkers have no experience of such negotiations. Research results can also be shared in the form of a documentary video. A short video can be an effective and flexible form of output.

It combines verbal and visual messages, and so has an impact that is hard to achieve in the printed word alone. Since it can be used alone or as part of a larger presentation, it is easily adapted to various audiences.

Many of the techniques of participatory research have been developed for use in connection with development work in rural settings. These are described in now classic work by Robert Chambers and many others who have built on his approach. An excellent source of information about these methods can be found at www.ids.ac.uk/ids/particip/research/pr.html. A useful resource in text form is Mikkelsen's (1995) research methods book, which focuses on participatory approaches. In some countries, there are organisations devoted to training and promotion of participatory methods (e.g., PAMFORK in Kenya). These are valuable resources for providing communities and researchers with information about specific methods and techniques that have been tried elsewhere. In this section, we have suggested a number of ways of adapting participatory approaches to value chain research. We urge you to continue the process.

A.8 Feminist research methods

Like participatory research, feminist research rests on a philosophical orientation that is somewhat different from that of conventional research. In the case of feminist research, the starting point is the recognition that a person's material life (what one does for a living and related facts such as the quality of one's material surroundings) has a profound effect on his/her understanding of the world. A street child who picks through garbage every day sees life very differently from a middle class schoolboy; a sweeper in a factory has a different world view from the company's managing director; a woman's perspective on life in the family is almost always different from her husband's. Feminist research methods try to see the reality being studied from the standpoint of the female members of the society. Neilson (1990: 20) claims that "to consciously adopt a woman's perspective means to see things one did not see before and also to see the familiar rather differently."

Feminist research recognises that in most societies women are subordinated to men. This means that the perspective of a woman is not just different from that of a man in some neutral sense.

Rather it reflects her situation as a member of a disadvantaged group. Feminist research starts by seeking a more complete understanding of reality, especially the impact of gendered institutions on people's lives. It does not, however, stop there. Feminist research also concerns itself with consciousness raising and with using research to empower women and transform society.

The orientation of feminist research affects its methodologies. For one thing, feminist scholars allow themselves to enter into the situation of the researched in ways that might be seen as inappropriate in traditional research, where objectivity is believed to require strict separation of researcher and research subject. Especially, but not only, when both researcher and respondent are women, occasions may arise in which the researcher is in a position to share experiences and/or knowledge with the respondent in ways that aim at increasing her power. Viewed as a violation of the strict separation of researcher and subject in conventional research, this would be acceptable and even expected in the context of feminist research. It should be emphasised here that the consciousness raising and learning go both ways. Researchers report having learned a great deal about their own reality when the conditions were right for give and take with respondents.

Feminist research borrows many of its data collection methods from traditional and participatory research, but tends to emphasise the qualitative over the quantitative approaches. Feminist scholars analyse secondary sources, interview key informants, engage in participant observation; they may even administer surveys. To these they add visual methods, conversational analysis, and other participatory and qualitative methods. Triangulation allows them to test their own findings. This allows for the interaction of quantitative and qualitative methods. It is especially important in cases where rejection of certain accepted methods leaves feminist researchers open to the criticism of being 'unscientific.'

Glossary of Terms

Advocacy:	The process and practice of trying to influence policies or ideological positions affecting a section of people, e.g. children, the disadvantaged, etc. Those engaged in advocacy are discontented in varying degrees with the existing situation.
Asymmetrical:	In a relationship it means that one side is much stronger than the other.
Bargaining:	A process and activity involving two or more parties who are exchanging goods or services. The parties normally give and take depending on what is under discussion.
Bargaining power:	This is the strength that a bargaining party has in relation to that of the other(s). It is in most cases what determines who wins and who loses during the bargaining process.
Buyer-driven:	The power lies with the buyer. In a value chain, the buyer sets the terms under which others in the chain operate.
Child labour:	This is the situation in which children under the statutory adult age are engaged to provide services of one or other type. Child labour could be either work in a family business, at home or paid employment somewhere else.
Codes:	The term “code” is used in two ways in this manual. The first is in the context of data entry and analysis. Here codes are symbols representing a response to a question. They may take the form of numbers or words, and their meanings are listed in a code book. The second meaning refers a law. In this sense, a code is a set of rules on particular subject as, for example, a code of conduct that prohibits the use of child labour.
Collective action:	This is any form of behaviour or activity done by a group of people who come together specifically to support of a certain cause.
Contractor:	It is someone or a group of people who is given a task to perform and rewarded according to terms that are agreed upon in the contract.
Culture:	This refers to a people’s way of life including their values, norms, beliefs, attitudes, language and practices. Culture is specific to a locality or geographical area and it encompasses how people make sense of their reality and carry out their daily activities.

Customer:	A person who buys something from another or a business. At times, the term customers refers to the more frequent buyer as opposed to the occasional one.
Data:	These are pieces of information about a certain aspect of social, economic or political life. Data is plural, with the singular being datum.
Domestic retailer:	This is a person who sells their goods or services in their home location or country. They sell directly to those who consume or use those goods and services.
Enterprise:	An activity involving taking of risks against the calculation of certain expected benefits. It entails the use of energy, creativity and initiative in all operations.
Export market:	This is a place for selling goods and services away from one's location or home country.
Factory workers:	They are people expending their energy on a particular task within a manufacturing establishment.
Feminist:	A person who is struggling to have equal opportunities for women in the same line as those of men. A feminist believes that women have always been at a disadvantaged position when viewed in relation to men.
Foreign retailer:	This is a person who sells their goods or services outside their home location or country. They sell directly to those who consume or use those goods and services within other countries outside their own.
Garment value chain:	This is the process through which a garment passes from the design to the consumption stages. The worth of the garment increases at each point of the process.
Garment cluster:	A group of garment producing businesses located around the same place. A cluster may also include suppliers of raw materials and specialised machinery, as well as traders dealing in the final product.
Garment enterprise:	A business enterprise/firm engaged in the manufacture and/or distribution of clothing.
Garments(s):	An article of clothing or costume. It is normally the product of textile work and a raw material for the production of clothes.

Gender analysis:	Gender refers to the socio-cultural ideas about what males and females should be and their roles. Gender analysis is therefore a way of trying to understand the place of men and women in a particular phenomenon, e.g. a value chain.
Gender relations:	This is the way people interact with one another due to the expectations of men and women in that particular society. Actions and reactions are based on those social expectations.
Geographical spread:	This is the spatial boundaries of a phenomenon such as a value chain. The geography implies that some value chains can be international, while others could be national, regional or local.
Global value chain:	This is the sequence of activities required to make a product. It can refer to all activities from conception of a product to its consumption or to some of them, for example from producer to retailer. A value chain is 'global' when different activities are carried out in different country.
Globalisation:	It is the increasing linkages between and among actors located in different countries. The linkages are social, economic, cultural and political.
Governance:	The process of co-ordinating activities in a particular system, for example a chain.
Household:	These are people who live and engage in consumption under one roof. Members of a household need not be of the same family.
Homeworkers:	These are people who conduct their activities in the place where they live. They are either own-account workers or out-workers for manufacturers or intermediaries (middle-persons).
Horizontal integration:	The coming together of different processes and actors within the same level of activity, e.g. production or distribution.
Informal workers:	They engage in work without being registered.
Informant:	Anyone who gives information during a data collection exercise. Informants are normally selected in a planned and intentional manner.
Input-output structures:	The set of products and services linked together in a sequence of value-adding economic activities.

Integration:	The bringing together of different processes and actors to form one unified system or way of doing things.
Intermediary:	This is the middle man (middle person) who links the producers with the buyer.
Interview:	This is the process of putting questions to someone in order to gather information. Interviews can be structured, semi-structured or unstructured.
Key Informant:	This a specialised person with a lot of information about certain issues. He or she has a good overview and good contacts with others in the locality or industry.
Labour:	This is energy expended on work. A worker's energy is their labour. It is usually measured in terms of person-hours, person-days, person-weeks, person-months, etc.
Labour intensive:	An undertaking that mainly uses human energy. People are the ones who provide the needed effort for the outputs to be realised. Labour intensity can be measured by the ratio of labour to capital.
Legislation:	The act or process of making a law or laws. It could also mean the laws themselves.
Liberalisation:	A process of increasing freedom from controls and certain procedures. In enterprises and economic life, liberalisation is the removal or relaxing of rules and controls, allowing the market to work freely.
Local market:	This is a place for selling goods and services within one's location or home country. Buyers are within short distance from the seller.
Mapping:	To make a plan of how activities or processes are connected. The arrangement is a pictorial representation of the actual reality.
Micro-finance:	These are small amounts of money given or lent to support an enterprise.
National value chain:	This is a chain in which all stages of the working and selling of a good takes place within one country.
Network:	An arrangement in which people /enterprises are (formally) independent, but agree to co-operate.

Observation:	A scientific method involving the accurate watching and noting of phenomena. Unlike casual observation, it is planned for in advance and carefully done.
Occupational health:	The well being of a person or group of people as a result of the work they do. It means avoiding harm that could arise from work.
Outlet:	A store, shop or place where goods or services from a wholesaler or manufacturer are sold.
Participatory approach:	Process of collecting information by involving those whose information is being sought in the record process. The information is not extracted in a quick question-answer session, but emerges from a longer process in which the person's own concepts and criteria are used to make sense of what is being investigated.
Primary data sources:	Information is collected directly from those who know (for example, retailers, factory managers, workers). In contrast a book, newspaper or statistical yearbook is a secondary source.
Questionnaire:	A set of questions for use in an interview. A questionnaire can have open-ended (those with blanks for filling in responses) or closed questions (those with fixed alternatives).
Quota:	A share which each person in a group of people is expected or allowed to contribute. A quota in garment production is the amount each worker is expected to produce in a certain period of time. In importation, a quota is the limit on the quantity of a good/service that may be imported in a given time period.
Research:	A systematic process of finding out something. It is (expected to be) planned and orderly so as to ensure the production of information which can be understood and checked.
Research design:	The overall plan of carrying out a research. It includes what data will be gathered, in what ways and for what reasons.
Research questions:	These are puzzling issues raised at the beginning of a research. They specify what the researcher wants to find out.
Retailer:	The person or firm that sells goods or services to the consumer. Retailers could be small (cornershop) or large (department store).

Retailing:	The process of selling goods and services to the customer, often in small quantities. It usually entails the displaying of what is being sold in singles.
Sampling:	This is the selection of a small but representative part of a population from which to collect information. Sampling is done because it may not be possible to cover a large population due mainly to constraints of time and other resources.
Secondary data sources:	Published or unpublished information that has collected by someone else, either for research or other purposes. The most common secondary sources are unpublished data collected by government, research reports, books, journals, newspaper articles, etc.
Segmentation (of workers):	Division of workers as per their attributes or characteristics, e.g. output, quality, etc.. It is an intentional process designed to make it easier to handle a large group of workers.
Small scale enterprise:	A business activity that is limited in terms of amount of capital outlay, number of workers and/or scope of operations.
Standards:	Something established as a rule, normally for measuring capacity, quality or other aspects. Labour standards refer to the kind of employment practices that we are allowed and not allowed, for example no child labour.
Sub-contractor:	It is someone or a group of people who are given a task to perform on behalf of a contractor. They are answerable to, and rewarded by, the contractor and not to the main client or giver of the task.
Supplier:	A person or organisation which provides raw materials, machinery, or other inputs to an enterprise on the basis of an agreement.
Survey:	In research, it is a strategy in which one collects data systematically from everybody concerned (the population) or only from some (a sample).
Symmetrical:	Something characterised by interdependence, harmony, balance and fitting together of the constituent parts. In a symmetrical relationship, both parties have equal power.
Tariff:	A charge or payment required by the government upon export or import of some goods. It is form of taxation.

Textiles:	Usually refers to woven or knitted clothes; can also refer to the yarn (cotton, wool), which is the raw material used for weaving and knitting.
Value:	The worth of a thing in terms of money or its quality as measured by how desirable or wanted the thing is.
Value added:	The worth that is added to a good or service at each stage of its production or distribution. A firm can calculate its value-added by subtracting the value of the inputs it purchases from the full value of its output.
Value Chain:	This is the set of value-adding activities through which a product passes from the design to the consumption stages. The worth of the product increases at each point of the process, hence the term value chain.
Variable:	Anything that varies in terms its quantity or quality. For example, in a survey of homeworkers, <i>age, location, number of hours worked last week</i> , could be variables.
Vertical integration:	The coming together in a single firm of activities extending over more than one of the successive stages of the production-distribution process. Vertical integration in the garment industry happens when, for example, a garment producer buys one of its textile suppliers.
Wholesaler:	Someone who sells goods and service in large quantities. They buy from the manufacturer to sell to the retailer for onward selling to the consumer.
Workers:	A person who provides their physical or mental energy to an industrial, domestic or other concern in return for a living. The worker's energy is rewarded with a wage.

Bibliography

Key resource prepared for WIEGO and available on WIEGO website:

Baden, Sally. 2001. "Researching Homework and Value Chains in the Global Garments Industry: An Annotated Resource List". Prepared for WIEGO Global Markets Programme. www.wiego.org/publi4.ssi

Abernathy, Frederick H; Dunlop, John T; Hammond, Janice H; and Weil, David. 1999. *A Stitch in Time: Lean Retailing and the Transformation of Manufacturing - Lessons from the Apparel and Textile Industries*. Oxford: Oxford University Press.

Babbie, Earl. 1973. *Survey Research Methods*. Belmont, CA: Wadsworth Publishing Company.

Babbie, Earl. 1989. *The Practice of Social Research*. Fifth Edition. Belmont, CA: Wadsworth Publishing Company.

Barrientos, Stephanie. 2000. "Globalization and Ethical Trade: Assessing the Implications for Development". *Journal of International Development*, 12: 559-570.

Barrientos, Stephanie; Bee, Anna; Matear, Ann; and Vogel, Isabel. 1999. *Women and Agribusiness: Working Miracles in the Chilean Fruit Export Sector*. Basingstoke: Macmillan Press

Barrientos, Stephanie; McClenaghan, Sharon; and Orton, Liz. 1999. "Gender and Codes of Conduct: A Case Study from Horticulture in South Africa". Report on research project of Christian Aid, funded by the Department for International Development

Bell, Martin, and Albu, Michael. 1999. "Knowledge Systems and Technological Dynamism in Industrial Clusters in Developing Countries". *World Development* 27(9): 1715-1734.

Berg, Bruce L. 1998. *Qualitative Research Methods for the Social Sciences*. Third Edition, Boston: Allyn and Bacon.

Boomgard, J; Davies, S; Haggblade, S; and Mead, D. 1992; "A subsector approach to small enterprise promotion and research", *World Development*, Vol 20, No 2: 199-212.

BRIDGE (Briefings on Development and Gender). Issue No.8: Trade Policy. July 1999. See <http://www.ids.ac.uk/bridge/dgb8.html>

Carr, Marilyn; Chen, Martha; and Tate, Jane. 2000. "Globalisation and Homebased Workers". *Feminist Economics* 6(3):123-142.

Casson, Mark, and Robert Price. 1987. "Multinational Enterprises in LDCs." In Norman Gemmill, ed., *Surveys in Development Economics*. Oxford: Basil Blackwell, Inc.

Chen, Martha, (ed), 1996, *Beyond Credit: A Sub-Sector Approach to Promoting Women's Enterprises*, Ottawa: Aga Khan Foundation, Canada.

Chen, Martha; Sebstad, Jennefer; and O'Connell, Lesley. 1999. "Counting the Invisible Workforce: The Case of Homebased Workers". *World Development* 27(3): 603-610.

Christerson, Brad, and Appelbaum, Richard P. 1995. "Global and Local Subcontracting: Space, Ethnicity, and the Organization of Apparel Production". *World Development* 23(8): 1363-1374.

Connell, R.W. 1996. "New Directions in Gender Theory, Masculinity Research, and Gender Politics" *ETHNOS* 61(3-4): 157-178.

Connelly, Patricia M; Li, Tania Murray; MacDonald, Martha; Parpart, Jane L., 1995. "Restructured Worlds/Restructured Debates: Globalisation, Development and Gender." *Canadian Journal of Development Studies Special Issue*: 17-38.

Delahanty, Julie. 1999. "A Common Thread: Issues for Women Workers in the Garment Sector". Ottawa: The North-South Institute. www.wiego.org/publi4.ssi

Department for International Development. 2000. *Eliminating World Poverty: Making Globalisation Work for the Poor*. White Paper. www.dfid.gov.uk/

Dicken, Peter. 1999. *Global Shift*. Third edition. London: Paul Chapman Publishing Ltd.

Dolan, Catherine; and Humphrey, John. 2000. "Governance and Trade in Fresh Vegetables: The Impact of UK Supermarkets on the African Horticulture Industry". *Journal of Development Studies*, 37(2): 147-176. See also *IDS Working Paper 96* on www.ids.ac.uk/ids/bookshop/index.html

Elson, Diane and Pearson, Ruth, 1981, "Nimble Fingers Make Cheap Workers: An Analysis of Women's Employment in Third World Export Manufacturing", *Feminist Review*, Spring

Esim, Simel, 1998, "Weaving for Export: Home-based Work in Textiles in Denizli, Turkey", HomeNet Newsletter, No9, Summer.

Fakude, Gordon. 2000. 'Informalisation in Kwazulu-Natal's Clothing Sector', Research Report, Industrial Restructuring Project, School of Development Studies, University of Natal, Durban.

Fernandez-Kelly, M. Patricia; Garcia, Anna M. 1989. "Informalisation at the Core: Hispanic Women, Homework, and the Advanced Capitalist State." In Portes, Alejandro; Castells, Manuel; Benton, Lauren A., eds., *The Informal Economy: Studies in Advanced and Less Developed Countries*, pp. 247-264. Baltimore: The Johns Hopkins University Press.

Fontana, Marzia; Joekes, Susan; Masika, Rachel. 1998. "Global Trade Expansion and Liberalisation: Gender Issues and Impacts." Briefings on development and gender (BRIDGE) Report No. 42. Sussex: Institute of Development Studies.

Fortuna, Juan Carlos; Prates, Suzana. 1989. "Informal Sector Versus Informal Labour Relations in Uruguay." In Portes, Alejandro; Castells, Manuel; Benton, Lauren A., eds., *The Informal Economy: Studies in Advanced and Less Developed Countries*, pp. 78-94. Baltimore: The Johns Hopkins University Press.

Gereffi, G. 1999. 'International trade and industrial upgrading in the apparel commodity chain'. *Journal of International Economics*, Vol 48, No 1: 37-70.

Gereffi, Gary. 1994. "Capitalism, Development, and Global Commodity Chains." In Leslie Sklair, ed., *Capitalism & Development*, pp. 211-231. London: Routledge.

Gereffi, Gary; Garcia-Johnson, Ronie; and Sasser, Erika, 2001, "The NGO – Industrial Complex", *Foreign Policy*, July/August:56-65

Gibbon, Peter. 2001. 'At the Cutting Edge: UK Clothing Retailers and Global Sourcing'. CDR Working Paper 01.4, Copenhagen: Centre for Development Research.

Gibbon, Peter. 2000. "'Back to the Basics' through Delocalisation: The Mauritian Garment Industry at the End of the Twentieth Century." CDR Working Paper 00.7. Copenhagen: Centre for Development Research.

Green, Duncan, 1998, "Together we can clean up the Clothes Trade: The Asian Garment Industry and Globalisation", Report, London: CAFOD, www.cafod.org.uk

Haggblade, Steven J., and Gamser, Matthew S. 1991. *A Field Manual for Subsector Practitioners*. GEMINI Project. Washington: U.S. Agency for International Development.

Håkansson, Håkan, and Johanson, Jan. 1993. "The Network as a Governance Structure: Interfirm Co-operation Beyond Markets and Hierarchies." In Gernot Grabher, ed., *The Embedded Firm: On the Socioeconomics of Industrial Networks*, pp. 35-51. London: Routledge.

HomeNet, 1999, The HomeNet Guide to the ILO Convention on Homework, Ahmedabad: SEWA and Leeds: HomeNet. www.gh.apc.org/homenet/

HomeNet, 2001, "HomeNet Mapping Pack: a Guide to Action Research with Homebased Workers", Mimeo, HomeNet Office; Leeds; available from homenet@gn.apc.org

HomeNet, (various years), The Newsletter of the International Network for Homebased Workers, Leeds: Homenet. www.gh.apc.org/homenet/

Humphrey, John, and Schmitz, Hubert. 2000. "Governance and upgrading: linking cluster and value chain research". *IDS Working Paper*, 120. Brighton: Institute of Development Studies, University of Sussex. See www.ids.ac.uk/ids/bookshop/index.html.

ID21. "Richer or Poorer? Achievement and Challenges of Ethical Trade". *Insights* 36, March 2001. See www.id21.org/insights/insights36/index.html

ID21. "Add Value, Go Global: Can Southern Firms break into Export Markets?". *Insights* 33, June 2000. See www.id21.org/insights/insights31/index.html

Institute of Development Studies. 1999. *Background Notes for Workshop on the Spreading of the Gains from Globalisation*. See www.ids.ac.uk/ids/global/conf/globalwks.html#bckgrdnotes

International Labour Organisation. 1996. *Globalisation of the Footwear, Textiles and Clothing Industries*. Report for discussion at the Tripartite Meeting on the Globalisation of the Footwear, Textiles and Clothing Industries: Effects on Employment and Working Conditions. Geneva: International Labour Organisation, Sectoral Activities Programme.

Jhabvala, Renana and Tate, Jane, 1996, "Out of the Shadows: Homebased Workers Organise for International Recognition", SEEDS Paper No. 18, New York: SEEDS

Joekes, Susan. 1987. *Women in the World Economy*. Oxford: Oxford University Press.

Johnson, Victoria; Ivan-Smith, Edda; Gordon, Gill; Pridmore, Pat; and Scott, Patta. 1998. *Stepping Forward: Children and Young People's Participation in the Development Process*. London: Intermediate Technology Publications.

Kabeer, Naila; Subramanian, Ramya. 1996. "Institutions, Relations and Outcomes: Framework and Tools for Gender-Aware Planning". *IDS Discussion Paper* No. 357. Sussex: Institute of Development Studies.

Kaplinsky, Raphael. 2001. "Is Globalization all it is cracked up to be?" *Review of International Political Economy*, 8(1) : 45-65.

Kaplinsky, Raphael; Morris, Mike; and Readman, Jeff. 2001. "Globalisation and Upgrading: Innovation and Learning in the Wood Furniture Chain". *Mimeo*. Institute of Development Studies, University of Sussex; School of Development Studies, University of Natal, and Centre for Research in Innovation Management, University of Brighton.

Kaplinsky, Raphael. 2000. "Globalisation and unequalisation: What can be learned from value chain analysis?". *Journal of Development Studies*, Vol 37, No 2: 117-146. See also *IDS Working Paper* 110 on www.ids.ac.uk/ids/bookshop/index.html.

Kaplinsky, Raphael. 1998. "Globalisation, Industrialisation, and Sustainable Growth: The Pursuit of the Nth Rent." *IDS Discussion Paper* No. 365. Sussex: Institute of Development Studies.

Kidder, Louise H. 1981. *Selltiz, Wrightsman & Cook's Research Methods in Social Relations*. Fourth Edition. Tokyo: Holt-Saunders Japan, Ltd.

Knoke, David, and Kuklinski, James H. 1982. *Network Analysis*. Sage Quantitative Applications in the Social Sciences, No. 28. New Delhi: Sage Publications.

March, Candida. 1996. "Concepts and Frameworks for Gender Analysis and Planning: A Toolkit." Oxford: Oxfam Gender and Learning Team.

McCormick, Dorothy; Kimuyu, Peter; and Kinyanjui, Mary Njeri. 2001. "Kenya's Garment Industry: An Institutional View of Medium and Large Firms". Paper presented at conference on Business Systems in Africa, organised by the Institute of Development Studies, University of Nairobi, in collaboration with the Centre for Development Research, Copenhagen. Available from ids@nbnet.co.ke

McCormick, Dorothy, 2001, "Value Chains and the Business System: Applying a Simplified Model to Kenya's Garment Industry", *IDS Bulletin*, Vol 37, No. 3. July: 105 –115.

Mikkelsen, Britha. 1995. *Methods for Development Work and Research: A Guide for Practitioners*. New Delhi: Sage Publications.

Mikkelsen, Britha. 1995. *Methods for Development Work and Research: A Guide for Practitioners*. New Delhi: Sage Publications.

Mohamad, Maznah. 1992. "Outworking and Formal-informal Linkages: Handloom Weaving, Shoe-making and Home-based Factory Work in Malaysia." In United Nations Educational, Scientific and Cultural Organisation (UNESCO), *Women and Informal Sector: Their Contribution, Vulnerability and Future*, pp. 97-106. Geneva: UNESCO.

Momsen, Janet Henshall. 1991. *Women and Development in the Third World*. London: Routledge.

Morris, Jon and Copestake, James. 1993. *Qualitative Enquiry for Rural Development*. London: Intermediate Technology Publications.

Mugenda, Olive M. and Mugenda, Abel G. 1999. *Research Methods: Quantitative and Qualitative Approaches*. Nairobi: ACTS Press.

North-South Institute. 1999. "From Social Movements to Social Clauses: Grading Strategies for Improving Working Conditions for Women Garment Workers", Briefing B-42, Ottawa.

Obura, Anna P. 1991. *Changing Images: Portrays of Girls and Women in Kenyan Textbooks*. Nairobi: East African Educational Publishers.

October, Lionel. 1996. "Sectors, Clusters and Regions: A Study of the Cape Clothing Industry." DPRU Industrial Strategy Project Working Paper No. 2. Cape Town: University of Cape Town, Development Policy Research Unit.

Ofreneo, Rosalinda Pineda. 1994. "The Philippine Garment Industry." In Bonacich, Edna; Cheng, Lucie; Chinchilla, Norma; Hamilton, Nora; Ong, Paul, eds., *Global Production: the Apparel Industry in the Pacific Rim*, pp.162-179. Philadelphia: Temple University Press.

Palpacuer, F, 1997, 'Subcontracting networks on the New York garment industry: changing characteristics in a global era', paper presented at Conference on 'Global Production, Regional

Responses and Local Jobs: Challenges and Opportunities in the North America Apparel Industry', Duke University, Durham, NC, USA, 7-8 November.

Palpacuer, F, 2001, 'Competence-based strategies and global production networks: a discussion of current changes and their implications for employment', *Competition and Change*, Vol. 4, No. 4.

Peil, Margaret. 1995. *Social Science Research Methods: A Handbook for Africa*. Revised Edition. Nairobi: East African Educational Publishers.

Prugl, Elisabeth, and Tinker, Irene. 1997. "Microentrepreneurs and Homeworkers: Convergent Categories." *World Development* 25(9):1471-1482.

Prewitt, Kenneth. 1975. "Introductory Research Methodology: East African Applications." *IDS Occasional Paper* No. 10. Nairobi: University of Nairobi, Institute for Development Studies.

Robert, Annette. 1983. "The Effects of the International Division on the Female Workers in the Textile and Clothing Industries." *Development and Change* 14: 19-37.

Schmitz, Hubert. 1998. "Responding to Global Competitive Pressure: Local Co-operation and Upgrading in the Sinos Valley, Brazil. *IDS Working Paper* No. 82. Sussex: Institute of Development Studies. See <http://server.ntd.co.uk/ids/bookshop/results.asp>

Schmitz, Hubert, and Knorrina, Peter. 2000. "Learning from Global Buyers". *Journal of Development Studies*, 37(2): 177-205. See also *IDS Working Paper* 100 on www.ids.ac.uk/ids/bookshop/index.html

Sen, Gita. 1996. "Gender, Markets and States:A Selective Review and Research Agenda." *World Development* 24 (5): 821-829.

Sharma, Ursula. 1990. "Public Employment and Private Relations: Women and Work in India." In Stichter, Sharon and Parpart, Jane L, eds., *Women, Employment and the Family in the International Division of Labour*, pp. 229-246. Philadelphia: Temple University Press.

Sims, Marjorie; Esim, Simel and Working Group on Women Home-based Workers, 2000, 'Home-based Work in Turkey: Issues and Strategies for Organising' (available in English and Turkish), ICRW Information Bulletin, Washington, DC, January

Sturgeon, Timothy, 2001, 'How do we Define Value Chain and Production Networks?', *IDS Bullentin*, Vol.32, No. 3, July.

Tate, Jane. 1996. "Every Pair Tells a Story." Report on a Survey of Homeworking and Subcontracting Chains in Six Countries of the European Union. Unpublished manuscript.

The Economist. 2000. "Sweatshops to Body Scans." 29 April 2000.

Tinker, Irene. 1990. *Persistent Inequalities: Women and World Development*. New York: Oxford University Press.

Unni, Jeemol; Bali, Namrata, and Vyas, Jignasa. 1999. "Subcontracted Women Workers in the Global Economy: Case of Garment Industry in India". Study report sponsored by the Women's Economic and Legal Rights (WELR) Program of the Asia Foundation, Washington, DC.

Wilson, Fiona. 1993. "Workshops as Domestic Domains: Reflections on Small-scale Industry in Mexico." *World Development* 21 (1): 67-80.

Wilson, Fiona. 1991. *Sweaters: Gender, Class and Workshop-based Industry in Mexico*. Hampshire and London: Macmillan Academic and Professional Ltd.

Yanz, Lynda; Jeffcott, Bob; Ladd, Deena; Atlin, Joan. 1999. *Policy Options to Improve Standards for Garment Workers in Canada and Internationally*. Ottawa: Status of Women in Canada

Ybarra, Josep-Antoni. 1989. "Informalisation in the Valencian Economy: A Model for Underdevelopment." In Portes, Alejandro; Castells, Manuel; Benton, Lauren A., eds., *The Informal Economy: Studies in Advanced and Less Developed Countries*, pp., 216-227. Baltimore: The Johns Hopkins University Press.

Websites

Here are some of the main websites which can help you in your research and political work. Further sites are mentioned in the course of the manual and the reference section.

Value chain research (to be annotated)

- ? www.ids.ac.uk/ids/global/valchn.html
- ? www.ids.ac.uk/ids/global/vw.html
- ? <http://www.nu.ac.za/csds/>
- ? www.gapresearch.org/programme/profile-08.html
- ? www.cdr.dk/research/programmes/glaf/glaf.htm
- ? www.nsi-ins.ca/ensi/research/index.html
- ? www.wiego.org/publi4.ssi

Complementary methods and approaches

- ? On participatory methods in various fields, see www.ids.ac.uk/ids/particip/research/index.html
- ? On participatory assessment of competitive advantage, see www.meyer-stamer.de/paca.html

? On statistics concerning the size and contribution of the informal economy
www.wiego.org/areas5.ssi

Making an impact

Many websites relevant for practical use of value chain research operate under the ethical trade banner. Most of the following annotated list of websites was prepared by Ruth Essex for ID21, see www.id21.org/insights/insights36/index.html

If your chain includes the UK, a good place to start would be DFID's Ethical Trading Initiative, www.ethicaltrade.org/, which includes ETI's baseline code. Other core baseline standards on which many audits are being based are the ILO standards at www.ilo.org/public/english/standards/index.htm and SA 8000 set by Social Accountability International at www.sa-intl.org .

Business forums developing ethical trade strategies include the World Business Council for Sustainable Development's Sustainable Business Network at sbn.netforchange.com and the Prince of Wales Business Leader Forum at www.pwblf.org . The New Academy for Business, www.new-academy.ac.uk, has a database of relevant documents. For research links, have a look at the New Economics Foundation's www.neweconomics.org/Default.asp and Warwick University's Corporate Citizenship Unit at www.users.wbs.warwick.ac.uk/cc The Sustainable Markets Group at the IIED has projects on sustainable trade and supply chains at www.iied.org/smg/index.html.

Campaign sites are prolific. Focussing on the garment industry are Oxfam's Clean Clothes Code site at www.oxfam.org.uk/campaign/clothes/clocodh.htm and the Clean Clothes Campaign International Network, www.cleanclothes.org/ , with links to European groups and a focus on Asia. The Asia Monitor Resource Centre at www.amrc.org.hk has focuses on labour movements and ethical trade in its Asia Labour Update. Corporate Watch, www.corpwatch.org, has excellent links and a guide for researching corporate conduct. For information on labour standards in export processing zones, check out www.maquilasolidarity.org. Check out Christian Aid's supermarket campaign at www.christian-aid.org.uk/campaign and Sweatshop Watch at www.sweatshopwatch.org/swatch/index.html.

If you seek help in building a global alliance involving corporations, public bodies and non-profit organisations, try the Global Alliance for Workers and Communities,

<http://www.theglobalalliance.org/>

If you are concerned with child labour issues you can consult the following sites:

www.ilo.org/public/english/comp/child, www.oneworld.org/guides/chld_labour/index.html, and www.savethechildren.org.uk/labour/index.html.

The site of the US garment workers trade union is www.uniteunion.org

The following organisations are particularly concerned with improving the earning opportunities of women in the garment industry: Women Working Worldwide, www.poptel.org.uk/women-ww, part of an international network of women worker and consumer organisations, promotes the rights of women garment workers, whilst www.sewa.org and www.homenetww.org.uk are particularly concerned with the organisation of home-based workers.