

Power in Global Value Chains: Implications for Employment and Livelihoods in the Cashew Nut Industry in India

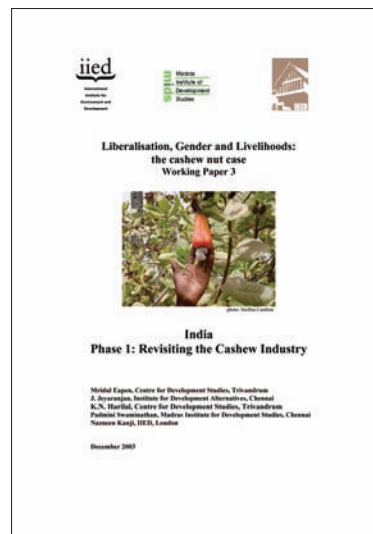
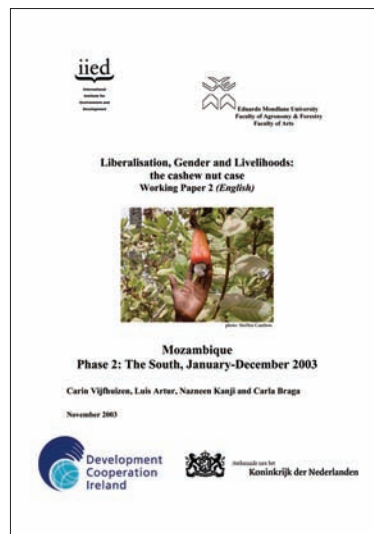
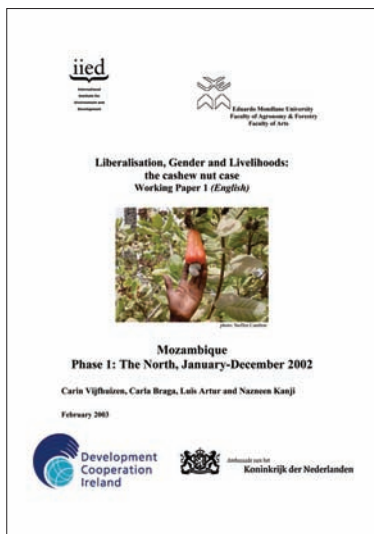


Summary Report

K.N. Harilal, Nazneen Kanji, J. Jeyaranjan,
Mridul Eapen and Padmini Swaminathan

March 2006





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Acronyms and Abbreviations

AFI	Association of Food Industries
CCI	Cashew Corporation of India
CENTA	Combined Edible Nut Trade Association
c.i.f.	cost, insurance and freight
CNSL	cashew nut shell liquid
DA	Dearness Allowance
EU	European Union
f.o.b.	free on board
Ha	hectare
HACCP	Hazard Analysis Critical Control Points
KSCDC	Kerala State Cashew Development Corporation
MW	minimum wage
Rs	rupees

Executive Summary

The last two decades have seen continuing measures to liberalise and privatise trade in most developing countries. For international donors, the aim is to boost global trade, benefit the South and reduce poverty. However, the results have been mixed and there is still no 'level playing field' for international trade. In fact liberalisation often increases inequalities: between countries, different socio-economic groups and between women and men. We are also witnessing a global restructuring of food product chains, with increasing concentration in corporate power.

India is a key player in the global cashew industry, a food product chain which stretches from the fields of India to the supermarkets of Britain. We explore the impacts of this expanding global market on the livelihoods of small farmers and the women employed in the Indian cashew processing industry. We undertook extensive fieldwork in Kerala and Tamil Nadu in south India and also interviewed cashew importers, roaster/salters and retailers in the UK.

We found that the power imbalance between intensely competing Southern producers and relatively few Northern buyers gives large retailers, the supermarkets, the upper hand over their supply chains. They are increasingly able to direct cashew networks, dictating the terms on which business is done and how the cashew is produced, as well as capturing most of the revenue generated along the chain. If traceability becomes more important, as indicated by key industry informants in our study, this would be another constraint for the Indian processing industry, which sources raw nuts from many different countries and different states within India.

Our survey of women cashew workers shows clearly that such employment, while essential for survival, does not pay enough to raise households out of poverty. The increasing informalisation of such employment creates insecure and hazardous working conditions. Employers take advantage of gender inequalities and women's cheaper labour to lower their processing costs; enterprises trying to pay decent wages find it increasingly difficult to compete in this 'race to the bottom'. This research is a good example of how international trade too often fails to provide the kind of economic growth which will foster secure and equitable employment and enable the working poor to escape from poverty. Government and international development organisations need to recognise this fact.

Our case study of the cashew industry in Panruti, Tamil Nadu shows that the diversity of retailing in India, with production for the domestic as well as international market, can be important to the livelihoods of large numbers of farmers, workers and traders. Thus there may be some room for manoeuvre by workers at the upstream ends of value chains, given a supportive policy environment. To protect the flexibility of such locally-generated systems, we need public policies that protect diversity in agri-food supply chains and which value the development of local, regional and national markets.

The advocacy of some international organisations for international and national labour standards legislation will only help workers if it is accompanied by policies, including competition policy, which recognise buyer power and which compel lead firms in the North to address the impact of their own purchasing practices on labour standards in the supply chain. Otherwise, the costs of meeting such standards are placed on firms which are much less able to bear them. Until policies which regulate entire global value chains are seriously explored, the cashew chain will remain a clear example of how the international trading system fails to improve the livelihoods of disadvantaged groups.

1. Introduction

1. Gereffi (1994) originally developed this approach based on an analysis of global commodity chains. See also Gibbon, 2001.

The increasing globalisation of production has generated considerable interest in analysing international trade in goods from the perspective of value chains. A value chain is a set of value-adding activities through which a product passes from the initial production or design stage to final delivery to the consumer (Kaplinsky, 2000). Value chain analysis has its origins in industrial sociology and new institutional economics and focuses on transactions between firms operating within the chain.¹ Increasingly, trade in labour-intensive products, largely produced by developing countries, is organised by global buyers. For food products, such as cashew nuts, these lead firms are usually located in developed economies and include not only multinational manufacturers but also large retailers, particularly supermarkets, and brand name firms.

The question of governance, a central concept in value chain analysis, arises when some dominant firms in the chain set parameters and exercise power and control along the chain (Humphrey and Schmitz, 2002). Understanding the nature of governance of a specific chain, in this case, cashew nuts, helps to understand the linkages between nodes of the chain, the distribution of gains along the chain and the potential for upgrading of independent but often subordinate firms. However, to fully understand the implications for employment and livelihoods for primary producers and workers who lie at the start of the chain ('upstream') and who are the focus of this paper, we argue that global value chain analysis has to be combined with locally contextualised livelihoods analysis. This livelihoods analysis, particularly when it incorporates gender differences, helps us understand the choices and outcomes for disadvantaged groups (Kanji and Barrientos, 2002). Such an analysis also throws up questions about who might gain and lose from policy efforts, such as fair trade, to promote shorter chains which make more direct links between producers and consumers.

The last two decades have seen continuing measures to liberalise and privatise trade in most developing countries. Such measures were predicted to boost global trade, benefit the South and reduce poverty. However, the results have been mixed, not least because markets have not been opened up in the North and we are very far from seeing a 'level playing field' for international trade (Priyadarshi, 2002). There is evidence that liberalisation has in fact increased inequalities: between countries, different socio-economic groups and between women and men, although much does depend on the specific context (Grown *et al*, 2000; Mehra and Gammaye, 1999; United Nations, 1999). It has been argued that markets tend to benefit those with the greatest pre-existing assets (material and social), unless specific policies are put in place to regovern markets (Torres, 2001; IIED, 2001) and 'spread the gains' of greater global integration (Gereffi and Kaplinsky, 2001).

In complex global markets, the ability of local producers to gain access to global value chains, and the conditions under which they can gain access, are important in determining how they benefit from trade liberalisation. These factors do not solely depend on the competitiveness of an individual producer. They include local supply networks, their connections to wider markets and value chains, and whether producers are able to adapt to the specific requirements of those value chains (Vorley, 2003). They also depend on the type of public and private policies regulating the chain at the national and sub-national level.

India is one of the world's largest producers of raw cashew nuts, the largest importer of raw

nuts and the largest exporter of processed cashew nuts (kernels). The world's leading producers of processed cashew nuts are India, Brazil and Vietnam. There is a growing market for cashew nuts in Europe and the US, with new markets opening up in other parts of the world, for example Russia and Japan. On the other hand, countries like Vietnam are increasing their supply of cashew nuts for the international market.²

This paper discusses the India-UK cashew value chain and then analyses the specificities of the export chain and its implications for workers in the processing industry in India. We examine the consequences of buyer-driven chains, in the changing global context, for cashew producers and processors in India. In particular, we wanted to explore whether an expanding global market provides opportunities to enhance the livelihoods of small cashew farmers in India and increase employment in the processing industry, where women are the majority of workers. Our analysis indicates that concentration and consolidation in the power of retail giants tend to drive down the terms on which in-country suppliers and other even less powerful actors engage in the production and processing of cashew nuts.

The paper is based on extensive fieldwork in Kerala and Tamil Nadu in south India and interviews in the UK. First, we mapped the supply chain and identified key issues based on secondary research, interviews with key informants in Kerala and the UK, and exploratory visits to a number of other states in India.³ This was followed by a more detailed analysis of the different 'nodes' of the chain, from primary producers in Kerala and Tamil Nadu in south India through to retailers in the UK.⁴ We also surveyed women workers, who make up the majority in the cashew industry in India, and studied a fairly unique type of 'cluster' processing in Panruti, Tamil Nadu.

2. Europe and the US do not impose import tariffs on cashew nuts processed in the South, unlike many other agricultural products. However, this paper deals with the context of liberalisation and the global restructuring of food product chains, rather than the issue of double standards with regards to protectionism or subsidies in the North.

3. Findings from this first phase, carried out in 2002/2003, including a more detailed historical overview of the cashew industry, are contained in an IIED working paper: Eapen *et al.*, 2004.

4. We collected and cross-checked information from buyers and sellers at each node (about 15 people per node) at the India end of the chain. In the UK, we met three leading importers (of the five biggest), two roaster-salter companies and one supermarket buyer. We also collected information from about 20 supermarkets and a dozen smaller retailers, including in areas where the ethnic market is strong. Wherever possible, we checked data collected through interviews using secondary sources. For instance, the unit value of imports and exports published by the Director General of Commercial Intelligence and Statistics (India) was used to check price data from other sources.

2. India and the International Trade in Cashew Nuts

Production

Cashew nuts are grown in semi-arid, sub-tropical regions of Africa, Latin America and South and South-East Asia. In 2000, the total global area under cashew cultivation was around 4 million ha, while the estimated average productivity was around 510 kg per ha and total annual raw nut production was 1.8 million tonnes (Balasubramanian and Singh, 2002). After Brazil, India is the second largest country for area under cultivation as well as production of raw cashew nuts. Today cashew is cultivated on around 720,000 ha in India, yielding an output of 450,000 MT per year and an average productivity of 710 kg/ha.

Raw cashew nuts grow on trees and a single nut is attached to and hangs below a false fruit or cashew apple. Cashew is processed by steaming, cutting and sun-drying. The most significant difficulty in processing cashew nuts is that the hard outer shell, which contains the edible kernel, contains caustic oil which burns the skin and produces noxious fumes when heated. The oil (referred to commercially as CNSL, cashew nut shell liquid) contains 90% anacardic acid and 10% cardol. Cashew nuts are kidney shaped and brittle which makes it difficult to remove the shell without breakage. Whole white kernels are the highest grade and larger whole kernels fetch higher prices. Processing the raw nut to produce the edible kernel is a long and labour-intensive process which includes:

- Steaming or drum roasting the raw nuts
- Cooling the nut
- Cutting or breaking to separate shell from kernel
- Drying the kernel
- Peeling
- Sorting the kernels (separating broken pieces)
- Grading the kernels
- Packing

Cashew kernels are often subject to further processing: roasting, salting or adding other flavours, and then packaging and labelling/branding for the consumer.

Trade

The Portuguese introduced cashew into India as early as the second half of the 16th century, but its commercial value was only realised in the 20th century. The world market for cashew is relatively new. Cashew started appearing on global markets towards the middle of the 1920s and two countries dominated trade: India, the sole exporter of cashew kernels, and the United States, the only buyer. Raw cashew nuts hardly figured in world trade because in India kernels were produced entirely from raw nuts grown within the country. The international trade in raw nuts began with the emergence of countries in Eastern Africa as suppliers, combined with the growth in demand for kernels. The expansion of the global market for cashew kernels in the 1960s prompted

India to adopt a systematic and integrated approach to develop the cashew economy, with attempts to reduce India's dependence on imported raw nuts. In the mid-1960s the government launched a cashew development programme and in 1966 a separate Directorate of Cashew Nut Development was established under the Ministry of Agriculture. As a result, India has since witnessed remarkable expansion in the area under cultivation, with production expanding from Kerala and Tamil Nadu to include Karnataka, Orissa, Maharashtra and Andhra Pradesh. However, despite the expansion in production, the processing industry is still heavily dependent on imported raw nuts, as Table 1 illustrates.

Table 1: Import of raw nuts into India (in '000 tonnes)

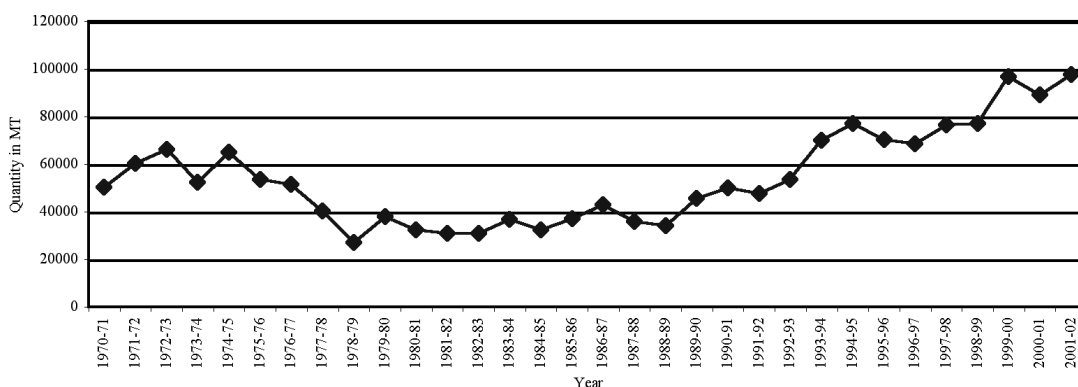
Year	Exports	Raw nut equivalent	Imports	% Share of imports in total exports
1970-71	50	228	169	74
1975-76	54	244	137	56
1980-81	32	146	16	11
1985-86	37	168	22	13
1990-91	50	226	83	36
1995-96	70	319	223	70
2000-01	89	405	249	62
2001-02	98	443	355	80

Note: Kernel-to-raw nut conversion ratio has been taken as 4.54
Source: Compiled from various statistics of the Cashew Export Promotion Council of India, Kochin, Kerala.

Source countries for Indian imports of raw cashew include Tanzania, Guinea-Bissau and Ivory Coast, followed by Benin and Mozambique. In the 1970s imports from Tanzania and Mozambique constituted almost 75% of imports. In the early 1980s there was a sharp decline in nut availability from these sources, resulting in an overall slump in imports. Since the mid-1980s new suppliers have emerged, with West African countries providing over 50% of imports. Imports from Mozambique grew after the World Bank-sponsored liberalisation programme in the mid-1990s, which was partly responsible for the collapse of the processing industry in that country (Kanji *et al.*, 2002). In sharp contrast, on account of the growth in its own domestic processing industry, imports of raw nuts from Vietnam have tended to dry out over the same period.

While heavily dependent on raw cashew imports, the cashew (kernel) industry in India has witnessed an export boom in the 1990s, which has persisted into this decade.

Figure 1: India's exports of cashew kernels



Source: Compiled from various statistics of the Cashew Export Promotion Council of India, Kochin, Kerala.

As Figure 1 shows, there was a sharp decline in the volume of exports in the second half of the 1970s, followed by a lull in the 1980s when exports stagnated. From 1988–89 until the present, exports have been increasing in a rather sustained manner. The trends over various periods have been discussed in various studies (Kannan, 1983; Deepa, 1994; Kutty, 2002). The picture of buoyancy in the 1990s remains more or less intact even when we consider the trends in terms of value, in both rupees and dollars (See Table 2).

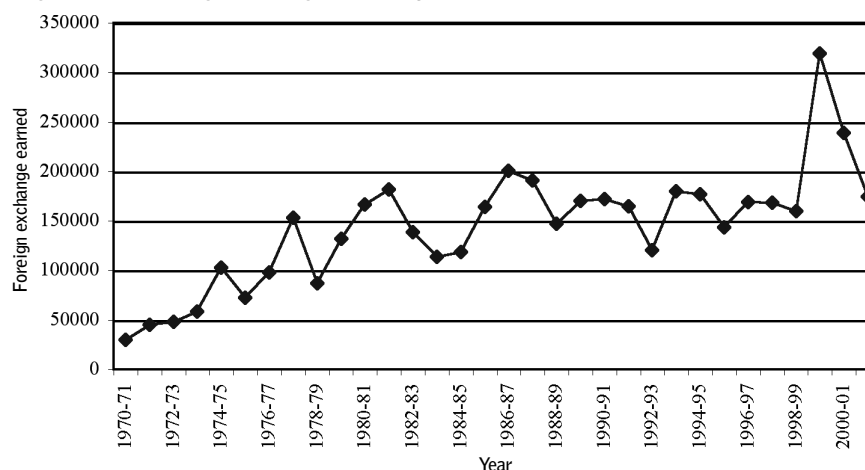
Table 2: Growth in India's exports of cashew kernels

Year	Growth in volume (000s tonnes)	Growth in value (rupee)	Growth in value (US \$)
1990-91	9.30	20.71	11.97
1991-92	-4.28	51.30	10.92
1992-93	11.94	11.42	-11.05
1993-94	30.78	40.31	37.13
1994-95	10.18	19.15	19.04
1995-96	-8.66	-0.47	-6.57
1996-97	-2.38	3.63	-2.36
1997-98	11.55	8.61	3.72
1998-99	0.63	16.76	3.13
1999-00	25.60	57.63	53.04
2000-01	-7.90	-20.23	-24.22
2001-02	9.42	-13.31	-16.82
1970-71 to 1979-80	-0.28	14.50	13.88
1980-81 to 1989-90	3.07	14.07	6.31
1991-92 to 2001-2002	7.18	16.29	6.50

Source: *Monthly Statistics of the Foreign Trade of India, Vol.1&2, DGCI&S, Calcutta, Relevant Issues.*

However, since the industry is dependent on imports of raw nuts, it is important that we analyse the trends in net foreign exchange earnings from cashew kernels. Net foreign exchange earnings in dollar terms, after increasing until 1986-87, have tended to stagnate (see Fig. 2). It is true that the volume of exports has increased, and that more and more domestic resources in terms of capital and labour are being employed (or expended) in producing for the world market. However, the boom in domestic resource use or the increase in workers employed has not generated any buoyancy in net export earnings.

Figure 2: Net foreign exchange earned by India (\$US)

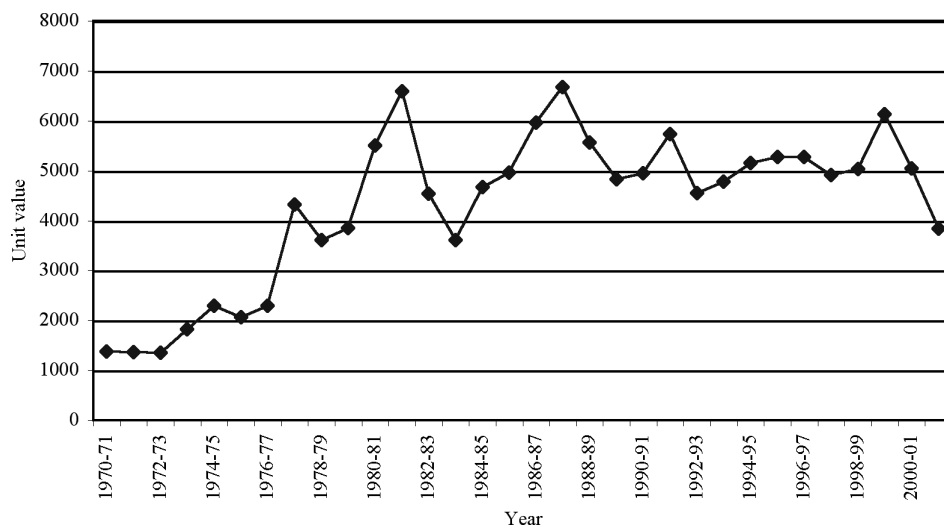


Source: *Compiled from various statistics of the Cashew Export Promotion Council of India, Kochin, Kerala.*

There are two important reasons for the observed stagnation in net export earnings. First, the share of the raw nuts used for export-oriented processing (total availability is defined as the sum of domestic production and imports) has declined over time. The industry is diverting more and more of its production into domestic sales. The share of exports (export equivalent of raw nuts) in relation to total availability of raw nuts (domestic production and imports) has declined from around 77% in 1970-71 to 57% in 2000-01 (Eapen *et al.*, 2004). An equally important reason has been the stagnation in the dollar price of kernels.

The average unit value of kernels exported in terms of rupees has increased over the past three decades, with the rate of increase in the 1980s being faster than that of the 1970s, and that of the 1990s being faster than the 1980s. The sharp increase in the unit value of exports in rupees is not surprising because both the 1980s and 1990s were characterised by continuous depreciation of the Indian currency. However, the average unit value in dollars has stagnated since 1987-88 (See Fig. 3).

Figure 3: Average unit value (\$/tonnes)



Source: Compiled from various statistics of the Cashew Export Promotion Council of India, Kochin, Kerala.

Although prices of kernels on the international market have risen since 2003, the overall picture remains the same.

The picture emerging from our analysis of international trade in raw nuts and kernels fits with the value chain, which is discussed in the following sections of this paper. The nodes at the upstream end of the cashew value chain (Box 1) are characterised by easy entry, and there is heightened competition in markets associated with the upstream nodes, leaving little opportunity to greatly increase returns.

Box 1: A Simplified Cashew Supply Chain: from India to the UK

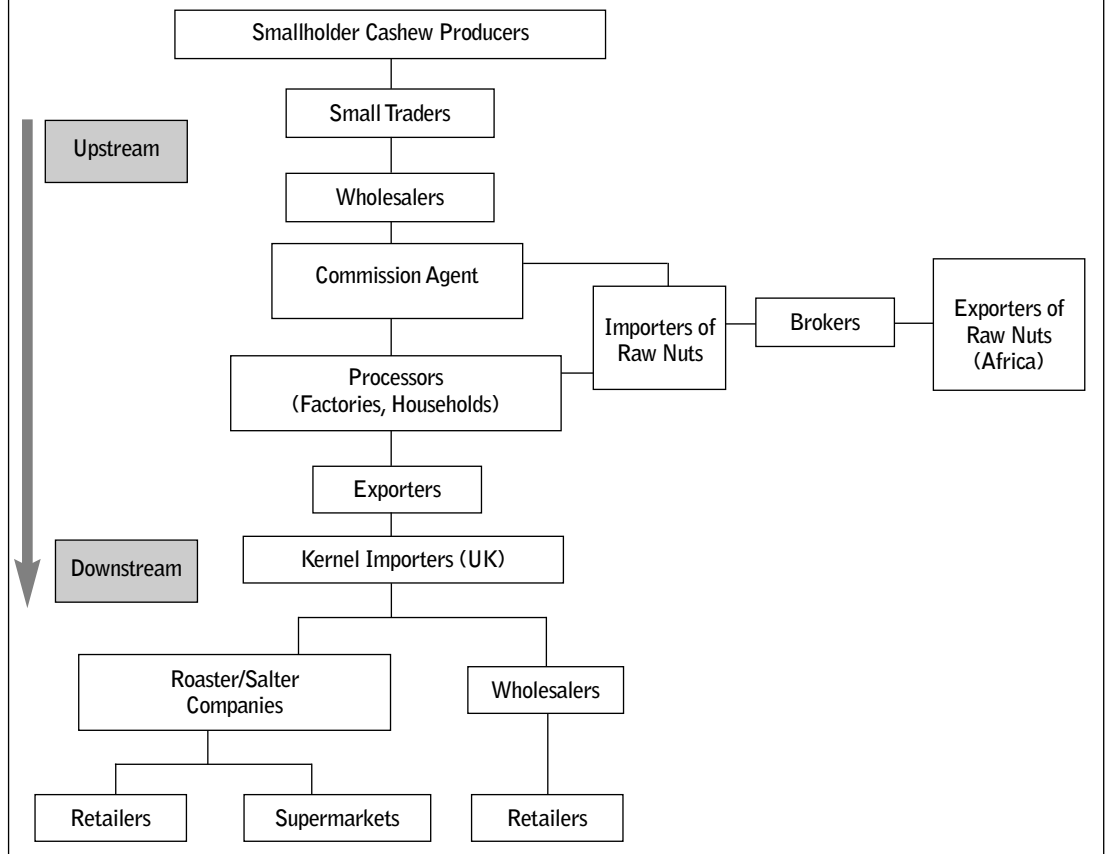
Figure 4 presents a simplified supply chain from hundreds of thousands of small Indian farmers (the primary, upstream producers of raw cashew nuts) through to the final (downstream) retail outlets of packed cashew nuts (kernels) in the retail sector in the UK.

Large numbers of smallholder farmers produce cashew nuts which they sell to small traders, who in turn supply wholesalers with raw nuts. Processors, who are sometimes also exporters, purchase raw nuts directly from wholesalers or from commission agents who are employed to buy raw nuts. In addition, both commission agents and processors buy from importers of raw cashew, who purchase the nuts in various countries in Africa.

The raw nuts are processed in Indian factories (on an increasingly informal basis) as well as by households through out-sourcing arrangements that are discussed below. These processed nuts are

exported, sometimes directly by large processors and sometimes by brokers, who have links with importers in the UK. The importers then supply the roaster/salter companies and some wholesalers. The roaster/salter companies mainly supply supermarkets, with a small proportion going to small retail outlets such as garage shops and pubs. Individual retailers, particularly those who specialise in the ethnic market, buy their nuts directly from the importers and do the packaging themselves.

Figure 4: A simplified cashew chain (from India to the UK)



3. Production and Trade in Raw Cashew in India

The state of Kerala has the largest processing capacity in India, almost 50% of a national capacity of one million tonnes of raw nuts in 2000. Kerala is followed by Tamil Nadu (Balasubramanian, 2001). Kerala exports the highest share of the country's cashew kernels (Pillai, 2002). In this study, we examined cashew nut production in Kerala and Tamil Nadu,⁵ the actors and networks through which the nuts reach the processing industry, which has its hub in Kerala, and the actors involved in export. We then interviewed importers, roaster/salter companies and retailers in the UK. This section reports on the situation in Kerala, while section 7 is a case study from Tamil Nadu.

Primary production: Kerala

In Kerala cashew is grown mostly in areas unsuited for cultivation of crops such as rubber and coconut. Cashew trees tend to be grown on marginal and less fertile land and may continue to produce for many years without the intensive inputs and labour which other crops require. These features of cashew trees are of crucial importance in understanding the dynamics of the cashew value chain. For farmers in Kerala, cashew constitutes only a supplementary source of income. As a study in northern Kerala concluded, *"An expansion of the area under cashew cultivation is difficult to achieve because only little waste land is available and, because, on better soils, cultivators tend to grow more remunerative crops than cashew"* (Veron, 1997). In southern districts there is little land exclusively under cashew, except for plantations owned by public sector corporations. Instead, cashew trees tend to be grown in mixed cropping plots as a part of farmers' diversification strategies. It can be argued that the low opportunity costs for farmers, and the supplementary nature of income from cashew in Kerala, makes the farmers more tolerant of fluctuations in prices.⁶

In the 1960s and 1970s, Kerala came first for production of cashew nuts and for productivity, followed by Tamil Nadu (Box 2). Since then Maharashtra, Karnataka, Andhra Pradesh and Orissa have overtaken Kerala as the leading producer of raw cashew nuts. Some reasons for the decline of cashew cultivation in the state include the pronounced seasonality of the cashew production cycle, high sensitivity of yield to weather conditions, unattractive prices, land ceilings for cashew plantations (which existed until recently), senility of the trees, and the non-agricultural orientation of landowners. But there has been little research into the extent to which these reasons, or a combination of these reasons, have led to a decline in Kerala's relative share in the production of raw nuts. Although cashew is a high-value crop and both international and domestic markets have been expanding, Keralan farmers seem to have insufficient incentives to concentrate on cashew cultivation, and there is little support for them to 'upgrade' their activities.

This is not the case in other states. Our exploratory visits to several states, carried out at the beginning of the study, provided complementary evidence that cashew production and marketing is expanding. In areas with poor quality land and/or little irrigation infrastructure, which do not support other crops, cashew cultivation is an important livelihood source for poor farmers. This preliminary work also showed considerable diversity in the ownership of the land on which

5. Although cashew nuts are also produced on plantations, the focus of our study is on the smallholder production which dominates the industry.

6. These features, interestingly, are not unique to cashew cultivation in Kerala (Kannan, 1983; Eapen *et al.*, 2004). In many new areas cashew is introduced as a soil conservation measure. Planting cashew trees on barren land in the forests is very common in India.

cashew is grown and harvested, including individual smallholder farms, as well as plantation and/or encroached forest land which may be both publicly and privately owned.

Box 2: Cashew production in Tamil Nadu

Secondary data suggest that Tamil Nadu is another important cashew-growing state in the country (Balasubramanian and Singh, 2002). In this state, cashew growing is concentrated in South Arcot, Pudukottai, Sivaganga and Kanyakumari districts, but our preliminary fieldwork was carried out in Pudukkottai–Sivaganga regions and Panruti in South Arcot. In the former region, there are no processing facilities but a well-developed market network to collect raw nuts from the small growers, which is similar to that described for Kerala below. In the latter area of Panruti, however, the situation is different. There are many villages where cashew is the single most important crop. Cultivation is more intensive with periodic ploughing, appropriate spacing of plants, protection during the flowering season and watering during summer months. Therefore, yields are much higher and bigger nuts are produced, fetching better prices. Probably the most crucial reason for the attention paid to maximising yields is that cashew processing is a major activity in many Panruti villages. Our study uncovered a set of unique relationships between production, ‘cluster’ processing and marketing, so we treat Panruti as an alternative and specific supply chain which we discuss later in the paper.

Local trade: Kerala

Local traders in raw nuts in Kerala, including those who operate in village fairs as well as the wholesalers in bigger markets, are small time operators who deal in many commodities and receive a narrow trader’s margin. It is perhaps the ease of entry into such trade that keeps the margins so low. Higher margins, in fact, also prompt the processors to step into the traders’ shoes and get involved in the local raw nut trade, especially when they want to ensure supply during times of shortage.

The number of intermediaries between processors and the farmer does not exceed two or three. In the main northern towns of Alakkode, Irutty, and Mattannur, farmers sell directly to wholesalers. The price in these centres in April 2005 was Rs 40/kg (just under US\$ 1). In small towns and villages, smaller traders procured raw nuts at around Rs 39/kg. The margins for these small traders who sell to the wholesale dealers in the bigger towns rarely exceed one rupee per kilo. The wholesale dealers sell raw nuts directly to the processors’ commission agents, who normally give a margin of 50 paise per kilogram to the wholesale traders. The processors pay transportation charges of around Rs 2,700 per truckload (about 10-12 tonnes) to the commission agents. Traders and related intermediaries are usually blamed for usurping a large share of the value of the product but, in the case of local trade in cashew, such allegations against intermediaries are grossly misplaced.⁷ Interestingly, therefore, from the point of view of the cashew value chain, local traders in raw nuts cannot normally hold on to any price advantage they extract from the growers without transferring it to the processors.

The landed cost of raw nuts from Africa was also around Rs 40/kg during April 2005. Entry into import trade was not easy a decade ago, when the cashew trade was much more controlled by government. The liberalisation of the 1990s has meant there are few formal barriers to trade in raw nuts. Many processors procure directly from Africa and although we did not study this part of the chain in India, the increase in the numbers of Indian raw nut buyers in Mozambique, noted since 2002,⁸ suggests that the import trade is contested and competitive.

The processing industry in Kerala

Historical overview

Kerala was among the first regions in the country where cashew-processing units emerged. In the 1930s the industry became concentrated in Quilon (now Kollam), in the former princely state of Travancore. Though initially foreign companies like Pierce Leslie and General Foods had given

7. The margin reported here, ie. on average one rupee per one kilogram of raw nuts, might appear to be on the high side. But, it should be noted here that this includes transportation charges as well as loss of weight in addition to the risk of price changes.

8. See Artur and Kanji, 2005.

impetus to the export trade, it quickly came to be dominated by indigenous entrepreneurs with a few families, the so-called cashew kings, leading the field (Balasubramanian, 2001; Deepa, 1994; Lindberg, 2001). Most of the cashew firms were organised as proprietary concerns and to some extent as partnerships, an arrangement which continues today; recent data show that almost three-quarters of the private cashew firms are proprietorships and the rest partnerships.

An important historical reason for processing capacity being located in Kollam (despite most cashew being grown in the north of Kerala) appears to have been the availability of cheap labour. The industry has always been labour intensive; for instance, Deepa (1994) found that the number of workers per unit of productive capital in cashew was 21.32 compared to 2.20 in cotton spinning and weaving, and 2.25 in coir spinning and weaving. Another factor appears to have been the lack of labour legislation and regulations in Travancore, unlike parts of India governed by the British. As the processing work required manual dexterity, for which women were deemed to be most suitable, the industry became highly female labour intensive. The absence of a law governing maternity benefits to women workers helped to reduce the financial burden on factory owners. Factories thus shifted from Mangalore (in S. Kanara) to Quilon in the 1930s to escape the onerous legislation of British India, and the post-war period saw rapid expansion of the industry.

State intervention has long been very intense in the cashew processing sector in Kerala, largely in response to pressures from trade unions. The deplorable conditions for workers prompted the state to enact protective legislation for workers and grant them minimum labour rights (Kesavan Nair, 1994). In 1945 the government declared cashew workplaces to be 'factories', even though they did not use power. This declaration gave employers considerable obligations, including adhering to stipulated working hours and paying unemployment compensation, maternity benefit and employees' state insurance, especially if the factories were categorised as 'perennial' factories. Despite stiff resistance from factory owners, in 1956 the government declared all cashew factories to be 'perennial'. Just prior to this, the industry was also brought under the purview of the Minimum Wages Act.

Needless to say, the implementation of this legislation in the cashew industry threatened its cheap labour base; factory owners took a number of steps to avoid implementing the legislation, including seasonalising work and resorting to cottage processing. With factory after factory closing down, the government responded by banning cottage processing in 1967. So factory owners shifted the cottage processing to the neighbouring state of Tamil Nadu. By 1967, 12 units had been set up in Tamil Nadu and by 1972 there were 107 factories, primarily located in Kuzhithurai (in the district of Kanya Kumari) (Kannan, 1983).

In 1969 the Left Front government in Kerala set up the Kerala State Cashew Development Corporation (KSCDC). This was an attempt to make a political statement and also adopt a pro-labour stance. The operations of KSCDC initially spanned a wide spectrum of activities: from channelling imported raw nuts through the Cashew Corporation of India (CCI), to distributing these nuts, and subsequently to taking over and running the closed privately-owned cashew factories. KSCDC was able to distribute the imported nuts more equitably among the processors (distribution was no longer controlled by the largest processors), market the kernels, and most important, pay statutorily fixed wages and benefits to the workers employed in its factories. In a further attempt to increase raw nut availability for Kerala factories, the government restricted inter-district movement of domestic raw nuts in 1975, culminating in the Monopoly Procurement Scheme of domestic nuts in 1977.

The KSCDC opened one factory in 1971 and then started purchasing or leasing factories; by 1975 it had 34 factories with 30,000 employees (accounting for about one-quarter of the estimated work force in this sector). The initial years were successful for the Corporation, and it showed reasonable profits for its first ten years of operation, despite paying workers full benefits. This exploded the myth that the cashew industry is unworkable when statutorily fixed minimum wages are paid to the workers (Pillai, 1981; Kannan, 1983). However, this success story no longer prevails.

KSCDC has incurred losses in recent years (Kerala Economic Review, various issues) and since 2001 the KSCDC factories have only been open sporadically. The policy of canalisation of imports was phased out during the 1980s and the system of monopoly procurement did not survive the wave of liberalisation of the 1990s.

Current practice in processing

There used to be two types of processing organisation within the private sector: the factory (organised) and the household/cottage (unorganised). Since the banning of any form of cottage processing in the latter half of the 1960s, the practice continues on a clandestine basis, while cottage-type processing on a sub-contracting basis has re-emerged in Aluva and Mattanchery (Ernakulam district) and in some places in Kollam. Today the organisation of processing activities in the private sector can be divided into four types:

1. owner of enterprise himself undertakes the processing using his license, but attempts to casualise the work force
2. owner leases the licence to process and the leaser carries out the processing
3. commission agent contracts owner to process nuts
4. commission agent contracts leaser to process nuts

The last two types are a recent practice known as '*commission varappu*'. Commission agents contract either the owner or the leaser to process a certain quantity of nuts for a certain amount of money. This is also called 'toll processing' and agents may be foreign or Indian.

By 2000, registered factories in Kerala numbered 400, employing 200,000 workers.⁹ However, these estimates do not include cottage or commission processing. One in-depth study of cashew workers estimated that there were 400,000 cashew processing workers in total in Kerala at this time (Lindberg, 2001). One data source revealed that in 2004 there were about 525 factories employing 229,000 workers.¹⁰ However, all data should be treated with caution since the growing informalisation of work could result in underestimation. However, the data do confirm that the new factories which are registered are smaller in size.¹¹ The records also show that since the 1990s a number of units with less than 10 workers (mainly for packing cashew) have registered themselves, reflecting an increasing outsourcing of this function by the smaller factories.

Processing and exporting in the value chain

The share of value added during processing has been on the decline in recent years. Processing technology has remained the same for many decades, with improvements, if any, only at the margins. But processing costs appear to have declined over time, not because of any improvement in technology, but by squeezing workers and reducing other costs.

For example, the cost of processing an 80kg bag of cashew ranges between Rs 1,200 in public sector factories to Rs 750 in a '*commission varappu*' arrangement. The cost of processing obviously declines as we move towards informal systems where workers get few benefits other than wages. All forms of informal processing have been gaining ground in the industry and an increasing proportion of cashew is processed in such low-cost processing facilities, with all the attendant implications for the cashew value chain. Such a shift has been facilitated by the liberalisation of entry. Easy entry, and the threat of migration to low wage centres in the neighbouring states, has also weakened trade union resistance.

Processors thus have clear power over workers, as well as over those who trade locally in raw nuts. But, interestingly, this is no guarantee that they are able to retain the advantage of lower processing costs without profits being garnered by overseas buyers. As suppliers to the international kernel market, they tend to compete more intensely now than in the past. The heightened competition among processors within the country as well as with the new exporters from Vietnam has had a negative impact on processors' margins.¹²

9. Interview with the President of the Cashew Workers Welfare Association, 2001.

10. These data, provided by the Office of the Joint Director of Factories and Boilers, Kollam are primarily for Kollam and Trivandrum; factories in the jurisdiction of Emakulam and Kozhikode joint directorates are not included. Emakulam only accounts for a further six factories but the number is likely to be higher in Kozhikode, since cashew is cultivated in the region of this district.

11. For instance in the 1980s factory size was around 700 workers in Kollam while in the 1990s, factories with 200-300 workers were registered.

12. In India under the import substitution regime the state used to control foreign trade in various ways. In 1970s cashew trade was canalised through the Cashew Corporation of India, a subsidiary of the state-trading corporation. This was meant to do away with 'unhealthy competition' among importers. But the discretionary policy of allotment of imported nuts tended to operate as an entry barrier into the processing/export sector as well. The policy favoured and strengthened the position of big processors (Kannan, 1983:45-47). The Kerala government's policy of monopoly procurement, which was intended primarily to ensure supply of the raw material to the processing industry in the state sector, also tended to restrict entry into the processing sector.

Progressive liberalisation during the 1980s and 1990s means there are now few formal barriers to entry into trade in raw nuts and kernels or processing of raw nuts. Nevertheless, there are other barriers such as capital, access to credit, accumulated knowledge, contacts, goodwill, etc. that favour the established firms. The established exporters certainly enjoy some advantage over the newcomers, especially in terms of their proven reliability with respect to quality, delivery schedules, lower risk of default, etc. As a result they are also said to command some price advantage over the newcomers. But the newcomers, who use informal processing intensively and supply for lower prices, have come to play an important role in the market. Interestingly, even the old export houses, which maintain some fair wage factories in Kerala, resort to lower cost processing facilities within or outside the state. Many of them own factories in Tamil Nadu, where processing costs are lower than their units in Kerala. There is also alleged cross-subsidisation of exports from domestic sales, which fetch higher prices. Another aspect, which sustains the export business perhaps, is the system of incentives that the exporters enjoy, including tax concessions and easy and duty-free access to imports.

Having discussed the Indian nodes in the cashew supply chain, in the next section we examine the Northern nodes, with a particular focus on the UK.

4. The Retail Revolution and the Cashew Chain: UK case study

Marketing channels in the North have undergone huge changes in the past 15-20 years, especially for food products. An important feature of this process of transformation has been the growing market power of large retailers and other dominant actors belonging to the downstream nodes of the global value chains. This is attributed to a variety of reasons such as competition among retailers, struggles over margins and changes in the regulatory environment (Dolan and Humphrey, 2000). However, the transformation of the marketing chains and the consequent domination by retailers have had far reaching implications for individual nodes in the chain and their interrelationships. One generally observed feature of this change has been the increasing role of lead firms, most often retailers, in the governance of the chains. The retailers and other downstream operators now govern the chains by setting and implementing new practices and rules for transactions between nodes and actors in the chain. The global cashew value chain is no exception to this.

One of the most significant changes in the cashew value chain, as in the case of many other food chains, has been the reorganisation of the retailing node. In the place of independent retailing shops in typical city high streets, large retail chains (integrated distributor-retailers: the supermarkets) have come to dominate most of Europe and the USA. The increasing pace of life coupled with the growth in employment of women outside the home have led more and more consumers to rely on supermarkets which offer one-stop shopping. The price and quality wars among the retail chains are argued to have benefited consumers. In any case the competition among the retail chains has prompted them to exert increasing control over their supply chains, extending from production through to the retailers' collection centres. In other words, the major retailers try to govern global value chains so that they do not lose out in the battle for margin and market share. Before we discuss the ways and means of governance employed in the cashew chain, it is useful to note the level of concentration of market power in the retailing node.

In the UK, supermarkets have captured at least three-quarters of the bread, milk, fruit and meat markets. Supermarket dominance is similar in most industrialised countries. This raises the question of supermarket share in cashew nut retailing. Although there are no secondary data available, our interviews in the UK with leading importers, roaster/salter companies, fair trade agencies and supermarket managers suggest that supermarkets sell at least 80% of cashew nuts in the UK. The major importers, such as Barrow Lane and Ballard or Bond Commodities, supply less than 10% of what they import to small individual retailers, mainly catering for the ethnic market. About 90% of what they import is supplied to a small number of leading roaster/salter companies such as United Biscuits (KP Nuts) and Percy Daltons. The roaster/salter companies supply most of their output to the supermarket chains. For example, the Managing Director of Percy Daltons stated that more than 90% of their output is sold to the supermarkets, with the rest going out under their own brand name to smaller retailers and pubs. She also admitted that sales, using their own brand name, have been on the decline and that the company had decided not to invest any more in brand name development. Other brand name companies, such as KP Nuts, have also been under pressure from supermarket dominance.

However, this is not to underrate the significance of individual retailers of cashew nuts, especially in the ethnic component of the UK market. The multicultural demographic profile of London, for instance, supports a buoyant ethnic market for food products and cashew nuts figure prominently in the shelf-space of ethnic shops and markets. These are purchased directly from importers or from wholesalers. It is also significant that cashew is sold in bigger volume packets (500 grams, 1kg) in such shops, whereas the supermarkets sell the nuts in smaller packets (50 to 300 gram packets). This may be due to the fact that nuts are an important element of the cuisine and diet of many ethnic groups from Asia and the Caribbean. However, the share of the non-supermarket segment of the cashew market in UK is not likely to be higher than 20%.

The retail revolution in the North is not restricted to the displacement of individual retailers and speciality shops by supermarket chains. An equally important development has been consolidation and concentration within the supermarket sector. Takeovers, mergers and acquisitions have led to the domination of the sector by a small number of retail giants. In the UK for instance, three-quarters of the country's supermarket food shopping is done in supermarkets belonging to just four firms: Tesco, Asda, Sainsbury's and Morrisons. Latest reports suggest further concentration on account of the growth of Asda, which is a subsidiary of the global giant, Wal-Mart. The Wal-Mart-Asda combination is predicted to overtake Tesco and dominate the retail scene in the UK.

At the global level a similar trend of concentration is taking place in food processing and distribution. In 2003, the biggest four companies (Carrefour, Ahold, Wal-Mart and Tesco) alone had sales (food and non-food) of \$520 billion and employed 2.5 million people (Fox and Vorley, 2004). It is predicted that there will be only 10 major global food retailers by 2010 (ibid).

In response to the increasing concentration at the retail level, the penultimate node (ie. food processing and distribution) has also been trying to consolidate and establish countervailing power by way of takeovers, mergers and acquisitions. The takeover of Planters (one of the biggest brand name companies engaged in roasting, salting and packing of cashews) initially by NABISCO and later by Craft Food might be understood as a part of the ongoing process of such consolidation. Nut Company in Europe is also aiming at such consolidation through mergers and acquisitions.

A similar process of consolidation and concentration is reported for importers. Our interviews with exporters and brokers in India and importers and packers in the UK suggest that the number of importers in the UK has come down quite significantly over time. The element of speculation and dominance of forward buying and selling makes it difficult for small-scale importers to survive. Uncertainties in the market, swings in prices and the menace of suppliers failing to deliver have driven many, including some established, importers out of business. Trade in cashew kernels requires deep sector knowledge and therefore intense specialisation, another obstacle for multi-purpose trading companies. This is also why the roaster/salter companies, except Planters, shy away from risking import trade. It also explains the dominance in the import sector of a small number of firms.

5. The Kerala-UK Value Chain

Governance of the export chain

As we have suggested, competition among retailers prompts them to control and govern upstream nodes of value chains. Another significant reason is changes in the regulatory environment for food trade. Consumer demand for high quality, safe food has increased as a reaction to past experience of industrialised food production and mistrust of government and 'science', as well as of large, usually transnational, companies. In response, the European Union (EU) has developed new and stricter quality, health, safety, sanitary and phyto-sanitary regulations for food products. Furthermore, food industry giants are adding stricter standards of their own in their bid to gain consumers and protect their reputations. As documented for many food products, these standards become non-tariff barriers to entry for many producers, particularly smallholder farmers, who want to produce fresh fruit and vegetables for European markets (Dolan and Humphrey, 2000; Bawden *et al.*, 2002). Retailers and food processors are held responsible and accountable for maintaining a wide range of quality and safety standards and in some cases, social and environmental norms, although the latter tend to be voluntary codes of conduct (Barrientos and Dolan, 2003).

The supermarkets attempt to transfer the pressures at the consumer end of the chains to the upstream nodes. The governance capability of the supermarkets is not uniform across the wide spectrum of commodities they deal with and the cost of governance also differs from product to product. When it comes to cashew nuts, the overwhelming control of the supermarkets gives them power to dictate terms to the roaster/salter companies. In fact, roaster/salter companies have few viable alternative channels to reach consumers and their survival in business increasingly depends on supply contracts from the supermarket chains. As our research revealed, even the giants in the business, such as KP Nuts and Percy Daltons, are at the mercy of the big retailers for gaining access to consumers.

The supermarkets therefore dictate the terms of supply contracts. The importers and roaster/salter companies complain that the supermarkets demand price cuts at every contract renewal. Until recently, the supermarkets used to negotiate annual supply contracts with the roaster/salter companies. With the advent of price wars between supermarkets, they have switched to shorter-term supply contracts. In order to keep the roaster/salter companies on a tight leash, the supermarkets also cultivate and sign supply contracts with smaller and newer entrants. Roaster/salter companies, on the other hand, try to amass countervailing power through mergers and acquisitions.

So far, the story at the retail end is similar to many other food products. However, there are some unique aspects in the governance capability of the retailers and importers when it comes to cashew nuts, in relation to two issues: food standards and dispute resolution mechanisms.

Food standards

At present, importer contracts with suppliers invariably dictate the shape, colour and size of the nuts; their moisture content and ensure that nuts are free from odours, mould, disease and decay. Physical (moisture, brittleness), chemical (eg. rancidity) and microbiological changes (eg. aflatoxin

contamination) to the nuts have to be minimised. The importers and roaster/salter companies subject each consignment to detailed quality testing via independent labs and/or their own testing facilities before payment is made. The conditions under which cashew nuts are processed and packed are controlled by the requirement that processing units possess HACCP (Hazard Analysis Critical Control Points) certification to ensure, for example, that glass and metal are not present in the packing area. These are essentially hygiene and safety standards for which the supermarkets are responsible to the consumer. The supermarkets are not obliged to maintain labour and environmental standards.

The supermarkets carry out periodic audits of manufacturing facilities on their own or by teams comprising representatives of roaster/salter companies and importers. We came across many interesting tales of such visits to India by auditing teams. Importers and roaster/packing companies we interviewed expressed their helplessness in imposing health and hygiene standards on their Indian suppliers. For example, one team requested that tables should be provided for workers, to avoid them working on the ground, and that water and soap should be on hand, but this has not been done to date.¹³ In addition, importers are aware that there is considerable outsourcing of processing and that it is highly unlikely that HACCP or minimum hygiene standards are followed in that process. However, to date, they do not really insist on these standards. They also continue to source from smaller, newer suppliers who sell at lower prices than some of the leading processor/exporters who are likely to run (at least some) factories with higher hygiene and safety standards. Some of the factories run by the larger, long-established processors also have certification for quality management systems, such as ISO 9000. Indeed, one of the reasons that importers give for increasingly sourcing from Vietnam is that the newer industry there tends to have newer factories which pursue quality management standards (with International Organization for Standardization–ISO–certification). The other reason is that Vietnamese nuts more often meet standards in terms of colour, moisture, aroma and percentage of broken nuts.

Finally, actors in the UK cashew chain pay little attention to minimum wages, protective clothing, environmental issues or traceability. In other words, social and environmental standards are not imposed on the Indian processing industry. If traceability were to become more important, following the general trend in food industries,¹⁴ this would be a major constraint for the Indian processing industry, given that raw nuts are sourced from many different countries, and different states within India.

Dispute resolution mechanisms

Trade associations such as the Association of Food Industries (AFI) in the United States and the Combined Edible Nut Trade Association (CENTA) in the UK have a very important role in setting norms and rules of quality and commerce. AFI, for instance, has prepared detailed specifications for the cashew trade. They are also key dispute settlement institutions, settling commercial disputes through arbitration rather than in the court system. CENTA deals primarily with disputes over non-compliance with contracts and the quality of merchandise delivered against contracts. However, arbitrators are chosen mainly from among leading importers or roaster/salter companies, implying that the dispute settlement mechanism is biased in favour of the lead firms located at the downstream nodes. It is cumbersome and costly for the exporters/processors in India to seek justice through the existing arrangement. On the other hand, lead firms in the UK also find it difficult, costly and time consuming to settle disputes through the regulatory mechanisms in countries like India. When market prices are on the increase, the default is more likely to be at the suppliers' end; when they are going down, it is more likely to be at the buyers' end.

When we interviewed importers in the UK, one major importer was concerned about delays in shipment from India and the risk of default. The profits to be made by defaulting on even one container of cashew are significant, so that smaller and newer suppliers may be highly tempted to de-

13. Note that these points affect safety and quality (aroma), so may not be motivated by a concern for worker welfare.

14. This is exemplified by the slogan "from field to fork" used by a major UK supermarket.

fault. However, current high levels of demand mean that importers do not want to enforce any blacklist of suppliers. In fact, although they have long-term relationships with some established Keralan processor/exporters, they are reluctant to pay them a premium, which is now US10-20 cents more than other exporters, as compared to 3-4 cents in the past. Importers argue that it is the power of the supermarkets which forces them to source from the cheaper suppliers, despite the risks. In addition, buyers and suppliers tend to negotiate future deals to compensate for current losses.

The cashew chain: shifts towards a 'directed' network

To summarise: processor/exporters from the South are pitted against corporate concentration and retailer market power in the North, which have a clear oligopsonic advantage. Access to the UK market depends on Southern processor/exporters' relationships with large importers, roaster/salter companies and the supermarkets. While the downstream nodes have witnessed a concentration of market power, the trend in upstream nodes has been in the reverse direction. Formal entry barriers have been removed and competition heightened for processors, local traders, workers and farmers. The ease of entry, facilitated by liberalisation and heightened competition, makes exporters and processors weak in resisting the dictates from the lead firms.

In one typology developed in the value chain literature (McCormick and Schmitz, 2002), chain governance is categorised as follows:

1. Market-based: Firms deal with each other mainly in 'arms length' exchange transactions.
2. Balanced networks: 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.
3. Directed networks: Firms from 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.
4. Hierarchical network: Firms are vertically integrated, so that they can directly control all or most of the activities of the chain.

The cashew chain is moving towards a 'directed network', where lead firms specify what is to be produced by whom and monitor the performance of producing firms. Transactions are neither market-based, arms-length exchanges, nor are they balanced networks where no one firm (or group of firms) exercises control over others. On the other hand, chain governance falls far short of being vertically integrated, where lead firms can directly control all or most of the activities of the chain. An example of the latter is the export of fresh fruit and vegetables from the South to supermarkets in the North. Here, lead firms may invest in subsidiaries which source directly from commercial farms.

Several factors contribute to the relative autonomy of Indian processors and exporters. The main factor is the growth of domestic demand for cashew nuts in India, helping to decrease dependence on international exports. In addition, increasing demand for cashew nuts in the North and the emergence of alternative markets in the South (the Middle East and China, for instance) lessen the power of UK importers. Therefore, although the cashew chain is buyer-driven and governed by lead firms, the structure and mechanisms of governance, the lack of vertical integration along the supply chain, and the fact that we are dealing with a product with growing national and international demand, gives the processors and exporters some measure of autonomy vis-à-vis the lead firms.

Before we move to the key focus of the paper—the effects of changes on the employment and livelihoods of processing workers in the chain—we present the distribution of retail value along key nodes in the cashew chain.

Distribution of revenue in the export chain

The estimates presented in this section are based primarily on prices at four nodes in the chain:

1. prices paid for raw nuts to the cultivators (which is roughly equal to the c.i.f (cost, insurance and freight) price of raw nuts imported from Africa)
2. export price f.o.b (free on board) of kernels
3. supermarket prices
4. ethnic market prices

The data on the latter two prices are more or less reliable, being as transparent as most market prices. Supermarket prices vary from one chain to another and prices in the ethnic market differ between shops, so we have taken the average of many observations. The same is more or less true for raw nut and kernel prices. However, we also cross-checked raw nut and kernel prices using data on unit value of imports and exports published by national and international agencies. In order to be as objective as possible we have avoided the use of data on costs and margins, which are not visible in the market place, but this means there are some gaps in our mapping of the chain.

In the cashew industry costs and prices are based on an 80 kg bag of raw nuts. When an 80 kg bag of raw nuts is processed the processor gets nearly 19 kg of kernels. In the supermarkets in London this 19 kg is sold to the consumers at an aggregate price of Rs 19,494 (Table 3). Of this, only about 23% is captured in India. How the balance is distributed among importers, roaster-salter companies and retailers is very difficult to verify. However, the price on the ethnic market, only around 41% of the supermarket price, does provide an idea of the margins involved at different segments of the chain.

Table 3: Distribution of value/revenue

Agency/node	Cost/price (rupees)	Share of supermarket retail price (%)
Cultivators (80kg bag @ Rs 40 per kg)	3,200	16
Transport/weight loss (80kg bag @ Rs 5 per kg)	400	2
Processing	960	5
Export revenue (19 kg bag @ Rs 240/kg)	4,560	23
Supermarket (19 kg bag @ Rs 1026/kg)	19,494	100
Ethnic market (19 kg bag @ bulk rate of Rs 420)	7,980	41

Note: The estimates are highly sensitive to changes in exchange rates and prices.

Sources: Interviews (2005) with cultivators, trade union leaders, traders, processors, importers in the UK, roaster/salter companies in the UK, retailers including supermarkets

The processor's margin would appear to be rather low if we believe their representatives. However, the picture of distribution of income along the cashew value chain (Table 3) suggests that there are some elements of truth in their claims. This shows that processors get only around Rs 4,560 (23% of supermarket retail price) for what they produce out of an 80 kg bag of raw nuts. We also know that the cultivators are paid around Rs 3,200 for 80 kg of nuts. The cultivators thus get around 16% of the supermarket prices. Processors incur around Rs 5 per kg on account of weight loss, transport and trader's margins, in addition to paying Rs 40 per kg to the cultivators. As a result, for producing 19 kg of kernels the processing node of the chain makes around Rs 960, barely 5% of the supermarket price. The cost of processing would be much higher if minimum wages and other statutory benefits were given to the workers in the processing industry. The labour cost is reported to be Rs 1200 per 19 kg in public sector units and Rs 1100 in private 'fair practice' companies. Even in the *commission varappu* system the labour cost would amount to around Rs 750. Processors have to bear several cost elements other than labour. These calculations show the pressures on processors to reduce labour costs to remain competitive. As anticipated by Kannan as early as 1983 (1983: 101-103), this explains the incessant search for new

strategies to informalise and casualise labour in the industry to reduce the cost of processing.

This brings us to the overseas end of the chain: the importers, roasters and salters, wholesalers and retailers. According to Table 3 the share of income accruing to the actors at this end of the chain is as much as 76%. This disproportionately large share of income accruing to the downstream end represents the difference between the price of kernels and the branded product reaching the consumer. Further, as we showed earlier in this paper, the dollar price of cashew kernels has remained stagnant over the past two decades. This picture of value realisation does not appear desirable or equitable, especially when considering that the dollar value (in terms of purchasing power) has declined over the same period due to domestic inflation in the US.

This section has examined the nature and governance of the increasingly directed networks operating in the cashew chain and the level of value realisation at the downstream ends of the chain. We have already established that there has been a corresponding cost-price squeeze on processors in India, who tend to cut costs by informalising and casualising the workforce. Is this inevitable or is there some room for manoeuvre on the part of workers, depending on the way in which processing is organised? In order to answer these questions, we now discuss the livelihoods and employment conditions of workers in different processing arrangements.

6. Employment and Livelihoods in the Kerala Cashew Export Chain

Considerable work has been done to understand the organisation of cashew processing in Kollam, Kerala, including labour conditions of the almost entirely female work force. A detailed study has shown that almost all women cashew workers are drawn from scheduled castes and poor communities and constitute some of the most marginalised members of Keralan society (Lindberg, 2001).

As we discussed above, trade and industrial liberalisation has resulted in a continuing tendency to informalise the workforce through commission and lease processing and has fuelled the emergence of new and smaller processing units. We found areas where 'household processing', which is officially banned, has expanded since the 1990s. In one area, Ernakulam, there are about 300 households working in sheds which extend from their houses (see Box 3).

Women workers in cashew processing

In order to understand the differences in earnings, working conditions and pattern of livelihoods of the workers engaged in different organisational forms of processing, we surveyed 110 women workers in factories and nine women in household processing in Kollam district (Table 4).

Table 4: Distribution of women workers by activity and organisation

Organisation	Roasting	Shelling	Peeling	Grading	Packing	Total
Government	0 (0%)	12 (46%)	5 (19%)	9 (35%)	0 (0%)	26 (22%)
Private	0 (0%)	14 (28%)	24 (48%)	7 (14%)	5 (10%)	50 (42%)
Commission Companies	1 (3%)	19 (56%)	8 (24%)	6 (18%)	0 (0%)	34 (29%)
Household (processor)	2 (22%)	7 (78%)	0 (0%)	0 (0%)	0 (0%)	9 (8%)
Total	3 (3%)	52 (44%)	37 (31%)	22 (19%)	5 (4%)	119 (100%)

Source: Survey data

Relatively few women are found in packing sections and hardly any in the roasting sections (except in the household processing units), although we did find one woman roaster in our sample from commission factories. However, the clear delineation of work places which we have presented does not reflect reality. We found that workers move between these different organisations, for instance from government to private factories which have a better supply of raw nuts, but even more importantly, from more permanent factories to factories operating on a commission/on-lease basis. In addition, women may not have known that the factories they worked in

were operating on a commission or lease basis, so the category of private factories (owner-operated) probably includes many that are in fact on lease. We also observed short term 'migration' (see below) of workers, mainly shellers from Kollam, to the household processing units.

Almost half the women were above 40 years of age and 75% had less than 10 years of schooling; however almost a quarter had reached high school stage and only about 5% were illiterate. Young workers in the age group 15-19 years constitute only 10% of the sample. An overwhelming majority of the women were married; however, almost one-fifth were unmarried and a small proportion was widowed/separated. In this respect, women working in cashew are older and more skilled/experienced than in many global supply chains (for example, textiles and garments). Cashew processing continues to be dominated by scheduled caste/'backward' communities, particularly in shelling, while other sections are a little more mixed. Almost a quarter of the workers belonged to the forward community of Nairs and scheduled caste workers were never found in grading and packing, so that even jobs within cashew processing are subject to caste hierarchies. Seventy-eight percent of those interviewed were Hindus, followed by Christians (12.5%) and Muslims (9.5%).

As regards work history, one-third of respondents had primarily engaged in household work before joining the present organisation and another third had already been working in other factories. However, once they started working few women stayed at home when work was not available in their organisation, but looked for cashew processing work elsewhere. While they had got to know about the available job largely from family members/friends, almost one third had heard about it through factory agents, indicating a certain demand for workers. Commission factories and household processing were regarded as places to get trained¹⁵ and after developing some skills the girls/women aspired to find work in a government factory or a 'good practice' private factory. In fact we were told that these factories conduct an 'entrance test' to assess the work seeker's skill and efficiency before appointment. Most women agreed that only a few women obtained a kind of attendance card which ensured relatively secure employment together with other wage and non-wage benefits. Access to assistance through the Cashew Workers' Welfare Fund was also easier for those holding such a card. However, women workers were of the view that it was increasingly difficult to get an attendance card, implying informalisation of working conditions.

15. Usually young girls from the poorer, socially disadvantaged households, after schooling normally go to commission companies with a family member/relations already working there to acquire the skill; they are paid at that time too. After turning 18 they try to enter a government or reputed private factory.

Organisation of work, wages and income

Both shelling and peeling are piece-rated work, while grading and packing are paid on a daily wage basis. The minimum wage is meant to be set every five years by the Government of Kerala; however, it was not revised when due in 2003. The last wage rate stipulations in 1998 set the following rates: for shelling Rs 8.11 per kilogram; for peeling Rs 10.32 per kilogram (for full nuts); for grading Rs 58.75 per day and for tin filling Rs 59.75 (Kerala Gazette, 1998). Additionally there is a Dearness Allowance (DA) of Rs19.53 per day, plus 12% Provident Fund contribution, and Employee's State Insurance of 4.75% on wages, including DA. A minimum quantity of work is fixed in all factories for eligibility for DA; for instance a sheller should shell 5kg of kernels per day to become eligible for DA. Normally the working time for women is 8 am to 5 pm but workers are free to extend their working time by cutting down on rest time and the need to maximise daily earnings compels them to do so.

Table 5 confirms that almost all factories in the survey pay the 1998 minimum wage rates; in fact in some commission factories the worker may be given a few rupees above this amount if she agrees not to claim the DA or bonus, the bonus being a statutory requirement for factory workers. For instance Rs 10 per kg for shelling may be offered rather than the minimum rate of Rs 8.11. We therefore find that some workers, particularly in commission factories, earn more than the MW in shelling.

Table 5: Wages in different organisations**(a) Shelling Piece Rate Rs/Kg and number of women workers**

Organisation	Piece rate Rs/kg	7.5 – 8.0	8.0 – 8.5	8.5 – 9.0	10 – 10.5	Total
Government		-	12	-	-	12
Private		1	13	-	-	14
Commission		2	10	1	6	19

Note: The numbers in the tables are the numbers of women receiving that particular wage or piece rate.

(b) Peeling Piece Rate Rs/Kg

Organisation	Piece rate Rs/kg	10-10.5	11-11.5	Total
Government		5	-	5
Private		15	9	24
Commission		6	2	8

(c) Grading Daily Wage, Rs/day

Organisation	Daily wage Rs/day	50-60	65-70	Total
Government		3	2	5
Private		4	3	7
Commission		4	2	6

Source: survey data

While women do receive the minimum wage rates set in 1998, they are often denied the Dearness Allowance. As Table 6 shows, more workers fail to get the DA in private and commission companies than in government factories.

Table 6: DA payments by organisation

Organisation	Yes	No
Government	17 (65%)	9 (35%)
Private	19 (38%)	31 (62%)
Commission Companies	14 (41%)	20 (59%)
Total	50 (42%)	69 (58%)

Source: survey data

Women, especially in government companies, manage to get work in commission factories when their own units do not have enough raw nuts. Most women reported that they managed to get six days of work in a week. This number fluctuates over time depending on the state of the market for both kernels and raw nuts, with government companies usually offering fewer days of work than private ones.

Transportation, tea and snacks were available much more often in private and commission factories than government-owned units, perhaps illustrating their demand for workers. With respect to hygiene and safety on the factory premises, more than 40% of women stated these were bad/very

bad in the commission units while this proportion was much lower in government and private factories; in fact in the latter categories a quarter of respondents said conditions were very good.

Livelihood issues

Almost half the women interviewed were sole earners in their families while 30% met about half of total family expenses. Only 19 of the 110 women respondents were able to save. An earlier study of women cashew workers also highlighted how critical women's income was to the survival of the family, contrary to often-voiced assumptions that it is supplementary to the husband's income (Lindberg, 2001). However, it was interesting to note that over three-quarters of the women stated that they decided how to spend the income they earned while a few reported that the decisions were taken jointly with their spouses.

Most women (90%) stated that they had no other source of income, while about 10% do some farming (a few had cashew trees and sold the produce in the local market). All workers in the government factories were members of the Cashew Workers Welfare Fund Board, while this figure was 80% for the private and commission companies. However, almost 75% of those who were members stated that they had not received any benefits; only 9 of the 95 members had received some educational assistance. Some of the women workers were also members of neighbourhood/self-help groups, started under 'Kudumbashree' (which means 'family prosperity'), a major poverty alleviation and women's empowerment programme in Kerala which promotes savings and provides small loans to their members. These groups sometimes also evolve into micro enterprises and provide a source of social support for the women.

The most important survival strategy for women workers was to maintain/increase their earnings by moving between factories; the other was to obtain loans. Almost 80% of the women stated they were currently in debt; most had borrowed from local moneylenders to meet contingencies (such as medical expenses, weddings and funerals). A small proportion had borrowed for consumption purposes. Local money lenders were the most favoured agency for borrowing (61% of women who borrowed money), followed by commercial banks (27%). Two of the workers had borrowed from their self-help groups. Though easily accessible, the rate of interest commonly charged by moneylenders is Rs 2 for every Rs 100 borrowed¹⁶ which yields an annual interest rate of 24%.

While an overwhelming proportion of the women working in factories reported they were members of a trade union (96 of 100 women), 45% of these felt that the unions were not working well. Most of the women felt that the main concern of the union should be to bargain for higher wages and better working conditions. A small proportion of the women also stated that unions should address the problem of harassment in the workplace.

We also asked respondents their views of changes in working conditions over the past five years. Although one-third of respondents said that they did not know, it is interesting to note that only 3% stated that they had worsened; over half were of the opinion that they had remained the same while almost 20% felt that they had improved. Women's main concern is to increase their earnings, which they are willing to do by intensifying their labour, working more days and longer hours. However, their current income is insufficient to meet household needs; particularly for those, according to caste hierarchy, who carry out the most onerous activities of shelling and peeling.

Key issues

One impact of trade liberalisation has been the growth in the employment of women workers in labour-intensive industries, but under unfavourable conditions. A recent report (Oxfam, 2004) examining women's work in global supply chains argues that the poor wages and conditions of women workers highlight one of the glaring failures of the current model of globalisation. The impacts of such poor and precarious employment go far beyond the workplace, and beyond this gen-

16. Sometimes the interest rate can rise to 60%.

eration, since women are still responsible for a range of domestic tasks, including raising children. Market liberalisation has also led to a lack of revenues for states to provide social protection (Cagatay, 2001).

In general, within the organised industry in India, a large and increasing number of workers are becoming 'informal' – casual, temporary and contract workers – who are unprotected by labour legislation (Ghosh, 2001; Hensman, 2001).¹⁷ Our study reflects this trend, providing evidence of some dispersal occurring in the cashew industry and informalisation in the organisation of processing. In the cashew industry, women increasingly have to work in more than one organisation (formal factory, informal factory and household processing unit) to obtain an adequate number of days of employment, but under increasingly informal arrangements. It is often women, more than men, who accept lower wages and more insecure earnings, partly due to the more limited choices they face and partly due to societal attitudes of what is acceptable for women and men. The myth that women are secondary earners and that households do not depend on their income is clearly erroneous, as our survey shows. In a sense, employers use social and economic discrimination against women to decrease their processing costs and increase their profits (Kanji and Menon-Sen, 2001). It can be argued that the low wages paid to women workers allow India to maintain its global market share.

17. Women are over-represented in informal work in India, as in most parts of the world. Ghosh (2001:19) shows how women's employment share in food manufacturing declined from 20.4% between 1989-90 to 17.2% in 1994-95 and in all industries from 21.3% to 17.5% over the same period. She argues that home-based sub-contracting activities or work in very small units, often on a piece rate basis, poorly paid and without non-wage benefits, have substituted for self-employment or more regular wage employment.

Box 3: Household processing

During the research, we identified an area of intense household processing in Alwaye in Ernakulam district. Household processing is carried out in Manjappetti village in this area, which is Muslim dominated and most of the household processors are Muslims. Although household processing persisted after it was banned, this area has witnessed considerable growth in processing as demand for cashew has grown over the last 15 years. Skilled workers from Kollam are recruited by industry processors or their agents, primarily for shelling and roasting, while local workers are recruited for peeling and grading. At present there are more than 300 household units in this area. They procure raw nuts from large importers or factory owners; more often steamed nuts from the latter, and further processing, such as shelling and peeling, is carried out by the households. There are only two cashew factories in this region and most of the work is commissioned by Kollam based processor/exporters, who also collect the shelled and peeled nuts.

In such set-ups the wage rate is definitely lower, for example Rs 7.5 per kg for shelling. However, the workers are given a lump sum in advance which is very attractive for meeting immediate expenses. Most of the shellers come from Kollam as family workers, staying in makeshift accommodation provided by the employers, working as many hours as possible to finish the contract. Here, men too were engaged in shelling and some women in roasting, operating as a family unit, as in the early days of cashew processing. In this area, we also found one or two 'card-holders' from government factories. There appears to be a premium on shellers, the most skilled and hazardous activity, given the corrosive nature of the roasted nuts. This is reflected in the large-scale recruitment (on a contract basis) of shellers/roasters from Kollam.

An informal environment reduces women's bargaining strength and makes it much more difficult, if not impossible, to enforce labour legislation. The conflict between workers and employers centres less on wages per se, and more on the Dearness Allowance and other benefits. The shellers who work in household processing centres (Box 3) are offered lower than minimum wages but are given lump sum advances, highlighting their need for cash and the dearth of credit at reasonable interest rates.

Women sometimes organise to access work on better terms, for example, in self-help groups such as the one described above. In that group, only 'grading' work was undertaken initially, but the group plans to become a full-fledged cashew processing and training centre. However, these are isolated examples and the trend we have described to minimise processing costs by squeezing women workers has been, by far, the most prevalent direction of change.

7. Lessons from an Alternative Cashew Network in Panruti

Our final case study, from the Panruti area in Tamil Nadu, shows that the diversity of retailing in India can make an important contribution to the livelihoods of large numbers of farmers and workers. Such examples indicate that there may be some room for manoeuvre by workers at the upstream ends of value chains, given a supportive policy environment. Panruti in South Arcot district of Tamil Nadu is uniquely organised compared to other cashew growing and processing areas. In a sense, it represents a microcosm of the cashew chain within a small geographical area, with characteristics which allow resource-poor and even landless people to reap benefits from primary production and processing. Cashew is widely grown, raw nuts are processed, raw nuts are imported from within and outside the country and processed nuts are sold directly and indirectly to the international market as well as in the domestic market. The cluster presents a complex but fluid web of production relations which adapt to suit changing conditions and markets.

Cashew cultivation in Panruti

The cultivation of cashew in Panruti is the mainstay of the local economy. It is grown on both private and government-owned forest lands and as the sole agricultural crop for many farming households, it is well-tended and high yields of quality nuts are produced. Production is organised through a social interplay involving many actors and mediated by property rights. Landless agricultural labourers work for wages; small peasants essentially use family labour and large landowners depend entirely on hired workers. There are leaseholders who lease land from the state or from individual farmers on an annual contract for the produce. But these categories are not exclusive and ownership and produce rights are invoked only during peak harvest. Exclusive rights to the produce are suspended towards the end of the season and anybody is free to go into any farm to collect the nuts both from the trees and from the ground. Such an erasure of boundaries has significance for the livelihoods of the landless agricultural labourers, smallholders in general and women and children in particular. These 'free' nuts provide a critical buffer for marginal livelihoods.

Cashew processing in the Panruti 'cluster'

Processing in Panruti is highly fragmented. Except for one or two factories that are owned by Kollam export houses, there are no integrated processing units. Machines required for processing are available in each processing centre, owned by individual processors and rented out to other processors. Similarly, every other service, including transport, is available to any processor. The processor need not own any of these services to begin processing and as such there are minimal entry barriers into the processing industry here. Such autonomous emergence of a system of shared infrastructure is the reason why we use the term 'cluster'.

Another unique characteristic of this cluster is the way it has responded to the volatile prices in raw nuts and kernel markets. Prices change almost every day. The processors in Panruti are very

small and can ill-afford such price fluctuations. Normally, it takes about 10-15 days for a batch of raw nuts to be processed into kernels. During this time, if the price of kernels falls by even 5%, they will lose all the margins as well as some of their precious capital as well. Thus they do not want to be exposed to the market for long. Each processor therefore takes up one sub-process, such as shelling, and as soon as it is completed the semi-finished product is sold in the market immediately. Cashew kernels, processed up to various stages, are available in a market that functions every day during the season. While the risk of market fluctuations are minimised under this system, the individual processor is left with narrow margins, as they do not undertake the entire processing activity. This restricts the scope for accumulation on an expanding scale. Individual processors do not undertake any sub-process for anyone else for a fee but they own the produce. Putting-out (sub-contracting) has not emerged strongly in this cluster. Because of these unique characteristics, the cluster continues to be highly fragmented but relatively less exploitative, as each person owns whatever they work on. This widespread ownership also ensures that the margins are also distributed widely but rather thinly.

Kollam processors in Panruti

The integrated units owned by the Kollam export houses replicate the processing practices that are used in Kollam. They source raw nuts from Panruti but not necessarily their entire requirement. Raw nuts are also imported through Tuticorin and sourced from other parts of the country as well. Processing using local labour takes place almost continuously in these units, since they build up stocks of raw nuts. When there is an export order, and if they need processed kernels, such export units buy kernels from small processors through middlemen. These kernels are cleaned, sorted, mixed with their own nuts, packed and shipped from these units. When these export houses step into the local market, the prices shoot up. The local processors do not compete with these houses on such occasions and they withdraw from the market. Volumes are high and the payments are quick when Kollam traders operate in the market. Given these advantages, the locals prefer to sell the kernels to these houses. The market gets back to its sedate pace as soon as the Kollam processors withdraw their market operations.

Local export houses

Apart from Kollam-based processors, a few within Panruti have larger processing facilities and export to various destinations. However, the volumes they deal in are low compared to the Kollam processors. They buy the processed kernels from small processors, clean the kernels further, sort them much more finely, dry them and vacuum pack them for export. They also import raw nuts for many small processors, who buy, process and then are free to sell the kernels to anyone (not necessarily to the local export house that has imported the raw nuts for them). The local export houses do not have the resources of the Kollam processors, so when the latter enter the local market either for the purchase of raw nuts or for kernels, the local export houses slow down their operations. The small processors, as we have noted earlier, prefer these monoliths from Kollam for their better price and cash transactions. (Interestingly, a similar pattern is observed when Indian traders, with containers waiting to be filled, enter the raw nut market in northern Mozambique. In these cases, small and medium sized processors there cannot compete with traders' prices for raw nuts and withdraw from the market.)

Each of the local exporters sources their kernel requirements from 25-30 small processors located in various villages that surround Panruti town. But the small producers are not dedicated suppliers of kernels to these houses. They have a loosely knit relationship. At any point of time, the small processors are free to sell their produce to anyone they like. The power of the export house is very fragile and they have little control over the price and the conversion cost. This feature is in sharp contrast to many other known industrial clusters, where export houses have a

tight reign over the entire supply chain and enjoy so much power that any shock in the market can easily be passed on to the nodes further up the chain. Thus, the small processors of Panruti enjoy a great level of freedom while simultaneously having the advantages of a cluster. In this sense, the cluster is unique. The presence of local export houses prevents the small processors from being drawn entirely into the otherwise dominant Kollam network.

Small processors in Panruti

The small processors predominate in the Panruti cluster. The way in which they organise processing defines the functioning logic of the cluster. The small processors in Panruti are not only processors, almost all also grow cashew. When the harvest season starts, they cease processing for two reasons. First, they have to harvest their crop. Secondly, the workers will not turn up for processing work because they are busy collecting the 'free' nuts in the cashew tree groves. It is more remunerative for them to collect the nuts rather than to work for wages. Harvesting also requires the labour power of the workers. Once the harvest season tapers off, processing picks up pace and continues till the next harvest season starts.

Raw nuts harvested from their own farms are not sufficient to sustain the small processors. Most of them retain their own produce to be processed when the raw nut prices go up. Early in the season, they buy raw nuts from other cultivators through middlemen. They also source raw nuts from other districts like Perambalur, Pudukottai and Sivaganga. When the supply from these districts dwindles, they source raw nuts from other states like Karnataka, Andhra Pradesh and Kerala as well as from other countries through traders. The individual processors do not have enough resources to buy a lorry load of raw nuts. Therefore, a few processors pool their resources and buy the required quantity of raw nuts through middlemen. Very few processors have the boilers to steam cook the raw nuts. The rest hire these machines when they need them. Nuts are transported to and from the boiling plant on hired carts. Rent for these services is conveniently fixed at a piece-rate basis. Similarly, the heating machines are owned by only a few processors with the rest renting them. Each village has at least one boiling and heating machine. Economies of scale are achieved by renting them out. Such an arrangement enables many small processors to become involved with nearly no investment in infrastructure and also allows others to benefit from the provision of services, such as transport.

Once the raw nuts are steam cooked, they have to be dried, cut open and the kernels extracted. The extracted kernels are heated and then cooled so as to enable peeling. Kernels are sorted and dried before they are packed. Many small processors do not undertake this entire sequence of processing. Some of them sell the kernels without peeling them and others take over. Kernels are also sold after the skin is peeled but not sorted. Sorted kernels are also marketed.

With such a volatile market both in raw nuts and kernels, processors who deal with a high value commodity would like to prevent unforeseen losses. This is probably why the market system has developed where the ownership of the product is constantly shifted at various stages. In a sense, the system enables risk sharing, not by owning the product collectively, but by owning it for briefer periods, minimising individual exposure time to the vagaries of the market. Fragmentation in the Panruti cluster applies to the number of small processors and to the division of processing steps.

Fragmented production and phyto-sanitary standards

Small processors have not invested much in infrastructure; at most, they erect a thatched shed in their homestead. Raw nuts are cracked open with stones and the workers have to squat on the floor, which is very often not even cemented. The workers are not supplied with any gloves and rags are used to cool the kernels prior to peeling. Kernels are placed on cement floors when cleaned and sorted. The highly unhygienic conditions mean that export houses have to clean the kernels

themselves before they pack them. Thus, only when demand outstrips supply from other sources do they source from Panruti. Even prominent importers we interviewed in the UK were aware of conditions in Panruti. The lack of minimum standards of hygiene and safety seriously hamper small processors' chances of increasing exports to Western markets. Instead of enabling these small producers to process their kernels in more hygienic conditions by constructing common sheds in these villages, the government has a grand plan to start an exclusive estate for cashew processing in the district.

The importance of the domestic market

What sustains the small processors in Panruti, apart from the export houses of Kollam, is the booming domestic market for cashew fuelled by India's growing middle class. Many small processors in Panruti only sell their produce on the domestic market through grocery wholesalers who supply retailers. Cashew supplied to this market is packed in plastic pouches (1kg and ½kg) and tins (5 kg). Such packages contain whole kernels, but of varying sizes. There is a generic brand that many Panruti processors use for packets, such as "Bombay Cashew", as well as several individual brands.

Most transactions in the domestic market are based on trust rather than legally binding contracts. Consequently, the power of the wholesaler is stronger than the processors who supply the cashew. While the wholesalers do not pay so much attention to the size of the nuts, they often defer payments. Usually, one consignment is kept as credit. If the processor quits the market, he can never recover the outstanding balance. Since the transactions are not based on any legal contract, enforcing compliance is impossible. Despite this disadvantage, Panruti processors extensively supply to wholesalers in the domestic market. Their scale of operation is suited to the demand for cashew from thousands of wholesalers spread across the country. Each order will range from 50 kg to 500 kg. The capital required to procure the required raw material and the processing costs are manageable for many small processors. The orders are placed at regular intervals throughout the year, enabling processing to take place year-round. The big export houses are not prominent in the growing domestic market because of the high transaction costs of engaging in so many business deals. This scenario might change when the state decides to open the retail sector for Foreign Direct Investment, when supermarket chains may emerge as an important channel for retailing. Until then, wholesalers and small retailers ensure secure markets for Panruti processors, although they need to keep abreast of increasing food safety standards in the domestic market.

Key issues

Social relations of production and trade in the Panruti cluster are complex and fluid; it is easy to see how interventions to improve conditions for workers or primary producers might backfire and lead to a loss of jobs and livelihoods. In its current form the 'cluster' organisation tends to promote economies of scale and maximise opportunities provided by both the domestic and international markets.

8. Conclusions: Policy Implications for Employment and Livelihoods

A key internationally driven approach to reducing poverty is for countries to increase and diversify their exports. In agriculture, this includes shifting to high-value crops for the international market (see for example, World Bank, 2002). Cashew nuts represent an atypical agricultural commodity, similar to some horticultural products, for which international markets are expanding rather than contracting. Since the 1990s, there has been an increase in India's cashew kernel exports, with greater import liberalisation for raw nuts and a relaxation of licensing regulations for processors. However, at the international level, there is also increased competition from other suppliers of cashew kernels, and perhaps also from producers of other nuts. The competition has become more intense on account of Vietnam's entry into the market and the efforts of other countries to increase exports. In addition, we have shown that the domestic resource cost of earning foreign exchange through the export of cashew nuts has increased.

The proliferation of quality and safety standards for food imports into Europe and the United States may further restrict access by smaller and less organised cashew nut producers. Traceability is also becoming more important, with consumers increasingly keen to identify the origins and processes through which the raw nut passes. This is particularly difficult in the Indian context where such a high proportion of nuts are imported. These standards and quality requirements are likely to increase and are an area of concern according to the Cashew Export Promotion Council.

While cashew producers in the South increasingly compete, market share has consolidated among a few retailers, roaster/salter companies and importers in the North. We have shown how in the UK, large retailers act as gatekeepers to consumers and therefore have tremendous power to determine price, quality, delivery and—indirectly—labour conditions for suppliers and producers in the chain. Such an imbalance in power between intensely competing producers and relatively few buyers in the global market place gives retailers the upper hand over their supply chains. Through the contracts they negotiate and the conditions they demand, they can capture much of the value generated by the cashew nut trade. Interestingly, the World Bank (2003) warns: *“Local firms may not capture the benefits of technology and increased power through networks if multinationals have a wide choice of production locations and a monopsonist position in the purchase of suppliers. In this situation, competition among suppliers may drive prices down, and the benefits of local firms' productivity improvements will accrue to the multinational.”* This is precisely what is indicated by this study of the cashew chain and the way in which value is distributed along the chain.

Given the buyer-driven pressures in the supply chain, processors and exporters transfer the burden of competition to the workers (and to farmers). Our survey of women cashew workers shows clearly that such work, while essential for survival, does not provide enough income to raise households out of poverty. This is likely to be the same for the Panruti cashew clusters. As a major UN report on women, work and poverty (Chen *et al.*, 2005) points out, combating poverty and achieving greater gender equality require a major reorientation of economic and development planning. Government and international development organisations need to recognise that in-

creased international trade to promote economic growth per se too often fails to provide the kind of secure, protected employment which enables the working poor to earn sufficient income to escape from poverty. Gender inequalities mean that pressures down the supply chain result in even worse and more precarious work for women than for men. The impacts of such employment go far beyond the workplace, and beyond this generation, since women are still responsible for a range of domestic tasks, including raising children. Market liberalisation has also led to a lack of revenues for states to provide social protection.

Much legislation in India (eg. *The Factories Act, 1948* and *The State Insurance Act, 1948*) does not apply to workplaces with less than 20 workers which operate without electric power. As Hensman argues (2001:7), this provides employers with a variety of ways to evade the laws: splitting an establishment into smaller units which are supposedly independent of one another, creating artificial breaks in employment so that workers never become permanent, employing large numbers of contract workers who are deemed to be employees of labour contractors and therefore do not appear on the payroll of the company or subcontracting production to smaller workplaces. In our study, we found that employers use similar strategies and there have been major changes in the social organisation of cashew processing: the growth of sub-contracting and out-sourcing of processing on a commission basis, including home-based processing. There is a notable absence of an active role by government (national and state level) to implement existing labour laws or even to design policies which would allow the Indian industry to maintain its global position and competitiveness in the future.

The International Labour Organization has pointed to a global 'flexibilisation of labour': informal activities, sub-contracting, part-time work and home-based work have proliferated while rates of unionisation have declined (Standing, 1999). In our study we found relatively high rates of union membership in the cashew industry, although unions are (and are perceived to be) relatively powerless to improve wages and working conditions in such globalised chains. On the other hand, Panruti's example points to ways in which disadvantaged groups can organise themselves to make the most of opportunities presented by the domestic as well as the international market, although wages are very low and working conditions are poor.

The Panruti case study makes it clear that the diversity of retailing in India makes an important contribution to the livelihoods of large numbers of farmers and workers. Public policy that protects diversity in agri-food supply chains and which values the development of local, regional and national markets may be an important way to promote wider gains from trade. There is a danger, however, that attempts at greater vertical integration of the supply chain, sometimes promoted by international NGOs in an effort to make companies more accountable, will exclude the innumerable small traders whose livelihoods depend on the small margins to be made in more lengthy and diverse supply chains. Vertical integration would also tend to increase disparities in wages and working conditions between export-oriented multinational firms and local firms.

Action needed at a national level to promote workers' rights is complex. It should not restrict the livelihood opportunities of the poorest workers through intentional or unintentional protectionism nor raise labour costs to a point where competitiveness is reduced and jobs may be lost. The advocacy of some international organisations to promote labour standards through international and national legislation is only helpful to workers if such legislation is accompanied by policies, including competition policy, which recognise buyer power and which compel lead firms in the North to address the impact of their own purchasing practices on labour standards in the supply chain. Otherwise, the costs of meeting such standards are placed on firms which are much less able to bear them. Until such policies which regulate entire global value chains are seriously explored, the cashew chain is going to remain a clear example of the way in which the international trading system fails to improve the livelihoods of disadvantaged groups. Instead of supporting long-term development, increases in the international trade in cashew nuts may well be perpetuating and reinforcing insecurity and vulnerability for hundreds of thousands of women workers in the cashew industry.

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Power in Global Value Chains: Implications for Employment and Livelihoods in the Cashew Nut Industry in India

explores the impacts of an expanding global market for cashew nuts on the livelihoods of women workers in the cashew processing industry. This report shows that a power imbalance between intensely competing producers and relatively few buyers in the global market place gives large retailers, the supermarkets, the upper hand over their supply chains. Supermarkets are increasingly able to dictate the terms on which business is done and how the cashew is produced, as well as to capture most of the revenue generated along the chain.

Our survey of the women workers who process the cashew nuts shows clearly that such work, while essential for survival, does not provide enough income to raise households out of poverty. The increasing informalisation of employment in the sector creates insecure and hazardous working conditions. This research is a good example of how international trade too often fails to provide the kind of economic growth which will foster secure and equitable employment and enable the working poor to escape from poverty.

We did find that in some areas the diversity of India's retailing sector, with production for the domestic as well as international market, can make an important contribution to the livelihoods of large numbers of farmers, workers and traders. To enhance such livelihoods, we need a) public policies that protect diversity in agri-food supply chains and which value the development of local, regional and national markets; and b) policies, including competition policy, which recognise buyer power and regulate entire global value chains, thereby compelling lead firms in the North to address the impact of their own purchasing practices on labour standards in the supply chain. Until such policies are seriously explored, the increasing trade in cashew nuts will fail to improve livelihoods for hundreds of thousands of women workers in the Indian cashew industry.

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