REVISITING THE CASHEW INDUSTRY IN INDIA: COMBINING INSIGHTS FROM VALUE CHAIN AND ‘SOCIAL EMBEDDEDNESS’ PERSPECTIVES

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The cashew industry in India is eminently placed for a review, combining insights from a value chain as well as from the social embeddedness perspective. Accordingly, this paper sketches a supply chain for the industry and in the process also seeks to understand how gains, not necessarily only monetary, from the industry have been/are being distributed along the chain within India. Many aspects, including wages, of this industry in Tamil Nadu in comparison with that in Kerala are discussed in order to arrive at some definitive or plausible concluding observations.

I. INTRODUCTION

Increasingly, trade in labor-intensive products produced largely by developing countries is organized by a few global buyers, who may work for, or act on behalf of, major retailers or brand name companies (Humphrey and Schmitz, 2002). Studies by Gereffi (1999), Dolan and Humphrey (2000), Schmitz and Knorringa (2000), among others, point out that access to developed country markets has become dependent on the ability to enter global production networks of lead firms situated in developed countries. Understanding the nature of control exercised by these lead firms, the trajectory that emerges when lead firm control is operationalized across space and time – in short, understanding the ‘governance’ pattern of a value chain or of value chains – is key to understanding how gains are distributed along the chain. While capturing global linkages is important in itself to understand who sets what parameters for whose benefit, this by itself is not sufficient to answer the question, namely, why, at the local level (meaning at the level of the local cluster of industries or at the level of the individual firm), global/local governance produces diverse patterns in the way activities are organized; some patterns benefit the actors involved, while others exclude large sections from any gain. Value chain analysis therefore needs to be combined with an understanding of what Granovetter (1985) calls the problem of social ‘embeddedness’ in order to be able to meaningfully read differential outcomes and behavior at different nodes of the same chain.

The cashew industry in India is eminently placed for an (re)examination combining insights from a value chain as well as from the social embeddedness perspective. India in general, and Kerala in particular, has a long engagement with the cultivation and processing of cashew. The industry has been the subject of considerable research; the themes largely covered but studied independently, include, the economics of cultivation, the commercial aspects of import of raw nuts and exports of kernels, and the changing fortunes of the women labour involved in the processing of the raw nuts (Emam Beevi, 1978; Kannan, 1983; Deepa, 1994; CEC, 1999, Lindberg, 2001). To the best of our knowledge there are hardly any studies that have attempted

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to map a chain—combining cultivation, collection of nuts, storage and redistribution of nuts to processors, collection of processed nuts, aspects related to packaging and shipment of processed nuts, and thereafter tracing it to its final destination, namely, the supermarkets of the developed countries. The attempt in this exercise is to map such a chain despite the considerable paucity of information for several nodes in the chain.

The motivation for the study in India has come from several, largely external, changes in the global market for nuts occasioned by WTO-initiated trade liberalization measures at one end, and World Bank initiated structural adjustment programs on the other; these in turn have led to differential consequences for different countries depending on where and how strong they were in the cashew chain at the time of these changes. One country that has suffered severely because of the combined onslaught of trade liberalization and structural adjustment programme is Mozambique, for which cashew is a significant export earner and on which depend the lives and livelihoods of innumerable smallholders and families. Mozambique’s link with India lies in the fact that, presently, India purchases almost the entire crop of raw nuts produced by Mozambique. The economic and social implications of the changing fortunes of the industry in Mozambique for the different actors involved has been extensively researched and well documented (Cramer, 1999; Hanlon, 2000; Kanji et al., 2002; McMillan et al., 2002; Vijfhuizen et al., 2003). From the Mozambican perspective, India holds monopsony power and is even construed as having contributed, along with the World Bank, to the impoverishment of Mozambican farmers (McMillan et al., 2002). India is indeed a big player in the international market being the largest producer as well as importer of raw nuts, and exporter of processed nuts. The burden of this paper, however, is less to assess the beneficial or adverse impacts of India’s international dealings in nuts (raw or otherwise) for players in other countries; but more to sketch a supply chain for the industry and in the process also understand how gains, not necessarily monetary, from the industry has/is being distributed along the chain within India.

II. THEORETICAL FRAMEWORK

The significance of employing global value chain analysis lies in the fact that it highlights the levels of integration between suppliers, producers and customers, across geographical space and over time. It focuses on the nature of transactions between parties/firms operating within a supply chain, and to that extent provides a different perspective to standard trade theory that is built on the assumption of trading partners meeting each other in free markets as independent agents. Beginning with descriptions of the full range of activities required to enable a product to reach the final consumer, value-chain analysis facilitates an understanding of how tightly (loosely) knit and integrated (fragmented) a chain or particular parts of the chain are. There is now a fair body of knowledge built around both the theoretical underpinnings of the analysis, as well as the application of the analysis to diverse contexts. We draw upon the insights that these studies provide for application to our study of the cashew industry.

Based on a range of studies analyzing trade in labor-intensive products such as clothes, shoes and high-value fresh vegetables, Humphrey and Schmitz (2002) distill out some of the key aspects of global value-chain analysis. ‘Governance’, according to them is central to this analysis and they use the term to express how some firms in the chain set and/or enforce the parameters that others in the chain operate. Governance matters because market access does not automatically follow dismantling of trade barriers; more importantly, the chains that developing country producers feed into are often controlled by a limited number of buyers. On the other hand, governance is needed because the buyer has a better understanding not only of
the demands of the market but also of the risks associated with non-compliance with standards. For any context to be studied using the value chain analysis, it is essential, according to Humphrey and Schmitz (2002), to “distinguish between different forms of governance and recognize the reasons why they exist; secondly, it is necessary to understand the way in which competences are acquired at the level of the firm and the cluster” (ibid., p. 23). An engagement with these two aspects will help in a better understanding of how insertion into global value chains impacts local upgrading strategies and also on what terms such insertion takes place. The term ‘upgrading’, in our opinion, is crucial and needs to be concretely captured since this determines the nature and coverage of the flow of gains through the chain. While the use of the term ‘global’ in value chain analysis does connote a hierarchical relationship – overseas buyers (generally located in developed countries) dominating and dictating terms to producers (generally located in developing countries)—the principles of the analysis itself are useful to understand the functioning of any chain (domestic or global). Nevertheless the fact is, the bulk of the physical parts of most global commodity chains are domestically located (developing countries) while the more significant value-adding parts of the same chains are overseas (in developed countries).

The academic significance of revisiting the cashew industry in India stems from the fact that the industry has, to date, not been subjected to an analysis from a value-chain perspective. Hence, while it is common knowledge that (a) the industry is seemingly an export-oriented industry, (b) it employs large numbers of women to process the nuts, (c) the enormous demand of the processing sector has led to large-scale cultivation across the country as well as increased import of raw nuts, etc., there is very little comprehension either at the policy level or at the academic level of the nature of relationship between these different actors and none at all of what the increase in exports and export earnings (if at all) has meant for, say, the growers of cashew, the collectors of nuts or even the processors of raw nuts. Equally there has been very little (almost nil) opportunity to engage with the global buyers of Indian processed cashew to understand the nature of the market at the retail level, the different ways in which the retailers compete to retain their customers (product and/or price differentiation?) and more important how and through whom they translate their requirements of quality and processing standards to their producers in India.

Our limited fieldwork has revealed astonishingly diverse patterns in the arrangements related to cultivation, collection, and distribution and processing of raw nuts. While a value-chain analysis can facilitate an understanding of where different actors are located and what their relative benefits are because of being part of a chain, it cannot explicate why organizational patterns are what they are at different nodes of the chain. It is in this context that we have found Granovetter’s (1985) discussion of the embeddedness of economic behavior very useful for our study. Eschewing extreme positions, namely, one—that the behavior and institutions to be analyzed are so constrained by ongoing social relations that to construe them as independent is a grievous misunderstanding- and the other, namely - that modernization has rendered the economy as an increasingly separate, differentiated sphere in modern society, with economic transactions defined no longer by the social kinship obligations of those transacting but by rational calculations of individual gain—Granovetter proposes that research needs to pay careful and systematic attention to the actual patterns of personal relations by which economic transactions are carried out. This examination, according to him, will make it easier to comprehend the various complex intermediate forms between idealized atomized markets and completely integrated firms. “Intermediate forms are so intimately bound up with networks of personal relations that any perspective that considers these relations peripheral will fail to see clearly what ‘organizational
form’ has been effected. Existing empirical studies of industrial organization pay very little attention to patterns of relations, in part because relevant data are harder to find than those on technology and market structure but also because the dominant economic framework remains one of atomized actors, so personal relations are perceived as frictional in effect” (ibid., p.504).

Another observation of Granovetter (1985) that we find extremely relevant for our context is the manner in which economists’ assumption of rational action needs to be perceived. “What looks to the analyst like non-rational behavior may be quite sensible when situational constraints, especially those of embeddedness, are fully appreciated. When the social situation of those in non-professional labour markets is fully analyzed, their behaviour looks less like the automatic application of ‘cultural’ rules and more like a reasonable response to their present situation. That such behaviour is rational or instrumental is more readily seen if we note that it aims not only at economic goals but also at sociability, approval, status and power. Economists rarely see such goals as rational.” (ibid., p.506).

Rammohan and Sundaresan (2003) have profitably applied the concept of social embeddedness to their study of the coir yarn commodity chain in India. In their view, with which we concur, socially embedding a commodity chain ‘facilitates raising important questions of policy’, of particular relevance to the peripheral society. We have mentioned earlier of the notion of ‘upgrading’ being crucial for our study. Rammohan and Sundaresan (2003) have engaged themselves with this concept at some length. They are against limiting the concept and its use merely to refer to economic upgrading (that is, “the addition of high value services and more sophisticated manufacturing capabilities” (ibid., p.906)), but also emphasize the need to explore the social implications of upgrading. Thus, the questions that they ask include, “How does upgrading translate into the lives of the peripheral workers? Does upgrading improve the working environment and ‘status’ of work? What are its implications for gender-based division of labor?” (ibid., p.906). These are some of the questions that have also formed part of our exploration of the cashew industry.

III. METHODOLOGY
As a first step our attempt has been to construct a supply chain for the cashew industry in India. This very preliminary attempt has immediately brought home to us the fact that at each node of the chain the number of actors involved, the range of interactions among these actors, and the underlying pattern of social relationships—that develop, get strengthened or broken, and/or lead to realignment of relationships are all extremely complex but extremely crucial for our understanding of the shape that a particular chain takes. Besides, even the limited fieldwork has made us aware that, apart from there being two or more chains, the nodes within a chain could crisscross depending on the nature of the relationship (economic and social) between the nodes.

The hub of cashew activity in India is, and continues to be, the southernmost state of Kerala. Kerala produces about one-sixth of the total cashew grown in India but has a near monopoly in the export of processed kernels from India and in the import of raw nuts into India. Our exploratory work began by examining the existing available information on the industry as it historically developed in Kerala and its current status. This literature review and a brainstorming workshop that was held early on in the study with key actors in the cashew sector in Kerala revealed the need to expand the scope of our study geographically to include other states, given reports of decline in the relative share of production of raw nuts in Kerala, and increases in both production and processing of nuts in other states. Thus field visits were made to Tamil Nadu, Orissa, Karnataka, Maharashtra and Andhra Pradesh. These visits revealed a range of production,
collection and processing arrangements with varying implications for the livelihoods of growers, collectors and workers who process cashew. Simultaneously, the field visits have thrown up several questions that existing data are not able to clarify. For example, visits to states, other than Kerala, have indicated that traders from Kerala are the major procurers of raw nuts from these states. And yet, official figures for Kerala as well as oral communications with a range of personnel in Kerala (official and otherwise) uniformly report a decline in processing activity in Kerala and the same having shifted to other states, particularly the neighboring state of Tamil Nadu. While we need to explore extensively and intensively the phenomenon of what happens to all the nuts that pour into Kerala from both domestic and international sources, our surmise is that, the aspect of ‘hidden’ processing activity is on the rise in Kerala with its attendant adverse consequences for the workers involved in such processing, who would be outside the purview of any labor legislation. The most interesting consequence of widening the scope of our study to include other states has been the rich information that we have been able to net, particularly on the diverse patterns relating to cultivation and collection of raw nuts, and the attempts being made to enter into the processing of nuts, hitherto the sole monopoly of Kerala.

The examination or more correctly, re-examination of secondary data enabled us to problematize certain ‘established’ notions relating to the structure of the market for cashews, both domestic and international. These include the following:

(i) At the domestic level, just putting together official figures relating to domestic production of raw nuts, imports of raw nuts and exports of kernels immediately revealed to us that officially there was no mention or recognition of the fact that there is a growing internal kernel (processed cashew) market. If the official figures are to be believed the internal market is almost 50 per cent of the total market. Hitherto, the cashew industry has always been considered from a policy angle and studied academically as a predominantly export-oriented commodity. At the moment, and unless researched, we have no knowledge of the ramifications of the domestic market – its geographical spread, the agents involved, the finer processes required before it is placed on the Indian supermarkets, how differentiated are the products, and the price at which it is retailed and more crucially, the relationship between the domestic and international prices for kernels in particular.

(ii) At the international level, our scrutiny of the data has called for critically understanding how the markets for raw nuts and kernels have behaved over time, the different sets of actors with differential powers involved in these markets leading to very different outcomes for the countries involved depending on which market they dominate. Merely characterizing markets as monopsonic or competitive based on the number of countries involved in each, could detract attention away from understanding where value gets concentrated along the chain.

(iii) The exploratory fieldwork that we undertook in the states of Tamil Nadu, Karnataka, Orissa, Maharashtra and Andhra Pradesh were occasioned by the official figures of area under cultivation and the phenomenal growth of raw cashew in these states. Unlike Kerala, however, which has had a long history of official engagement with the organization of the industry (given the latter’s contribution to Kerala’s economy in terms of revenue and employment), in the states mentioned above, official engagement is at present confined largely to facilitating promotion of cashew cultivation. What began as soil conservation measure has now turned into a commercial proposition for the forest departments of most of these states. Except for one region in Tamil Nadu...
where a cluster of units has managed to organize processing of nuts, in all the other places, processing is at a very low level. Even though Karnataka has a longer history of cashew cultivation and processing than Kerala, for various reasons, historical and otherwise, organized processing activities in Karnataka have declined considerably. Our interest in exploring Karnataka is precisely to understand what brought about the decline and the current status of the industry there. The cashew industry has brought about considerable tension between the neighboring states of Kerala and Tamil Nadu. Tamil Nadu’s lax labor laws and almost nil implementation of those that exist have been blamed for the shifting away of processing activity from Kerala to Tamil Nadu and to that extent of having robbed Kerala of its legitimate share of employment generated. However, the fact is, Tamil Nadu has also considerably increased its share of raw nut production. Hence, whether all processing activity in Tamil Nadu is to be seen as legitimately belonging to Kerala or some at least is to be seen as an expansion from cultivation into a higher value added activity namely processing, was what informed our field trips to Tamil Nadu. Maharashtra at one end and Orissa at the other form part of a (cashew) belt stretching from the Western Ghats to the east coast, covering in the process the northern part of Kerala where cashew is cultivated. As repeatedly stressed, the field trips have been exploratory, more to get a feel of the range of activities involved in these different states and also the manner in which these activities are organized, socially and economically.

For want of space we concentrate on mapping the industry scenario in Tamil Nadu against the backdrop of Kerala. Interested readers are invited to refer to two papers that contain the full details of the collaborative study on which this paper is based (Eapen et al., 2003 and Harilal, et al., 2006).

IV. ASPECTS OF CASHEW INDUSTRY IN TAMIL NADU

Secondary data suggest that Tamil Nadu is an important cashew-growing state in the country. In this state cashew growing is mainly concentrated in South Arcot, Pudukottai, Sivaganga and Kanyakumari districts, but we confined our fieldwork to the Pudukkotai–Sivaganga regions and Panruti in South Arcot. Cashew in Tamil Nadu is predominantly grown on red laterite soil, with very little irrigation infrastructure.

1. Cashew Cultivation in Pudukottai-Sivaganga

The most striking aspect of this region is that it remains a cashew-growing one despite there being so few processing facilities. The only processing facilities in Pudukottai region are owned by the VLC Group of Kollam, Kerala. Much of the produce is sold to processors in Kollam or Panruti (in Tamil Nadu). However, there is a well-developed market network to collect raw nuts from the growers (described below).

Anecdotal evidence suggests that most cashew cultivation in this region occurs on public forestland (controlled by the forest department) and private cashew cultivation seems to be on the decline. The decline in private cultivation seems to be primarily related to deep bore well technology. When water is struck, farmers abandon cashew cropping as uneconomical. This may well be true in the short term, but evidence from elsewhere shows that water mining does not last long and there are many instances of farmers reverting to previous cropping patterns once the underground water is nearly exhausted.
(i) Private Cultivation

We visited eight villages in the Pudukottai, Sivaganga region and interviewed cashew cultivators on various aspects of cashew cultivation. Private cashew cultivation mainly occurs on land which cannot support other crops. There are few villages that grow only cashew and the livelihood options and survival base seem to be much narrower in such villages.

None of the cultivators process their own nuts. The only processing activity we observed in the region was about eight small-scale processors who processed about 5–10 kg of raw nuts on the roadside for sale to travellers on the main road between Thanjavur and Pudukottai towns.

Very small growers, those owning 2 or 3 acres, sell their raw nuts to peddlers the day they are harvested. The peddlers take the collected nuts (about 10–15 kg a day) to the big traders in town. Larger cultivators sell the raw nuts directly to the bigger traders in the towns. They wait till prices are good but this can often be a gamble.

(ii) Forest Department Cashew Plantations

In this region the state forest department is a far bigger player in cashew production than individual cultivators. Planting cashew trees on barren land in the state forests is very common in India. Tamil Nadu forest department embarked on cashew plantation initially as a soil conservation measure. The commercial value of these plantations grew in significance when the price of raw nuts shot up over the past decade or so. Since then, the department has floated a separate corporation, Tamil Nadu Plantation Corporation (TAPCON), to deal with commercial forestry of cashew and other forest products. The cashew plantations operated by the TAPCON in this area are scattered over a vast area, often falling within the boundaries of various villages. The size of each plantation also varies. There is no record, official or otherwise, either of number of trees in each plot or the volume of nuts harvested.

The Corporation generally does not involve itself in cashew harvesting, instead it auctions the usufruct rights every year. The successful bidder can collect raw nuts between January and May of that year. Though the process of collecting the nuts from TAPCON-run plantations looks simple and transparent the actual process is very complex.

Successful bidders have to pay a sum to the local community. In return, the village community pledges that the members of the village community shall not collect the usufructs, and extend full cooperation to the contractor. Once the deal is struck, the contractor can bid with the forest department (TAPCON) and secure his seasonal right. The money collected by the community is spent as decided by the community panchayat. In Pudukottai and Sivaganga regions, such community funds are generally spent on the annual village festival and very rarely put to other uses.

Secondly, the role of traders in the auctioning of Corporation plantations is very crucial. The investment involved in such deals is huge, beyond the combined resources of the conglomerate of individuals (generally 5 to 6) who form a partnership and bid for the plantations. Big traders contribute the rest of the money. In turn, the traders get (i) 36 per cent interest for the money that they advance; and (ii) more importantly, the entire raw nut collection has to be sold to the trader at a price fixed by him (so far traders have been men only). Invariably, the price quoted by the trader would be lower by about 20 per cent than the price that prevails in the market.

Third is the role of politicians. The local functionaries of the ruling party influence the auction and bid for a price. They also seek a share in the profit and on many occasions own the bid by proxy. However, even for such functionaries, approval by the village community is very essential.
From the brief description above, we realise that the complex nexus between traders, politicians and officials of the TAPCON seems to control the entire process. The village community has some stakes but the actual machinations of this complex process warrant a detailed enquiry.

(iii) Harvesting of Cashew in the Corporation Plantations

The successful bidder employs local workers to do most of the harvesting. Usually five women per hectare are paid a cash wage of Rs.30/- per day to collect the nuts. After three days of drying, the nuts are packed and ready for sale. Each worker is able to collect about 15–20 kilograms of raw nuts at the beginning of the season. Once the plantation is handed back to the forest department, the locals (usually women and children) are free to collect the remaining nuts, if any, from the plantation, which they may sell to the peddlers. These nuts are known as ‘saruha kottai’ (nuts from dry leaves).

(iv) Role of Traders

Cashew traders are mainly from the Chettiar caste and are involved in three different ways: as direct procurers of raw nuts, as commission agents and as traders of imported nuts.

Some traders act as intermediaries between the cashew processors (mainly in Kollam, Kerala) and cashew growers. The processor who appoints the trader as his agent provides the capital required for procurement and transportation. The agent in turn uses his knowledge and contacts to procure the required quantity and quality of raw cashew from the region for which he is paid a commission.

As mentioned earlier, there are not enough raw nuts grown in India to meet the processing capacity. Some traders from this region also trade in imported nuts and sell them in small quantities to the processing houses in South Arcot, Kanyakumari districts of Tamil Nadu and sometimes also to Karnataka and Andhra Pradesh processors. But in terms of scale, this is very small compared to their domestic trading activities.

(v) Cashew Cultivation and Livelihoods

While we came across very few cultivators who relied only on cashew for their livelihood, in terms of employment, cashew generates continuous employment for many women for nearly three months every year. A 50 acre cashew plantation can employ about 100 women for nearly three months. Men are primarily employed to maintain the plantation. Though the cashew plantations provide employment for only three months in a year, it is crucial because: (a) It is one of the few sources of income for women; (b) No other crop provides employment continuously for three months; and (c) It provides employment during the lean season when no other employment is available in agriculture.

The collection of ‘Saruhu Kottai’ is another important element in local livelihoods, although its significance needs to be explored further. Similarly the importance of plantations as a source of firewood for the households surrounding the plantation could merit further exploration. Another area for future investigation would be to assess the importance of income from these plantations and the wage income of workers within the overall economy of the village.

2. Cashew Cultivation and Processing in Panruti Region (South Arcot District)

Panruti cluster 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 to suit changing conditions and markets.

(i) Cashew Cultivation in Panruti

The cultivation of cashew in Panruti is the mainstay for its population; it is grown in both private and government owned forest lands and is the sole agricultural crop for many farming households, it is well-tended and high yields of quality nuts are produced. The social organisation of production is an interplay of many actors and property rights mediate their activities. Landless agricultural labourers work for wages; small peasants organize production essentially with their family labour and large land owners depend entirely on hired workers. There are leaseholders-who lease land from the State or from individual farmers – on an annual contract. The contract is for the produce. At any time, these categories are not exclusive. Despite these nuances, in terms of ownership and thereby the right over the produce, such rights – property rights over land, the produce from the land or both, are suspended for long spells of time in a year. Rather, these rights are invoked only during the time of peak harvest. All the exclusive rights over the produce are suspended towards the end of the season and the entire stretch turns into a huge common property resource. 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 and turning of private land into common property 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 their livelihoods.

(ii) Cashew Processing in Panruti Cluster

Cashew is processed by a steaming, cutting and sun-drying method. Processing in Panruti is highly fragmented. Except in 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 initiate the processing activity. Thus, there are minimal entry barriers into the processing industry in this cluster. Such autonomous emergence of a system of shared infrastructure is the reason why we use the term cluster. The other important character of industrial clusters, viz. ‘real services’ have not emerged here.

Another crucial characteristic that is unique to this cluster is the way in which it has responded to the high risks involved in cashew processing due to volatile prices in raw nuts and kernel markets. The price changes 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 prices of kernels go down by even five per cent, they will lose all the margins as well as some of their precious capital as well. Therefore, they do not want to be exposed to the market for long. Each processor therefore takes up one sub process 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 the market that functions every day during the season. While the risk of market fluctuations are minimized under this system, the individual processor is left with narrow margins, as they do not undertake
the entire processing activity, which 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 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 one own whatever they work on. The widespread ownership also ensures that the margins also get distributed widely but rather thinly.

(iii) Kollam Processors in Panruti

There are at least four types of processors in the cluster. The integrated units owned by the Kollam export houses replicate the processing methods adopted by them in Kollam. They source raw nuts from Panruti area 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 any export order, and if they need processed kernels, such export units buy kernels from small processors through middlemen. Such kernels are cleaned, sorted, mixed with their own nuts, packed and shipped from these units. When such 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.

(iv) Local Export Houses

Apart from Kollam based processors, there are a few from within Panruti who 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 it much more finely, dry it and vacuum pack it 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 their 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 any one they prefer. 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 upstream in 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 with the power and control not concentrated in
the hands of a few. The presence of local export houses enables the small processors not to be entirely drawn into the otherwise dominant Kollam network.

(v) Small Processors in Panruti

Small processors dominate the Panruti cluster. The way in which they organize processing defines the functioning logic of the cluster. The small processors in Panruti are not only processors, almost all grow cashew. When the harvest season starts, they close down the processing activity for two reasons. First, they have to harvest their crop. Secondly, the workers will not turn up for work in processing. They go to collect the ‘free’ nuts in the cashew tree groves that are declared as open. It is more remunerative for the workers to collect the nuts rather than work for wages. Harvesting also requires the labour power of the workers. Once the harvest season tapers off, processing activity picks up pace. It goes on till the next season starts.

Raw nuts harvested from own farms are not sufficient to sustain the processing. Most of the small processors 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. Raw nuts from other countries are also sourced 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. All the rest hire these machines for their requirement. Transportation of nuts to the boiling plant and back is through carts again for a fee. Rent for these services are conveniently fixed on piece-rate basis. Similarly, few processors own the heating machines. Other processors use the machine for a rent. Each village has at least one boiling and heating machine. The economies of scale are achieved through renting out. Such an arrangement enables many small processors to get into the trade with nearly zero investment in infrastructure.

Once the raw nuts are steam cooked, they have to be dried, cut open and kernels have to be 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, minimizing 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.

(vi) Fragmented Production and Phyto-sanitary Standards

Small processors have not invested much in infrastructure, but use available space; 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 in their premises before they pack them. Only when the demand outstrips supply from other sources, do they source from Panruti. Even prominent importers in the UK were aware of conditions in Panruti. 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 of starting an exclusive estate for cashew processing in the district. The lack of minimum standards of hygiene and safety seriously hamper small processors’ chances of increasing exports to western markets.

(vii) The Importance of the Domestic Market

The Kollam export market uses the kernels from the Panruti cluster in a covert way due to the poor processing conditions that prevail. What sustains the small processors in Panruti, apart from the export houses of Kollam, is the booming domestic market for cashew. Many small processors in Panruti sell their produce only in the domestic market, through wholesalers of grocery, who supply retailers. In the state of Tamilnadu, such wholesalers are found in Salem in the west, Virudunagar in the South, Chennai and Vellore in the north and Nagapattinam in the east. Panruti processors have explored these grocery hubs and supply cashew kernels on a regular basis. The wholesalers place orders over the telephone and the consignment reaches them via road transport. Payments are made at regular intervals. Cashew supplied to this market is packed in plastic pouches (1kg and ½ kg) and tins (5 kg). Such packages contain whole nuts but of varying sizes. There is a generic brand that many Panruti processors use for packets, such as “Bombay Cashew” but there are several individual brands too.

Much of the transaction in the domestic market is based on trust and not on 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 the payments. Essentially, that amount of capital gets locked up for the processors. 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 obstacle, the processors from Panruti 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 cost is manageable for many small processors. The orders are placed at regular intervals throughout the year, enabling processing to take place during the entire year. The big export houses are not prominent in the growing domestic market, since the transaction costs of engaging in so many business deals are high. The 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, the role of wholesales and small retailers ensure secure markets for Panruti processors, in a growing domestic market based on growing middle classes in India. However, processors from Panruti need to be aware of increasing food safety standards in the domestic market as well.

V. WORKERS AND EARNINGS

An important part of our exploratory exercise has been the examination of the organization of labor in the cashew industry. Ideally, since our interest is to understand the cashew chain, we should have been able to pinpoint the manner in which labor is organized at each node in the chain. But given the preliminary nature of the exercise, and given the absence of recorded
information on very many crucial aspects of the industry, we have barely managed to put together an account of the different aspects of the functioning of the industry in a few of the cashew growing areas of the country. However, an aspect of the industry where labor organization has been fairly well recorded is processing. The processing part of the industry has attracted a lot of attention for many reasons, not least being the fact that it is almost the only part that gives the sector an industry status. Two, the processing part is almost entirely made up of women labor, so much so, that the common perception is that the cashew industry is women-intensive.

To us, approaching the industry from a chain perspective, the question of how female-intensive the cashew industry is, is still an open question. If the fact of the industry being female-intensive overall is true, then the question that follows, namely, how has the industry benefited the women workers individually, and as members of households, still needs an in-depth probe. Nevertheless, beginning with an examination of available data and research work on women labor in cashew, we have put together our findings on the present ‘status’ of processing activity and conditions of women’s work in this activity. Our field trips relating to this activity have largely been confined to Kollam, Kerala (where the bulk of processing activity in the country is concentrated) and a short trip to neighboring Kanyakumari. In this paper we confine our discussion to the processing sector in Tamil Nadu, namely Kanyakumari and Panruti.

Cashew processing as has been recorded in most sources, (Balasubramanian, 1981; Kannan, 1983; Lindberg, 2001) started on a commercial basis around the 1920s and 1930s in India. It was transformed into an export-oriented activity by the early 1940s with the phenomenal increase in the demand for cashews predominantly in the US.

The growing liberal environment in the country, both in terms of trade liberalisation and industrial delicensing and a fairly steady growth in the production and exports of cashew kernels after a sharp downturn between 1977–88, (Veron, 1997), mark the progress of this industry in the nineties. However, such an environment appears to have legitimized greater ‘informalisation’ of production and work arrangements in the processing sector in our region of study, leaving in doubt whether any gains could have accrued to the large numbers of workers employed in this sector, over 90 per cent of whom are women.

1. Conditions of Work in the Cashew Processing Units of Kanyakumari

Cashew processing activities in Kanyakumari were initiated, and are today still controlled, by entrepreneurs from Kollam, Kerala. There is considerable switching of activities between the states to escape legislation which producers see as hindering their ability to enhance their profits, especially legislation designed to mitigate exploitative labour conditions. Our limited exposure to Kanyakumari also reveals that the social organisation and control of processing in Kanyakumari by Kerala entrepreneurs has not only been detrimental to local labour, but also to local entrepreneurial initiatives. Local government in Kanyakumari has contributed to this particular form of organisation of production because of its attempts to ‘industrialise backward rural areas’ (CEC, 1999).

A study of the Kanyakumari cashew sector by the Center for Education and Communication in 1999 has covered these issues in detail. We provide a brief summary of the findings here, which our own factory visits endorse. Their work is relevant because the working conditions and implications for gender largely corroborate the Kerala findings. And also because it is an interesting comparison to our findings on the social organisation of production in Panruti. Our research that indicated the largely beneficial impact on households of Panruti’s processing clusters appears to be in sharp contrast to the Kanyakumari model.
We have summarised the CEC findings under the following two headings: (a) Ownership and organisation of processing activities in Kanyakumari; and (b) Women’s working conditions.

(i) Ownership and Organisation of Production

According to the CEC, the Kollam cashew nut industry owners have transplanted the same industry organisation into Kanyakumari. As in Kollam, one person/family owns a number of different factories. But where several proprietors have units in a single area, they work in close coordination and function as ‘combines’. There appear to be a number of advantages to this (Sathyadas, 1991, cited in CEC, 1999): ability to access loans from the same credit institutions but in different names; deriving benefits that accrue to units defined as small-scale; capacity for monopolistic control over the markets for raw nuts; ability to change administrative staff from one factory to another so often that the latter do not establish long term contact with local producers; and rendering work conditions uniformly oppressive so that workers see no benefit in switching from one unit to the other except to be near their home.

“In the beginning, the cashew nut industry entered Kanyakumari as a temporary arrangement to evade enforcement of labour legislation in Kerala. When the processors were able to pay very low wages and got their cashew processed, they permanently established their units. Moreover, the nodding acceptance by the state officials and not enforcing the labour legislation in the name of ‘rural industrialization’ has also played a major role. Though this has generated employment to unskilled women, for many years the cashew nut processors were very careful in not raising the workers’ wages. The ownership patterns they followed were quite efficient in discouraging local entrepreneurs from entering the industry. However, the implications of such strategies are very adverse to the interests of labour.” (CEC, 1999, pp. 27).

(ii) Working Conditions in Kanyakumari

While the industry has continued to expand, workers continue to be exploited, visible indicators of which include long hours of work, denial of non-wage benefits, low wages, etc. However, workers are uncritical when discussing the (exploitative) nature of their jobs in the cashew industry or the (health-impairing) conditions of the workplaces. This can be understood better when we consider that while Kanyakumari district records the highest female literacy rates in Tamil Nadu, it has the lowest female work participation rate. The district has few industries, agricultural activity is also low, and hence gainful employment is difficult to come by. As per data provided by CEC, a quarter of all factories in the district are cashew-processing units; the industry employs nearly 75 per cent of all factory workers in the district, especially in

<table>
<thead>
<tr>
<th>Process</th>
<th>Tamil Nadu</th>
<th>Kerala</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shelling</td>
<td>2.6</td>
<td>8.11</td>
</tr>
<tr>
<td>Peeling</td>
<td>1.1</td>
<td>10.12</td>
</tr>
<tr>
<td>Grader</td>
<td>24</td>
<td>58.57</td>
</tr>
<tr>
<td>Tin Filler</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>Loaders workers/fireman</td>
<td>55</td>
<td>75.75</td>
</tr>
<tr>
<td>Dearness allowance</td>
<td>5.37</td>
<td>27</td>
</tr>
</tbody>
</table>

Note: However, for Kerala, Cashew Industry employers have got a ‘stay order’ which allows them not to actually pay the revised minimum wage rates given above.

Source: CEC (1999).
Vilvancode, where most units are located. Given the absence of any other employment generating activity in the area and/or any other source of income women would have remained unemployed had it not been for the cashew factories.

Here we highlight the contrasts between women workers in Kerala and Kanyakumari:

(i) Unlike Kerala, there is no mention in Kanyakumari of a decline in the number of days of work. In fact work in Kanyakumari is available throughout the year, including Sundays.

(ii) The fixed minimum wage in Tamil Nadu contrasts quite sharply with Kerala’s (Table 1). For processes where men are involved, the Kanyakumari cashew nut workers are earning just 50 per cent of what male cashew nut workers earn in Kerala; in the case of women it is just 25 per cent (CEC, 1999, pp. 48).

This needs further research, especially;

(iii) Whether payment of such low wages in Kanyakumari is not only encouraging the shifting of units, but also raw nuts from Kerala, such that there is continued processing all through the year in Kanyakumari;

(iv) If so, why are trade unions on both sides of the border not forging alliances to jointly address the issues of declining days of employment in Kerala and the persistence in payment of abject low wages in Kanyakumari?

VI. DISCUSSION TOWARDS CONCLUSION

Based on our reading of the existing literature on the cashew industry, and on our explorations on the field, as recorded above, we have the following observations to make.

(i) Academically, there is a dearth of studies taking an integrated view of the cashew sector and in a long-term perspective. Thus far, in our view, academic engagement with the sector has been broadly of two types. One, a very economistic reading of the sector no doubt covering various aspects like cultivation, processing of nuts, technology, markets, pricing, labor, etc. But each of these aspects has been treated as independent entities linked almost only by price. The social underpinnings of economic relations have rarely informed these studies. On the other hand, we have studies that have approached the industry from a gender perspective (employing multi-disciplinary methodologies), but these have not been able to move beyond the processing sector; the latter, the most visible part of the industry, is almost entirely made-up of women workers. What is it about the organization of the industry as a whole, that makes women visible only in the processing sector and not in others—such questions have rarely engaged the attention of gender studies’ scholars.

(ii) Our analysis of the available secondary data have been revealing in so far as they have made us question certain accepted notions pertaining to the functioning of the industry. The examination of secondary data relating to imports of raw cashew, domestic production of raw nuts and exports of kernels, immediately brought home to us the fact, that, if official data are to be believed, then almost 50 per cent of the kernels are being consumed in the domestic market itself. Whether or not this is true, and if so, the direction and dimension of the market, the major players in this market, its spatial concentration—these are as yet unexplored and unresearched issues. The data on exports in value terms made us realize that, while in rupee terms, there has been an increasing realization of value, the same in dollar terms has been stagnating. The full implication
of this phenomenon to our efforts to boost exports—ostensibly to increase our foreign exchange earnings and in the name of which efforts, we have been altering our export-import duty structures — these need to be worked out in detail. The characterization of international markets for nuts and kernels as either monopsonic or competitive is highly problematic. These characterizations are based more on numbers of countries involved and not so much on the bargaining strength of these countries, the particular markets being addressed (nuts or kernels), or even the possibility of lead players combining to block entry of others. While data as well as interviews with trade unions, workers, employers, etc., emphasized decline in the availability of raw nuts for processing and therefore leading to decline in number of days of employment for workers, this did not cohere with the fact that almost all the nuts grown in other states and a large part of those imported were being bought by processors in Kerala. Our surmise therefore is that, given the low level of processing activity in other states, and also given the fact that data do not show decline in numbers of cashew workers, there could be a decline in processing activities in factories, while clandestine processing may have increased.

(iii) The state-wise documentation of the range of activities covering various aspects of the industry have given us glimpses of the diverse manner in which the same activities are organized in the different states, and in different regions within the same state. More significant, the wide canvas that we have covered (even if at the cost of not being able to explore any one activity in depth) has enabled us to get a feel of the complex social underpinnings of what seems on the surface as straightforward economic transactions.

(iv) Our effort has been to, simultaneously construct a cashew chain as well as situate each node of the chain in its social context. The main nodes that we have engaged with, in this study, include, cashew nut cultivation, collection of nuts, distribution of nuts collected domestically and those imported, processing of raw nuts, collection and marketing of processed nuts. Exploring the manner in which each of these activities are organized (technically and socially) in a particular geographical space and the manner in which these activities are linked across space, has enabled us to comprehend to some extent, why, the same set of activities show differential outcomes in the different areas; also, why, certain interlinkages between activities are more beneficial (to some of those involved in the activities) than others.

(v) Take cultivation of cashew trees and harvesting of nuts, for example — an activity in which the government has a large presence in almost every state. But the differential manner in which each state has organized/promoted/facilitated this activity has immediate implications not just for those involved in the harvesting of nuts and planting/nurturing of trees, but also for those involved in the subsequent set of activities, namely, collection of the harvested nuts, distribution of the same, etc. In each of the states that we have covered the pattern of intervention, by the state in particular, is very diverse.

(vi) The larger question that these differential patterns (at each node and across nodes, and in each geographical area and across space) raise, is, how sensitive are our policies (at every level, local national and global) to the social organization of activities. An in-depth exploration of this question is extremely important at this point of time (given the environment of liberalization, the institution of global standards for labour and for processes of production) inorder also to be able to concretely unravel the beneficial (or otherwise) impact of trade liberalization measures all along a commodity chain.
(vii) Hitherto, the processing aspect of the cashew chain has merited considerable attention for several reasons, the most significant being the domestic importance of the segment for the sheer volume of workers that it employs, almost all of them women. The gendered nature of the organization of the processing sector and the visibility of this sector among all others notwithstanding, our submission is the need to view this sector as a node. The implications of viewing it as a node, are several, according to us. While discrimination of any kind, including that based on sex, needs to be addressed, the questions of the changing forms of organization of processing activities (increasingly from factory to non-factory type), increasing blatant violations and outright non-implementation of labor laws, etc., need to be studied in the context of an overall thrust towards ‘removing all barriers’ to economic activity, particularly in export-oriented activities, since the goal is primarily to increase earnings in foreign currency; the goal of benefiting workers, if at all, is only as an off-shoot of this goal. Viewing processing as a node necessarily implies that we need to realistically assess (as in the case of other nodes) the value generated/added at this node in order to address the oft-repeated statement that payment of mandatory stipulated wages and benefits could render the whole operation/units unviable. Exploring the processing node from a social context will mean also placing an equal emphasis on studying ‘employers’ as much as ‘workers’ and more important, studying employers in conjunction with their workers. The nature and intensity of employers’ linkages with other nodes in the chain, the linkages between employers themselves, their capacity and ability to pay stipulated wages and other benefits, the manner in which employers are ‘governed’ because of being part of the chain, etc., these are as yet hardly researched. Rather, labor studies implicitly assume a homogenous category of employers, almost all of them ruthless exploiters of labor, and generally flush with money.

Embedded in the above listing of the findings of the study itself is a huge agenda for research. Even so, it would be in order to prioritize some of the issues so that our understanding (as yet very miniscule) of the ‘governance’ aspect of the cashew chain gets strengthened. Thus far, our emphasis has been on mapping the physical aspects of the chain, and wherever possible, the social underpinnings of each of the nodes. The engagement with the issue of ‘governance’ and its concrete manifestation at each node, and the singularly most important question of who benefits by how much and why, at every node, now needs to be superimposed on the physical map that we have drawn. While to some extent we have profitably used Granovetter’s (1985) ‘embeddedness’ concept to explain the emergence of diverse patterns in a particular activity across space, and diverse arrangements across activities, we have yet to begin our explorations in to the form of governance characterizing the cashew chain - what gives the chain the form that it has and the persistence of the form. We are aware that markets at the retail end of the chain are controlled by a limited number of buyers. Apart from understanding the manner in which the buyers’ market is constituted, it is also important to concretely document the parameters that the buyers’ have set for those aspiring to be their suppliers, what monitoring mechanisms they have instituted to examine compliance standards, how much they are prepared to invest to enable suppliers to attain these standards, etc. Similarly, at the domestic level we need to concretely trace who belongs to which chain on what terms; what does ‘inclusion’ in the chain mean monetarily and otherwise, etc.

We are aware that, as we go along the chain from the retail end to the cultivation end, the possibility that the retailer and the cultivator would know of each other being part of the same
chain, is extremely remote; by the same token we are also aware that just being part of the same chain does not mean that the cultivator is better placed to gain from value-addition along the chain. However, precisely why some actors on the chain gain while others do not, what circumstances dictate the distribution of these gains along the chain, how are these gains further distributed between households and within households, across gender, etc., are issues waiting to be researched.

References