

# Understanding ‘Crises’ in a Traditional Industry

## Case of Coir in Kerala

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*The paper attempts to critically analyse the issues that are an offshoot of the open market regime pursued in the industry. Intense competition between exporters for developed country suppliers along with imperfections in the factor markets has resulted in the downward pressure on producer prices. Price liberalization in the presence of distorted factor markets have not improved the lot of poor and marginal workers, despite high foreign and domestic demand as production is increasingly being reorganized into small-scale, decentralized and more flexible economic units using a flexible labour force. The coir industry which traditionally employed permanent unionized workers who received a certain level of social protection is being transformed into a reserve pool of flexible unprotected workers.*

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Until recently, the coir industry was highly regulated. The focus of the paper is on the consequences following upon an open market regime in the industry. The paper tries to outline the norms for pricing that existed before the initiation of the open market regime in the industry and attempts to understand how the dismantling of this norm was contingent upon the reorganization of the value chain to lower costs, faced with an uncertain price for coir products. The new regime purportedly to encourage the free working of the market forces has had detrimental affects on the majority stakeholders, viz., the small producers and the workers. The paper attempts to critically analyze the issues that are an offshoot of the open market regime pursued in the industry. The first section of the paper is a broad overview of the history of the coir industry up to the recent changes. The second section delineates the analytics of pricing followed in the past. The third section focuses on the changing nature of work organization in the industry. The last section makes a case for the continuation of intervention in pricing.

## I

Coir<sup>1</sup> is a traditional industry of Kerala; traditional due to customary associations with the land made possible by the uniqueness of Kerala’s environs and also due to the nature of production organization and processes that are followed in its production. The industry has been exposed to global markets since the 16th century and the scale of production is determined by the changing nature of demand in the world market. Though the contribution of the coir industry to the state’s domestic production is not high compared to other sectors, this continues to be an important industry as it is a major provider of employment to a large number of rural poor.<sup>2</sup>

The production of coir and coir products involves two major operations: spinning of coir yarn from coir fibre and weaving the yarn into mats and matting. Occupations in the industry are segregated by sex; women workers who comprise 90 per cent of all workers in the coir industry are mostly engaged in the spinning of yarn and while men are engaged in the weaving of mats and matting (Survey of Coir Industry, 2002). The manufacturing sector engaged in weaving yarn into mats and matting is concentrated in Allappuzha and comprises several small household units and a few large manufacturing and exporting units. Yarn production is spread throughout the Southern coastal belt of Kerala. Production is mainly household-based with the prevalence of several small and medium producers employing workers in their own work yards.

This section attempts to briefly state the history of the industry. The extraction of fibre from coconuts has a very long tradition here. Colonial integration and the expansion of international demand for hard fibres stimulated the external trading in coir products and thereby fostered the emergence of a coir industry in Kerala. Over time the industry evolved as the second most important source of labour absorption in the state. About 90 per cent of the labour force and over 90 per cent of the industrial establishments engaged in the processing of coir and the manufacturing of coir products in India were spread out in the densely populated coastal regions of the state of Kerala such as Allappuzha, Kollam and Thiruvananthapuram. The characteristic features of the industry, such as labour intensive technology, the petty production structure, with ample opportunities for different forms and degrees of self employment and self-exploitation, and the customary work sharing arrangements, had made the industry suitable for accommodating the surplus population that could not find gainful employment elsewhere [Isaac et al, 1992].

The fragmented production structure of the industry necessitated a large network of middlemen in the raw material market of husk and in the product market of yarn. The middlemen in the husk and yarn markets were able to appropriate profits while the workers were paid only subsistence wages as a result of the product market structure and institutional rigidities in the residual labour market of coir yarn that prevailed. Exporters and merchants based in the port town of Alleppey constituted the highest end of the supply chain, and it was they who had managed to monopolize the trade in coir.

The development and spread of the trade union movement during the later half of the fifties led to significant wage gains for workers engaged in coir, but this eroded the cheap labour base of industry. Changes in industrial relations stimulated the rise in wages and employment policies bolstered the bargaining power of workers. Over time, competition among exporters and middlemen and from substitute products led to the induction of technology. This technological change in the early sixties disrupted the traditional domestic arrangements of production the coir industry and this formed the background of the militant trade union movement in the industry. Further fragmentation of production structure and attempts to introduce labour saving machinery were the employers' response to the spread of the trade union movement. The major entrepreneurial response was to further decentralize the production structure, especially in the weaving sector where production was contracted out to small-scale establishments. There was also fragmentation of production in the spinning sector [Isaac, 1984].

More capital-intensive technologies were made available in coir defibring,<sup>3</sup> spinning and manufacturing operations. The unions resolutely opposed moves for mechanisation. They demanded a ban on labour saving technology, in order to protect employment and also for the elimination of middlemen through a programme of co-operativisation of the industry in order to improve earnings of workers. Vigorous intervention by the state in the raw material and product markets in support of the workers' cooperatives was also called for. Industrial circles and experts had been very critical of these policies, partly because of the ban on mechanization and the nature of government intervention in the raw material market. However, given the political climate of the state, the policies pursued by successive state governments had been broadly in accordance with the policies advocated by the unions [Isaac and Raghavan, 1990].

State intervention in the coir industry was enforced with the setting up of cooperatives. To protect employment and improve the workers' wages, the strategy adopted by the government was to remove middlemen and to reorganise the spinning sector of the industry on a co-operative basis. The government also introduced minimum wages for the industry and measures to regulate the husk and product markets. The producers' co-operatives were also set up. The production was marketed by the apex marketing federation, Coirfed. But this attempt at co-operativisation was

undermined by the scarcity of husks, the ineffectiveness of state intervention in the raw material market as well as the decline in foreign demand.<sup>4</sup> This led to a fall in wages and days of employment in the coir industry [Isaac, 1990]. This situation strengthened the arguments for reorganising the industry again, but this time on a modern technological basis. The technology used in coir till the 1990's is described as traditional, which meant that the production process was basically manual and not dependent upon machine power. The reorganization of the industry on a modern technological basis was purported as the only means of revitalisation of the coir industry. The leftist parties (traditionally strong in Kerala) that spearheaded the movement against mechanisation earlier, citing reasons of large-scale labour displacement, also supported this new scheme. The State sponsored scheme of technological modernisation in the co-operatives came up in this context. It aimed at increasing productivity, wages and value addition. The employment scenario had also changed in the 1990s. The lack of steady employment in the industry during the 1980s, higher levels of education attained by young women, the changed attitude to work, and the possibility of alternate employment in the construction and service sectors reduced the preference for work in the coir industry. Further, the imported fibre from the neighbouring state of Tamil Nadu, helped to supplement the local shortage of husks and to retain employment in the spinning sector [Rammohan, 1999]. The attempts at mechanized production have not worked due to frequent breakdowns of equipment and also deskilling. Most cooperatives have incurred huge losses in the process. It has been successful in defibring and not in spinning. The existing cooperatives are reverting back to manual production or production using motorised ratts in spinning. The late nineties also witnessed (as a consequence of the neo-liberal reforms) the deregulation and decontrol of the coir industry. At present all the interventions in the raw material market have been given up. The minimum purchase price of coir products enforced under the Purchase Price Enforcement Scheme (PPES), which was earlier set by the Coir Board, has been abolished in 2002. With regard to export products, regulatory measures were taken to ensure the quality and price of coir products. Only registered products were allowed in the export market, and minimum prices (Minimum Export price) were fixed to discourage competitive underpricing by the exporters. Now the minimum export prices have also been given up, and the prices are governed by conditions in the market.

## II

### *Minimum Export Price (MEP) and Purchase Price of Coir and Coir products*

Prior to independence the major item of export was coir yarn, which was converted into finished products abroad by the European importers. After independence the emphasis shifted to the export of finished products. The introduction of MEP ensured better export realisation to the exporters (NCAER, 1999). Initially this benefit percolated to ensure reasonable prices to the manufacturers and wages to the workers. But slowly installed production capacity increased and it became much higher than required. Exporters bargained with the manufacturers, to reduce price, given their excess capacity. The Industries Department (Govt. of Kerala), issued an order in 1975, under the DIR, notifying minimum sale or purchase price of coir mats and mattings. This order was suspended by another notification of the Govt. of Kerala in 1976. From 1976, the Coir Board implemented the Purchase Price Enforcement Scheme (PPES) to ensure reasonable price for manufacturers and wages to workers engaged in manufacture of products for export.

### *Calculation of MEP*

MEP has been in operation for more than 30 years. In 1990, the Jagan Philipose Committee formulated certain norms for arriving at the price. The MEP included the following components namely; the purchase price which was fixed and announced by the Coir Board; the actual (average) of finishing and packing expenses; the actual (average) FOB expenses and a profit of 13.5 per cent, which included the exporters' share to the coir workers' welfare fund. The last revision of MEP was made in 1997.

### *The Purchase Price Enforcement Scheme (PPES)*

Till 1990, purchase price revisions were made on a lump sum basis after discounting increases in raw material prices, wages to workers etc. In 1990, the Jagan Philipose Committee formulated some criteria for the revision of purchase prices. Since then the guidelines finalised by the Committee was used for making price revisions. The components of the Purchase Price included the raw material price, which was arrived at by considering the open market price at the production centre and price at Coirfed with and without rebate; the basic wages fixed by Coir Industrial Relations Committee(CIRC); rates of Dearness Allowance (the dearness allowance applicable to coir workers is based on the cost of living index of the month, the provision to include the increase in D.A for the incoming year is also made in the costing); overall increase in wages and D.A. (the coir workers in the product sector are eligible for an overall increase of 22 per cent in wages and D.A. w.e.f. 11-9-67 as devaluation benefits); another increase in the total wages @ 23 per cent was made effective from 23-1-91 by the CIRC as the enhancement of wages arising out of devaluation; a provision towards the share of contribution to the coir workers' welfare fund is also included in the price (coir workers welfare fund, enacted in 1987, as per this act the owner of the factory has to contribute to the fund at the rate notified under the Act); annual fringe benefits: holiday wages (5.5 per cent), leave with wage (5 per cent) and bonus (as announced by the CIRC) are accounted in the purchase price. Holiday wages and leave with wages are also to be added to the actual wages for calculating bonus. They are accounted in the purchase price. So the standards of wage control are highly related to the standards that are adopted to determine prices and business profits.

### *Price liberalization and its Consequent Maladies: Soaring Demand, trailing Wages*

The present condition in the coir industry is a paradox. While the industry has been enjoying buoyant market conditions, the condition of the small producers and workers has not seen a reversal. The role of the Government has now changed to that of a facilitator without having direct involvement in the affairs of the industry and trade. The ongoing changes in market conditions and the technological change in the industry have implications for vast sections of people in the State of Kerala, as workers in coir yarn processing are drawn from among the most disempowered social groups [Rammohan, 1999]. In this context, there is a need to understand why the paradox of high demand (external and domestic), but low wages co-exists in the coir industry today. According to the neo-classical approach, a la Hecksher-Ohlin-Samuelson, we would expect demand for labour to increase in the exportable sector via derived demand as exports increase. This should raise both wages and employment in this sector which has not been the case in the coir industry. To resolve the paradox, the production organization needs a detailed probing.

## **III**

### *Changing Production Organizations and the Changing nature of Employment Relationships*

The cooperative sector was the most dominant form of production organization in the coir industry till the end of the eighties. Cooperatives are of two types – manufacturing cooperatives that produce coir products for export and for the home market, and spinning cooperatives – engaged in the production of coir fibre and yarn. The apex marketing society Coirfed procured the produce from Cooperatives and sold them through various outlets. The cooperatives, set up with the government support had to shut down as losses incurred from operation escalated with increasing costs of raw material, wages and overheads in the 1990s. Cooperative members were forced to take up self-employment or to work with small scale producers to earn a living. At present, household based production of fibre, yarn and coir products by small and medium producers is the most dominant form of production organization. There are varying degrees of

putting out and wage work involved in the production of fibre, yarn and coir products. Most of the production in the coir industry is carried out by small and medium cottage enterprises using manual labour, though there is factory-based production mainly for exports using power looms. Large export houses also manufacture coir products and they dominate the export market for coir products. They also subcontract export orders to small and medium producers, through various intermediaries/middlemen (called depot owners) who are also engaged in marketing coir products of small and medium producers to exporters. This they do after levying a commission per square metre of mat/matting. Throughout this period the prices of husks and fibre (the main raw material) kept rising. Small producers had to find a leeway between these two opposing price trends – escalating husk prices and depressed product prices. The prices of husks and fibre have been reining high due to the scarcity of husks and fibre in Kerala. The coir industry has been able to use only about thirty per cent of domestically available husks and fibre due to the costs involved in transporting them to the workshops. Presently Kerala is importing fibre from the neighboring State of Tamil Nadu. The fibre mill owners there have been profiting from this. The fibre prices have trebled in the last three years. This situation has also created a new breed of fibre merchants/traders who sell fibre and take back the coir and products so produced for a given price, after deducting the price of fibre and a commission on the produce.

The changed situation has led to the emergence of tied producers, both in spinning and weaving akin to the situation of the fifties and sixties. Trade unions had to wage several struggles to reorganise the industry into producers and workers cooperatives during that period. After its dismantling the industry seems to be returning to its old predicament. About 30,000 workers are employed with 12,000 small scale producers in Allapuzha in the matting sector. The price for mats/ matting is fixed by the middlemen traders also called depot agents.

As workers turn themselves into own account operators, they become less organised and the relationship between own account operators and middlemen/merchants is not the same as that between an employer and a worker, as no legal contract exists between them. The price received by small producers after deducting the costs of production does not cover the mandatory wages fixed by the government. So self-employment in coir also amounts to considerable unwaged employment for spinners and weavers.

## IV

### *Case for Price Intervention*

For any kind of price signals efficiently it is necessary that they function independently of those who are to be guided by them and are not able to be manipulated by them. There ought to be no imperfection for price signals to operate efficiently. Imperfections in the market necessitate interference with the market mechanism which includes direct price control. The case for price control and pricing policy rests essentially on the failure of the price signals to operate in the desired manner. Deviations from optimality cause market failures which arise due to the characteristics of markets, such as monopoly, oligopoly and inadequate information. Despite the increase in competition among traders and exporters, marketing channels for coir products remain imperfectly competitive. Domestically there are several layers of intermediaries that separate coir producers from export trade, creating a situation analogous to double marginalization in the relationships in industrial organization. So they have a bargaining leverage over coir producers. Producers' incomes are depressed not only by transport and marketing costs, but also by the market power exercised by traders.

According to the Coir Board statistics, 15 exporters (in terms of value) contributed to more than 80 per cent of India's export in the international market. Monopoly power in a market results in higher prices and lower quantity produced relative to those that would prevail under perfect competition. Although on the supply side, coir producers operate in a competitive market and are price takers, they are faced by a relatively small number of manufacturers/exporters who can take advantage of the imbalance in market power (not necessarily deliberately, but simply as a consequence of the high degree of concentration relative to the fragmented nature of producers).

While on the demand side the manufacturers/exporters may not have full monopsony (monopoly purchasing) powers, their small numbers are consistent with the existence of oligopsony (oligopoly power in purchasing). Also there is the problem of inadequate or incorrect information. In coir production, there is a time lag between the making of a production decision and the sale of the finished product, which is further exacerbated by the number of producers. Also investment in coir products entails significant sunk costs. The most significant input is raw material and labour, which is spent before the price of the product is known. Each producer acts rationally when faced with a market signal, and the result is over supply. But manufacturers and exporters continue to make reasonable profits even in a oversupplied market due to the imperfections in the market. Faced with an inelastic demand a small increase in supply would lead to high rather than low export earnings for exporters. The elimination of government set prices have aggravated asymmetric information.

Market failures can be ameliorated by voluntary action or by government intervention. The use of direct intervention and controls facilitate co-ordination in supply; reduce variations in quality and serves to ameliorate the imbalance of market power. This would ensure that the margins at the higher end are not made at the expense of small producers and workers. Also economic and direct controls raise most important questions about the balance among interest groups in society particularly about organized coir business and labour and economic/ price stability can be built up only on prior stability among these interest groups. Traders face more uncertainty about the future and they will discount even more heavily future revenue relative to current revenue

### *Conclusion*

A manifestation of intense competition between exporters for developed country suppliers along with imperfections in the factor markets resulted in the downward pressure on producer prices. Price liberalization in the presence of distorted factor markets have not improved the lot of poor and marginal workers, despite high foreign and domestic demand as production is increasingly being reorganized into small-scale, decentralized and more flexible economic units using a flexible labour force, which can respond to changes in demand and supply. This is reflected in intense overtime work leading to long hours when orders have to met altering with lay-offs and short time working when demand is slack characterized by insecure employment conditions, long hours of work, poor working conditions and fluctuating earnings of casual and seasonal workers. Contract workers do not have legal benefits available to permanent workers nor do they have any security of employment. Increased competition has given rise to efforts to increase productivity and decrease costs, which have had negative impacts on employment and wages in imperfect market structures, exacerbated by the abolition of price intervention. The coir industry which traditionally employed permanent unionized workers who received a certain level of social protection is being transformed into a reserve pool of flexible unprotected workers.

## References

- Department of Economics and Statistics (1981), *Statistics for Planning*, Government of Kerala, Thiruvananthapuram.
- Gregory K.Dow (2003), *Governing the Firm: Workers' Control in Theory and Practice*, Cambridge University Press, UK.
- Kannan K.P (1998), "Political Economy of Labour and Development in Kerala", Center for Development Studies Working Paper No. 248, Trivandrum.
- Rammohan, K. T. (1999), "Technological change in Kerala Industry: lessons from coir yarn spinning", Discussion Paper No. 4, Thiruvananthapuram: Kerala Research Programme on Local Level Development, Center for Development Studies, Trivandrum.
- Raju K.V and Maitreyi Kollegal (2002), *Evaluation of the Scheme of Cooperativization in the Coir Industry*, Ministry of Small Scale Industries and Agro & Rural Industries, Government of India.
- Thomas Isaac T.M (1984), *Class Struggle and Industrial Structure-A Study of Coir Weaving Industry in Kerala 1859-1980*, PhD thesis submitted to the JNU, at the, Center for Development Studies Trivandrum.
- Thomas Isaac T.M (1990), "Evolution of Organization of Production in coir Yarn spinning in Kerala", Center for Development Studies Working Paper No. 236, Trivandrum.
- Thomas Isaac T.M and Pyarelal Raghavan (1990), "A Policy Frame work for Revitalization of coir Industry In Kerala", CDS working Paper No 240, Trivandrum.
- Serial Publications*  
*Annual Reports*, Coir Board, Government of India.  
*Kerala Economic Review*, Department of Economics and Statistics, Government of Kerala.

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<sup>1</sup> Coir is an important export oriented agro-based industry that produces coir fibre, coir yarn and other coir products

<sup>2</sup> At present, within Kerala this sector employs nearly 3.6 lakh (360000) workers, including many women. Women workers are mostly engaged in the spinning of yarn and they comprise 90 per cent of all workers in the coir industry (*Survey of Coir Industry, 2002*)

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<sup>3</sup> extraction of fibre from coconut husks

<sup>4</sup> Coir exports came to an all time low in the late 1980's, but the last decade up to now has been a period of growth in exports (Coir Board, 2004)