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# COFFEE CONUNDRUM: WHITHER THE FUTURE OF SMALL GROWERS IN INDIA?

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#### ABSTRACT

In this paper an attempt has been made to analyze the situation and identify critical issues in the coffee sector, in terms of production conditions, marketing and trade, labour, promotional measures and role of various actors with a specific focus on small growers who account for bulk of plantation estates and face several constraints. Our analysis points out that, vertical integration of small producers is important in order to enhance value for the primary producers. Product diversification (to quality coffees) quality improvement, mechanisation of certain operations, professional management and technical inputs, post-harvest processing, supplementary income earning opportunities would enable small growers to remain in production chain with cost competitiveness. Enhancing domestic consumption would also help in price stability. Labour and social security reforms are also needed to enhance productivity and cost competitiveness. Limited spread of certification mechanisms need to be acknowledged and efforts should be made towards developing locally contextual certification measures, including self-certification in order to enhance value for environmental protection.

## Introduction

India is the 6<sup>th</sup> largest coffee producer in the world. It is grown in the southern states of Karnataka (70%), Kerala (20%) and Tamil Nadu (7%) and especially in the plantation districts within the Nilagiris biosphere that are known to be ecologically sensitive regions of the country. Small growers (with below 10 hectares) contribute substantially in coffee sector, in terms of number of holdings as well as production. They account for over 90 per cent of operational holdings and 70 per cent of the production. Hence it is major source of income for the small and marginal planters as well as plantation workers. As a production system, it is labour intensive. Farm labour in coffee plantations requires a particular set of skills and in the light of limited options for mechanization, coffee production is basically recognized as labour intensive and hence it is exposed to a high level of farm risk (production and market risk).<sup>1</sup> It is also highly globally traded commodity, next only to oil, and it exposes the producers to face enormous risk, owing to volatility in global prices due to supply-demand mismatch.

As per the data of Coffee Board, market share of coffee exports of India stands at 3.37 percent in 2008-09, which is marginally lower compared to 4.06 percent during 2005-06. The top five countries which imported coffee from India are Italy, Russian Federation, Germany,

<sup>1</sup> Hartmann M., and Akasha B.M., Emerging Challenges for Farm Labour in the Indian Coffee Sector. *Humboldt-UniversitätzuBerlin, Department of Agricultural Economics,* Division of Development Planning and Project Management, p. 1.

Belgium, and Spain. Indian coffee is not marketed in a substantial way in growing markets like US and East Asian countries like Japan and Korea.

Historically, most planters (especially small growers) produce coffee on, inherited land, and so as an industry, it has been relying on owners who are passionate about growing coffee as a cultural practice and therefore sustainability in terms of production and marketing for better returns is a challenge. Cultivators are increasingly exposed to vagaries of market forces in contrast to secured environs of regulated marketing.

According to the Economic & Market Intelligence Unit of the Coffee Board, the average daily number of persons employed in coffee plantations in Karnataka, has increased from 414,099 in 2001-02, to 475,688 in 2007-08. In Kodagu district alone, the average daily number of persons employed in coffee plantations has increased from 197,550 in 2001-02 to 254,001 in 2007-08.<sup>2</sup> Despite this increase over the years, according to the small and marginal growers, there is a shortage of labour across the coffee growing districts. Historically, plantations depended on the migrant labour and given the time bound operations of coffee cultivation, the tightening of labour markets in the neighboring districts<sup>3</sup> have resulted in acute labour shortage for small growers.

Given the fragility of the production and marketing conditions, coffee sector is often faced with cyclical down turns (crisis) and upswings (boom). It is reported that some of the growers who have been affected by the coffee crisis of early 2000 have not yet been fully recovered even now. Indebtedness, fluctuating prices and rising input costs are three major aspects that affect small growers.

<sup>2</sup> The Economic & Market Intelligence Unit of the Coffee Board., 2010. Database on Coffee. pp.8.

<sup>3</sup> Anecdotal evidence points out that due to national rural employment guarantee scheme, there has been a shortage of labour.

This paper attempts to bring together issues related to production, marketing and sustainability of coffee cultivation in order to identify issues for further research and policy analysis. Following this introduction, Section 2 presents the situation analysis vis a vis production and marketing related developments in the sector. The roles of different stakeholders and issues and concerns as discerned by the stakeholders are presented in Section 3 and 4. The final section presents the summary and a set of recommendations.

#### 2. Situation Analysis

Given the importance of small and marginal growers (below 10 hectares) in the Coffee sector, in terms of the number of holdings as well as production, this section is primarily devoted to analyze their situation vis a vis various aspects of Coffee economy. We present an analysis of production, marketing and trade, promotional as well as value addition aspects in order to identify constraints as well as opportunities. Such an analysis, it is hoped, will help in identifying issues and concerns, scope for areas of further research, as well as policy suggestions that can be taken up by appropriate authorities at the national as well as state levels.

#### 2.1 Area under Coffee

The area under coffee across the plantation districts indicates that Kodagu district has the largest area under Robusta. Chikmagalur accounts for largest area under Arabica. It is to be noted that coffee growing districts of Karnataka and Kerala account for over 70 per cent of area (Table 1).

While the coffee planting and bearing area in India has generally shown a upward trend (Annex. Tables 1), the traditional coffee growing areas have reached a plateau and the expansion is mostly in non traditional areas. As indicated in Table 1 over the past couple of years there was some expansion of area under coffee cultivation, mainly Arabica from 40,648 hectares in 2007-08, to 45,728 hectares in 2008-

| Table 1: Planted Area of Coffee in Coffee Growing Districts/areas (In Hectares) | l Area of  | Coffee i      | n Coffee G   | rowing <b>D</b> | istricts/a | reas (In H | (ectares) |               |              |               |        |               |
|---|------------|---------------|--------------|-----------------|------------|------------|-----------|---------------|--------------|---------------|--------|---------------|
|   | Arabica    | % to<br>Total | Roubsta      | % to<br>Total   | Total      | %<br>Total | Arabica   | % to<br>Total | Roubsta      | % to<br>Total | Total  | % to<br>Total |
|   |            |               | Year 2007-08 | 7-08            |            |            |           |               | Year 2008-09 | 60            |        |               |
| Karnataka   |            |               |              |                 |            |            |           |               |              |               |        |               |
| Chikmagalur   | 56590      | 30.7          | 31078        | 15.3            | 87688      | 22.6       | 56995     | 30.1          | 31565        | 15.4          | 88560  | 22.5          |
| Kodagu  | 28830      | 15.6          | 74495        | 36.6            | 103325     | 26.6       | 28828     | 15.2          | 74497        | 36.4          | 103325 | 26.2          |
| Hassan  | 24475      | 13.3          | 0666         | 4.9             | 34465      | 8.9        | 24475     | 12.9          | 10540        | 5.1           | 35015  | 8.9           |
| Sub Total   | 109895     | 59.6          | 115563       | 56.7            | 225478     | 58.1       | 110298    | 58.2          | 116602       | 56.9          | 226900 | 57.5          |
| Kerala  |            |               |              |                 |            |            |           |               |              |               |        |               |
| Wayanad   | 32         | 0.0           | 67354        | 33.1            | 67386      | 17.4       | 12        | 0.0           | 67354        | 32.9          | 67366  | 17.1          |
| Travancore  | 1930       | 1.0           | 10750        | 5.3             | 12680      | 3.3        | 1930      | 1.0           | 10750        | 5.2           | 12680  | 3.2           |
| Nelliampathie<br>hills(Palakkad)  | 1800       | 1.0           | 2850         | 1.4             | 4650       | 1.2        | 1800      | 0.9           | 2850         | 1.4           | 4650   | 1.2           |
| Sub Total   | 3762       | 2.0           | 80954        | 39.7            | 84716      | 21.8       | 3742      | 2.0           | 80954        | 39.5          | 84696  | 21.5          |
| Tamil Nadu  |            |               |              |                 |            |            |           |               |              |               |        |               |
| Pulineys hills<br>Nilgiris Dist   | 14028      | 7.6           | 1023         | 0.5             | 15051      | 3.9        | 14028     | 7.4           | 1023         | 0.5           | 15051  | 3.8           |
| Nilgiris  | 3610       | 2.0           | 4175         | 2.0             | 7785       | 2.0        | 3610      | 1.9           | 4175         | 2.0           | 7785   | 2.0           |
| Shevroys (Salem)  | 5600       | 3.0           | 100          | 0.0             | 5700       | 1.5        | 5600      | 3.0           | 100          | 0.0           | 5700   | 1.4           |
| Annamalais<br>(Coimbatore)  | 2470       | 1.3           | 338          | 0.2             | 2808       | 0.7        | 2470      | 1.3           | 338          | 0.2           | 2808   | 0.7           |
| Sub Total   | 25708      | 13.9          | 5636         | 2.8             | 31344      | 8.1        | 25708     | 13.6          | 5636         | 2.8           | 31344  | 7.9           |
| AP and Orissa   | 40648      | 22.0          | 268          | 0.1             | 40916      | 10.5       | 45728     | 24.1          | 268          | 0.1           | 45996  | 11.7          |
| N E Region  | 4405       | 2.4           | 1356         | 0.7             | 5761       | 1.5        | 4035      | 2.1           | 1381         | 0.7           | 5416   | 1.4           |
| Sub Total   | 45053      | 24.4          | 1624         | 0.8             | 46677      | 12.0       | 49763     | 26.3          | 1649         | 0.8           | 51412  | 13.0          |
| Grand Total   | 184418     | 100.0         | 203777       | 100.0           | 388215     | 100.0      | 189511    | 100.0         | 204841       | 100.0         | 394352 | 100.0         |
| Source: Coffee Board data   | soard data |               |              |                 |            |            |           |               |              |               |        |               |

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09, in non-traditional states such as Andhra Pradesh and Orissa. Saturation in terms of area under cultivation in traditional geographical locations is an aspect to be taken into consideration for future policy options and its implications for the sector as a whole. As we shall see later, the productivity gains and economizing on the cost has to come from these traditional coffee growing areas and this warrants a concerted policy action. Also concerns of sustainability are paramount in the traditional coffee growing areas.

If one were to ask who the coffee growers are, interesting facts emerge. Among the 2,20,825 coffee holdings in the country during 2007 – 2008, 218,116 (98.8%) holdings belonged to small farmers with less than 10 hectares accounting for about 75% of the total coffee area. It may be further noted that holding with less than 2 hectares accounted for 80.9 per cent of the holdings accounting for 37 per cent of total area<sup>4</sup>. This situation in fact warrants strategies that would accommodate the economic and social sustainability of this group of planters who face the brunt of rapid and dynamic changes occurring in the industry (Table 2).

## 2.2 Coffee Production

As mentioned earlier, Coffee producing areas in India are concentrated in the South Indian States of Karnataka, Kerala, and Tamil Nadu, with some small quantity of production in the non-traditional areas in the states of Andhra Pradesh & Orissa and the North Eastern Region. During 2009-10 Karnataka accounted for 71 percent of the total coffee production in India (77.6 percent for Arabica and 67.8 percent for Robusta). Kerala's share in total coffee production is 20.5 percent mainly from Robusta. Tamil Nadu accounted for 6.7 percent of

<sup>4</sup> During the field work, we found villages in south Coorg with large number of planters owning coffee estates of about 1 acre or less in size. Similarly large number of coffee growers of Wayanad own very small plots and homesteads.

| Table 2: | Size of Holdings – Number, Area and Share of Production     |
|----------|---|
|          | of Coffee under Different Sizes of Coffee Holdings in India |
|          | - 2007-08   |

| Size of Holdings<br>in Hectares | No. of<br>Holdings |       | Area under<br>Coffee |       | Share of<br>produc-<br>tion |
|---------------------------------|--------------------|-------|----------------------|-------|-----------------------------|
|                                 | Number             | % to  | Area                 | % to  |                             |
|                                 | (holders)          | total | (in Hectares)        | total |                             |
| Small Holdings                  |                    |       |                      |       |                             |
| < 2 hectares                    | 178585             | 80.9  | 144196               | 37.1  |                             |
| 2-4 hect                        | 27731              | 12.6  | 71905                | 18.5  |                             |
| 4-10 hect                       | 11800              | 5.3   | 73642                | 19    |                             |
| Sub total                       | 218116             | 98.8  | 289743               | 74.6  | 70%                         |
| Large holdings                  |                    |       |                      |       |                             |
| 10-25 hect                      | 1789               | 0.8   | 29829                | 7.7   |                             |
| >25 hectares                    | 920                | 0.4   | 68623                | 17.7  |                             |
| Sub total                       | 2709               | 1.2   | 98452                | 25.4  | 30%                         |
| Total                           | 220825             | 100   | 388195               | 100   |                             |

Source: The Economic and Marketing Intelligence Unit - Coffee Board

total production, mainly from Arabica. The share of non-traditional areas in total production was 1.8 percent mainly form Arabica (Table 3).

| 1001001001100110  |         |      |         |      | 1011000110 | ,    |
|-------------------|---------|------|---------|------|------------|------|
| State             | Arabica |      | Robusta |      |            |      |
|                   | (MT)    | %    | (MT)    | %    | Total      | %    |
| Karnataka         | 73400   | 25.3 | 132300  | 45.7 | 205700     | 71   |
| Kerala            | 1375    | 0.5  | 57875   | 20   | 59250      | 20.5 |
| Tamil Nadu        | 14650   | 5.1  | 4700    | 1.6  | 19350      | 6.7  |
| Non Traditional   |         |      |         |      |            |      |
| Areas             | 5100    | 1.8  | 85      | 0    | 5185       | 1.8  |
| North East Region | 75      | 0    | 40      | 0    | 115        | 0    |
| Total (India)     | 94600   |      | 195000  | 67.3 | 289600     | 100  |

Table 3: Coffee Production by States - 2009-10 (pre Monsoon estimate)

Source: The Economic and Marketing Intelligence Unit - Coffee Board

Kodagu district of Karnataka stands out as a major coffee producing district among the plantation districts of the region with 53 percent of coffee production in Karnataka (38.5 percent of all India). However it can be seen that Chikmagalur stands at the top with respect to Arabica production (Table 4).

According to the post-blossom estimates released by the Coffee Board, India's coffee output stands at 306,300 tons in 2009-2010, a 4.4 per cent higher compared to 2008-09. If the actual output in 2009-10 matches the estimates, India is likely to climb up in the ranking list of top 10 coffee-producing countries in the world. According to the International Coffee Organisation (ICO), India has a bright chance of becoming the fifth largest coffee producer in the world, replacing Mexico<sup>5</sup>.

The Coffee Board estimates the production for the year 2009/10 of 289,600 tons (4.83 million bags of 60 kg), included 94,600 tons of Arabica and 195,600 of Robusta and this is less than the Post-Blossom estimate of 306,300 tons, due to adverse weather conditions during bean maturing and harvest stage. Furthermore our interactions with the planters revealed that untimely rains (in Dec 2009) have also caused some quality problems, particularly for the Arabica variety.

During the current decade, there has been a decline in the production levels achieved. This is mainly attributed to the declining yield of the Arabica variety owing to diminishing yield rates due to pest attacks (Appendix Table 1). In addition the productivity in the non traditional areas wherein the area expansion in Arabica coffee took place, the productivity is found to be lower. This in turn appears to have been influencing the overall yield. It is to be recognized that there has been some uprooting of infected Arabica trees and replanting with new stock in order to contain the white stem borer in some of the traditional coffee

www.ibef.org [Accessed on 3 June 2010]

| 09-10             |
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| in                |
| Coffee            |
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| able 4            |

| Table 4: Production of Coffee in Coffee Growing Districts- 2009-10 | ction of | Coffee       | in Coffee | Growin        | g Distric                       | ts- 2009      | -10     |               |                                 |               |        |               |
|--|----------|--------------|-----------|---------------|---------------------------------|---------------|---------|---------------|---------------------------------|---------------|--------|---------------|
|  |          |              | Post Mo   | nsoon E       | Post Monsoon Estimation 2009/10 | 2009/10       |         | Post Blos     | Post Blossom Estimation 2009/10 | ation 200     | 9/10   |               |
|  | Arabica  | %to<br>Total | Roubsta   | % to<br>Total | Total                           | % to<br>Total | Arabica | % to<br>Total | Roubsta                         | % to<br>Total | Total  | % to<br>Total |
| Karnataka  |          |              |           |               |                                 |               |         |               |                                 |               |        |               |
| Chikmagalur  | 37450    | 39.6         | 32700     | 16.8          | 70150                           | 24.2          | 40600   | 39.8          | 35400                           | 17.3          | 76000  | 24.8          |
| Kodagu   | 21500    | 22.7         | 89650     | 46.0          | 111150                          | 38.4          | 22850   | 22.4          | 95125                           | 46.5          | 117975 | 38.5          |
| Hassan   | 14400    | 15.2         | 9950      | 5.1           | 24350                           | 8.4           | 16720   | 16.4          | 11230                           | 5.5           | 27950  | 9.1           |
| Sub Total  | 73350    | 77.6         | 132300    | 67.8          | 205650                          | 71.0          | 80170   | 78.6          | 141755                          | 69.2          | 221925 | 72.3          |
| Kerala   |          |              |           |               |                                 |               |         |               |                                 |               |        |               |
| Wayanad  | 0        | 0.0          | 49950     | 25.6          | 49950                           | 17.3          | 0       | 0.0           | 50250                           | 24.5          | 50250  | 16.4          |
| Travancore   | 775      | 0.8          | 6650      | 3.4           | 7425                            | 2.6           | 775     | 0.8           | 6650                            | 3.2           | 7425   | 2.4           |
| Nelliampathies   | 600      | 0.6          | 1275      | 0.7           | 1875                            | 0.6           | 600     | 0.6           | 1275                            | 0.6           | 1875   | 0.6           |
| Sub Total  | 1375     | 1.5          | 57875     | 29.7          | 59250                           | 20.5          | 1375    | 1.3           | 58175                           | 28.4          | 59550  | 19.4          |
| Tamil Nadu   |          |              |           |               |                                 |               |         |               |                                 |               |        |               |
| Pulineys   | 6700     | 7.1          | 350       | 0.2           | 7050                            | 2.4           | 0069    | 6.8           | 350                             | 0.2           | 7250   | 2.4           |
| Nilgiris   | 1950     | 2.1          | 3800      | 1.9           | 5750                            | 2.0           | 1950    | 1.9           | 3800                            | 1.9           | 5750   | 1.9           |
| Shevroys (Salem)   | 4000     | 4.2          | 50        | 0.0           | 4050                            | 1.4           | 4000    | 3.9           | 50                              | 0.0           | 4050   | 1.3           |
| Annamalais   | 0000     | ,<br>c       | C C L     | 0             | 0010                            | 00            | 0000    |               | 001                             | 00            | 0020   | c<br>c        |
| (Combatore)  | 2000     | 7.1          | nnc       | 0.5           | 0002                            | 0.9           | 2000    | 7.0           | nnc                             | 0.2           | 0002   | 0.8           |
| Sub Total  | 14650    | 15.5         | 4700      | 2.4           | 19350                           | 6.7           | 14850   | 14.6          | 4700                            | 2.3           | 19550  | 6.4           |
| AP and Orissa  | 5100     | 5.4          | 85        | 0.0           | 5185                            | 1.8           | 5500    | 5.4           | 95                              | 0.0           | 2655   | 1.8           |
| N E Region   | 22       | 0.1          | 40        | 0.0           | 115                             | 0.0           | 80      | 0.1           | 50                              | 0.0           | 130    | 0.0           |
| Sub Total  | 5175     | 5.5          | 125       | 0.1           | 5300                            | 1.8           | 5580    | 5.5           | 145                             | 0.1           | 5725   | 1.9           |
| Grand Total  | 94550    | 100.0        | 195000    | 100.0         | 100.0 289550                    | 100.0         | 101975  | 100.0         | 204775                          | 100.0         | 306750 | 100.0         |
|  |          |              |           |               |                                 |               |         |               |                                 |               |        |               |

Source: The Coffee Board

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growing areas. These replanted trees are yet to reach bearing stage in order reach to the yield levels achieved previously.<sup>6</sup> According to industry sources, the outlook for the 2010/11 crop presents a mixed picture. Although several coffee growing regions have received good preblossom and back up showers, rainfall has been poor in some parts of Coorg and Tamil Nadu. High February/March temperatures could affect Robusta production to some extent, although heavy December 2009 rains left enough soil moisture, which may help compensate for the lack of pre-blossom showers. Industry sources forecast 2010/11 coffee production marginally lower than the 2009/10 estimate at around 275,000 tons, which include 175,000 tons of Robusta and 100,000 tons of Arabica.

## 2.3 Coffee Crisis

While the most recent period recorded good growth, the early part of 2000, the global coffee industry experienced its worst crisis which necessitated a fundamental re-thinking on the future challenges and strategies required to ensure survival and growth, from the producers' perspective.<sup>7</sup> To begin with, the supply constraint caused by the frost in Brazil in the mid nineties was followed by a period of abnormally high prices which in turn prompted a surge in production that substantially altered the global production structure.<sup>8</sup> Following over production, the prices fell substantially and the slump has affected the incomes of small growers. In several countries across Africa, Latin America and Asia, the slump in coffee prices resulted in a deep socio-economic and humanitarian crisis.<sup>9</sup> As Mr. Mandanna of the Karnataka Planters' Association highlights, the coffee crisis saw increased cost of production

<sup>6</sup> Govindan, A., 2010. India Coffee Annual 2010. A report prepared by Global Agriculture Information Network. IN1038, pp. 1.

<sup>7</sup> L. Venkatachalam – p.1.

<sup>8</sup> Ibid.

<sup>9</sup> Ibid.

and as in 2004-2005, fall in coffee prices a 100-year-low. Many growers had to even sell their estates and were heavily indebted. Studies conducted during mid 2000 identified the impact of global coffee crisis on plantations in South Indian states. For example, it is reported by the leaders of coffee workers that in the Wayanad district about 10 estates were closed down in 2005 which affected over 1500 workers.

International Coffee Organisation's analysis on the coffee crisis indicates that the imbalance between supply and demand for coffee, as illustrated in Figure 1, was a major factor for the situation experienced.

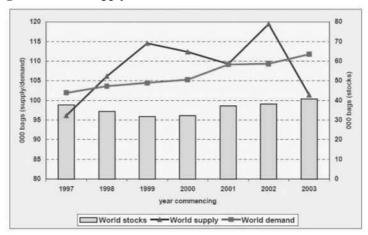


Figure 1: World Supply and Demand for Coffee

Source: International Coffee Organisation

Production had been rising at an average annual rate of 3.6%, but demand had been increasing by only 1.5%.<sup>10</sup> It was observed that in many cases, prices did not even cover the costs of production. Farmers depend largely on coffee for income, including food purchase and where indebtedness has been incurred, farmers are either more heavily in debt

<sup>10</sup> International Coffee Organization. 2002. The Global Coffee Crisis: A Threat to Sustainable Development.p.2 [Online] Available at www.ico.org [Accessed 7 June 2010].

or have been forced to abandon their farms or switch to alternative crops. In Vietnam, there are reports of farmers selling their possessions to satisfy debt collectors. Coffee farmers from Mexico have died trying to enter the USA illegally after abandoning their farms, and indebted coffee growers have been committing suicide in India. In general the situation stimulates emigration to cities and to industrialised countries.<sup>11</sup>

As opposed to some parts of the world, where the crisis was causing chaos, the evolution of the coffee economy in consuming countries, which are predominantly in the Western Hemisphere, was proving more fruitful, showing a positive growth pattern with a sustained improvement in profits.<sup>12</sup> This was all due to the emergence of a growing coffee culture, which relied heavily on the new and innovative retail chains such as Starbucks, and the coffee brands Nescafe and Illy in the consuming countries.<sup>13</sup> According to a paper, by the International Coffee Organization on the coffee crisis, some coffee farmers have shown enormous resilience, be at some cost, and one way or another most have managed to survive and continue to produce.<sup>14</sup> However, on balance, there appears to be a bleak future for small growers in India unless steps are taken towards improving quality and sustainable production and marketing.

At the same time, during the periods of crisis, large private estates and companies with interests in curing and roasting appeared to have expanded their businesses in India. Tata Coffee has consolidated its interests during this period; Amalgamated Bean Coffee Trading Company (ABCL) has expanded in terms of area under coffee plantations as well as curing capacity, Hindustan Lever has also recorded growth.

<sup>11</sup> Ibid.

<sup>12</sup> Ibid.

<sup>13</sup> Ibid.

<sup>14 &</sup>quot;Lessons from the World Coffee Crisis: A Serious Problem for Sustainable Development", A copy of the Executive Director's Submission to UNCTAD XI Conference, June 2004, Sao Paulo, Brazil International Coffee Organisation.

#### 2.4 The Coffee Sector Developments Elsewhere

The value chain for coffee has gone through some major restructuring in the last two decades. Producer organizations have lost much of their clout due to the end of quota regulation and domestic market liberalization. Local traders have been put under pressure from increased involvement by international traders in domestic procurement. International traders themselves have gone through considerable restructuring. Mid-sized traders found themselves too small to compete with larger ones. As a result, they either went bankrupt and had merged with others, or were taken over by larger traders. It is argued that the coffee trade has become more concentrated. With some exceptions, there has been little vertical integration between producers, roasters and international traders. The level of concentration in the roaster market has reached a level even higher than for international traders. Roasters are still able to maintain a relative position of power over retailers because in many retail markets coffee is offered to consumers at a low margin, or even at a loss.<sup>15</sup> Specialty coffees exhibited higher margins at the retail level, but supermarkets' own brands have not been able to enter the specialty segment in a meaningful way. It is more likely to find 'high quality' brands dominating the high-end market in retail chains. Increasing and sustaining coffee farmers' income (and especially smallholders') in African-Caribbean and Pacific (ACP) countries is an important policy goal, <sup>16</sup> that must also be integral to the marketing goals of not only small and marginal growers, but also the many stakeholders of the coffee industry in India. The emergence of Vietnam and resurgence of Brazil in early 2000 have lowered the cost structure for coffee production. It is observed that the average production of the three top producer's viz., Brazil, Vietnam and Columbia constitutes

<sup>15</sup> CTA's Executive Brief, 2008. *Coffee: Trade issues for the ACP.* [Online] also in CTA's Agritrade: ACP–EU Trade Issues (2009 Compendium). Available at: http://agritrade.cta.int/en [Accessed 4 June 2010].

around 55% (average of three years) of global production in 2004. The medium term projection of coffee forecasted around 2004 that 'the outlook is likely to be dominated by the biennial nature of Brazil's production that will significantly influence the annual demand supply balance'.<sup>17</sup> This observation appears to have come true to a larger extent as the market behaviour during the past two years testifies.

## 2.5 Market Prices and Trade

It is important to understand the dynamics of trade in Coffee, as it is the second most widely traded primary commodity, next only to crude oil. The supply chain is complex and inter-related, dictating the fortunes of the producers who are far and remote from the consumers. There are several intermediaries and the value chain is meshed with layers of middlemen (traders), financiers, roasters, brands and retail chains. The role of the government, apex bodies like the International Coffee Organisation, trade exchanges and traders become critical in ensuring returns to and participation of the growers in the markets. In this subsection we attempt to map markets and identify the critical issues.

After the dismantling of quota system by 1989 and procurement by the Coffee Board, there is a tendency for prices to behave cyclically and they are affected not only by local conditions, but also by international production, demand and price situations. Uncontrolled markets in a way meant medium-term price volatility compared to regulated markets and it has been reflected in the boom witnessed in 1993 and 1994 (due to frost in Brazil). Subsequently, the prices have dropped by 1999 due to excess supply. In some ways, the local markets did become price sensitive as planters receive information on movement of prices at the international level.

After several years of boom, planters had a major problem by the turn of the century, with coffee prices coming down from Rs. 3000 to

Rs. 400 per 50 kg per bag of Robusta coffee (Cherry) in 2001. There is no real control to the fluctuating nature of coffee prices since the market price of Robusta and Arabica are determined by the futures exchanges in London and New York respectively. It can be seen that during the past two years there is a rise in prices and the price quoted in 2010 is at the level what the planters have received in 2001 the peak period (Table 5). Such fluctuating behavior results in uncertainty the incomes of small growers.

| Arabica (Parchment) | Rs. 6400 - 6450 |
|---------------------|-----------------|
| Arabica (Cherry)    | Rs. 2800 – 2850 |
| Robusta (Parchment) | Rs. 2900 – 3000 |
| Robusta (Cherry)    | Rs. 1675 - 1725 |

Table 5: Raw Coffee Prices as on 10/6/2010 in Rs./50 Kg bag

Source: Coffee Board

Most of the coffee is purchased by local traders/agents located in different towns. It is estimated that there are about 40 local buyers who procure most of the coffee from small growers in Kodagu alone. Small growers prefer to sell coffee in the form of dry cherry and parchment. Large growers sell coffee in green and graded form either directly to exporters or through private auctions (Chattopadhyay and John 2007). The market structure is characterized by oligopoly with concentration by few major players who deploy local traders and agents for procuring coffee. It is to be noted that after withdrawal of the Coffee Board, there appears to be a vacuum for some time which to some extent has been replaced by private sector initiatives like Indian Coffee Trade Association (ICTA), which began auctioning on a periodic basis. There are also efforts towards online trading which is being conducted through portal commodityindia.com. However, overall scenario is that less than 10 per cent of coffee is sold through auctions as most small growers prefer to sell unprocessed crop directly to exporters or roasters through agents.

This situation demonstrates the difficulties faced by the small growers in achieving full vertical integration for producing clean coffee owing to fragmented production and lack of economies of scale. Value addition through production of differentiated (specialty) coffees which requires smaller volumes may be an attractive alternative proposition for groups of like minded small growers, but here also there are constraints in terms of stringent quality requirements and innovative relationship marketing (Venkatachalam, L 2005).

Disincentive in the form of levying income tax (on 25% of income earned) on the self-cured coffee also appears to be one of the deterrents that discourage planters to engage in processing of coffee (ibid). Curing units in the coffee growing districts are increasingly moving into buying coffee and this development has led to increase in the number of curing units in recent past. Growers exercise option of selling coffee to curers through agents, or get the coffee cured at a fee and store it to sell at a later date for better prices. Access to global price information appear to be one of the critical factors determining the decision of the grower(s) vis a vis spot sale or holding of the stocks. Most of the export houses also have their own curing units so that they process the procured coffee locally.

There are over 74 active coffee exporters in the coffee growing districts. However trade is concentrated among top five who account for over 54 per cent of total exports and the top 12 exporters account for over 85 per cent of coffee exports in during 2006/07 (Nielson and Pitchard 2009). The major exporters (and their affiliates/agents) of Indian coffee are located in Kushalnagar, located in the Northern part of Coorg bordering Mysore district<sup>18</sup>. The main domestic buyers of coffee are Tata Coffee, Allanasons Ltd., Narasu Exports, Comark in Tamil Nadu and Illy Coffee from Overseas. The main exporters of coffee in India are Allana Sons, General Commodities, CCL products, Nestle, Olam (India),

Nedcommodities India Pvt Ltd, IllyCafe, Conmark, Hindustan Lever, ITC Ltd, International Trade Group (Coca-Cola), Ecom Coffee group, etc.

Coffee production is poorly responsive to short term shifts in demand and this creates an endemic volatility within coffee markets and it is in this context, futures trade is advocated as a mechanism to hedge the sales against price fluctuations. Futures trade is also advocated as there is more clarity in terms of quality parameters and grading of coffee and thus acts as a price-discovery mechanism. However it needs to be underscored that in a regime of regulated trade, futures trade at a global level has not attracted the attention of financial speculators and it has seen participation mainly from importers and roasters. But the scenario has changed during 1990s as financial speculators entered into the market (post deregulation of coffee trade) and this, it is argued has infact led to the *increased instability* of the world market prices (quoted in Nielson and Pitchard 2009). Infact this appears to be the central issue with respect to the falling of prices of primary commodities across the board during the past one decade and crisis in agriculture is often attributed to this phenomenon.

This does not mean that there is no price sensitivity and response at the local level. Typically planters monitor price movements in global commodity exchanges and such a globalised trade is determining factor in arriving at spot prices locally. Newspapers and radio announcements also refer to the global market prices and there by setting the bench marks for the local markets.

Infact this situation is one of the determining factors in the lukewarm response of growers towards futures markets in India. Apex agencies like National Commodity Exchange Ltd NCDEX have introduced futures market in coffee. However, the choice of such an option has not been encouraging, especially due to lack of information, poor speculative activity, the inter-locking of markets and long term association that the traders and planters hold which prevents experimenting with futures market. A related development, promoted by one of the major coffee exporter viz., ITC Ltd is internet based dissemination of market information (online) where in price discovery is sought to be achieved and parties can enter into trade contracts (sale / procurement). This too has limited impact at the ground level.

During April, 2003, Government of India has set up a Price Stabilization Fund (PSF) for the benefit of coffee growers. The objective of the PSF Scheme is to provide financial relief to the growers when the prices of the commodities covered fall below a specified level.<sup>19</sup> The PSF was established with a corpus of Rs. 500 crores which shall include Rs.482.88 crores as a one-time contribution by the Central Government and Rs. 17.12 crores as a non-refundable initial contribution by the participating growers @ Rs. 500 per grower. The corpus of the Fund would be kept in the Public Account of the Government of India. Contribution to the Member – Grower's Savings Bank A/c, by the Government and/or the Member – Grower, in a given year would be on the basis of categorization of the year as boom/normal/distress period. Such categorization would be done on the basis of a uniform band of 40 per cent being adopted with a price spectrum band of +/- 20% from the seven years moving average of international prices.

The Scheme is based on the principle of contribution from the growers and from the Government depending upon boom/normal/ distress periods. The Scheme would cover a total of about 3.42 lakh growers of tea, coffee, natural rubber and tobacco, being the most needy amongst those having operational holdings of up-to 4 hectares. The operation of the Scheme involves The Market Intelligence Unit of the Coffee Board. The Scheme is operational from April 2003 onward, initially for a period of ten years.<sup>20</sup> According to planter community,

<sup>19</sup> Price Stabilization Fund.pdf http://indiacoffee.org/indiacoffee.php? page= RighttoinformationAct

<sup>20</sup> MINISTRY OF COMMERCE & INDUSTRY (DEPARTMENT OF COMMERCE), New Delhi, the 24th July 2003 RESOLUTION: http:// www.commerce.nic.in/psft/resolution.htm

such schemes received lukewarm response as planters are not aware of the modalities of enrolment and how to utilize such opportunities. Infact the scheme received enrolment of only about 9000 odd planters in 2006<sup>21</sup>. There are efforts being made by the coffee board in popularizing the scheme. Our interactions with small growers revealed that they do prefer a procedure of this nature in a more simplified way in comparison to the current implementation mechanism.

#### 2.6 Coffee workers

Given the labour intensive nature of coffee cultivation, it absorbs large number of workers. There are different estimates of labour absorption in this sector. While UPASI, the apex plantation association, estimates that over a million of workers are in coffee plantations, the Coffee Board estimates the number as over 500,000 permanent workers and a similar number in indirect employment. Family labour is also main stay for farm operations as over 80 per cent of plantations are below 2 hectares. Given the large presence of seasonal labour, it needs to be underscored that migration plays an important role. Hence the labour market conditions are contingent upon the agriculture and other income earning opportunities for workers in the neighbouring districts. During 2005, of the total coffee workers of 5.27 lakhs, about 2.02 lakhs were in Kodagu district, 1.31 lakh in Chikmagalur district, 0.88 lakh in Hassan district of Karnataka and the rest were spread across other states including non-traditional areas.

Big plantations (and corporations) developed a system of modern labour management with statutory provisioning. Among small planters, labour management is more informal in nature, where in certain cases a number of labourers are tied to the families over generations as permanent workers. Increasingly feminization of 'permanent workers' is

<sup>21</sup> Science Tech Enterprenuer, Export Prospects of Coffee and Coffee Based products from India 2006. http://www.techno-preneur.net/informationdesk/sciencetech-magazine/2006/march06/export prospects.pdf

observed as a phenomenon, which infact raises issues related to women's work and returns. It is to be noted that a vast majority of coffee workers are from scheduled tribe and scheduled caste families. This has implications for the welfare and social security of workers as most often they are in debt-bondage relationship.

Women's contribution is vital in many coffee-producing areas around the world. However, they tend to have little control over the harvest proceeds, and coffee industry structures do not tend to make many provisions for women's interests. There are few international associations working to ensure their access to equal ownership and employment conditions.<sup>22</sup> Without information or training beyond purely field-related issues, women have limited opportunity to contribute to the decision-making processes that affect them.<sup>23</sup>

'Labour problem' i.e. shortage of labour (especially skilled labour) is often reported as a major constraint affecting coffee production. Discussions with planters in Kodagu district is illustrative of the sentiment of the planters vis a vis rising labour costs. During the discussions with the office bearers of the Coorg Planter's Association it was observed that the new generation today is unwilling to do manual labour and work on the plantations<sup>24</sup>. This was also echoed by apex bodies like Kodagu Small Growers Association as well. Other factors such as lack of discipline and alcoholism were also identified as some constraints faced by the planters vis a vis labour. All these factors affect efficiency and structures which means that growers lose out, for example, workers misplacing expensive equipment.<sup>25</sup> Similar views were

<sup>22</sup> Scholer, M., 2008. WOMEN IN COFFEE. [Online] International Trade Forum Issue 3-4/2008. Available at: http://www.tradeforum.org/news/ fullstory.php/aid/1367/Women\_in\_Coffee\_.html [Accessed 30 May 2010]. ESPFRANÇAIS

<sup>23</sup> Ibid.

<sup>24</sup> Interview with Mr. Nanjappa, small grower.

<sup>25</sup> Ibid.

expressed by technical personnel, managerial staff of plantation as well as small planters. To sum up, there is an overall observation that wages are quite high due to the labour intensiveness of the industry, which may be unsustainable in terms of livelihoods of growers in the long  $run^{26}$ .

Several other scholars<sup>27</sup> have also recognised that labour was about 45% of the total cost of growing coffee, and now due to the higher wages, the production costs have inevitably increased. There is also a view that absence of second generation labour, including the children of the workers, due to the more access to education (resulting in more opportunities of work elsewhere away from the plantations) is another factor compounding the crisis. Human resources are gradually dwindling, as the younger generation are not so interested due to their origination to the metros (perception is that one earns more and there are more opportunities in cities) and their entrepreneurial thinking; controls are less due to less family-orientation in metros.<sup>28</sup>

Officials of the Extension Department of the Coffee Board have identified several hard-ships from the point of view of the growers, such as an inadequate infrastructure. To overcome the shortage of labour growers are now encouraging in-migration of labour, though there is a language barrier between the growers and the workers<sup>29</sup>. The high wage rate of around Rs. 200-250 per day is due to this shortage, and that reality dictates how much more labour can bargain to receive over the

<sup>26</sup> Various reasons are attributed for this situation like urbanization and ageing of labour. suggested measures included mechanization but some operations still require large quantum of manual labour. On current prices basis, wages have gone up by 120% compared to 1990s (interviews with Mr. Chinnappa, A Coffee Consultant (Plantations) and visiting Estate Manager and Mr. Nanda Subbaiah, President of Maldare Primary Agriculture Cooperative Society and a small-grower.

<sup>27</sup> Dr. Kiran Kushalappa, Forestry College.

<sup>28</sup> Mr. Nanda Subbiah interview.

<sup>29</sup> Mr. Reddy, Deputy-Director of the Coffee Board Extensions Unit.

stipulated minimum wage of Rs. 115.<sup>30</sup> Several growers as well as extension workers feel that encouraging in migration of workers from else where (distant lands from Bihar and Assam) has a major challenge in training them. These would add to the cost structure of production. A repeated concern of several planters was related to the productivity of workers and their inability to complete timely operations due to the shortage of labour, during the past 5-6 years.<sup>31</sup> International comparison of labour costs is often invoked to show how the Indian coffee sector is highly labour-intensive, with 65% labour input against 25% in Brazil<sup>32</sup>.

Historically, the weather and living conditions in coffee areas are rather hostile – it continues to remain the same with high rainfall, inspite of improved communication facilities over the time. This has necessitated even the small planters to seek workers as permanent workers and create several provisions for their housing, health and education.

#### 2.6.1 Plantation Labour Act

The Parliament passed the Plantations Labour Act [PLA] in 1951 to provide for the welfare of labour and to regulate the conditions of workers in plantations. Under this Act, the State Governments have been empowered to take all feasible steps to improve the lot of the plantation workers. The passing of PLA brought some improvements in the plantations sector. It has also helped in creating conditions for organizing the workers and the rise of trade unions. However, the potential benefits promised under the PLA remain unachieved mainly due to ignorance of workers about their rights under the law and inadequate implementation. Infact this is one of the areas that deserve further research and studies, especially on the conditions of plantation workers vis a vis implementation of provisions of plantation labour Act.

<sup>30</sup> Mr. Reddy interview.

<sup>31</sup> Mr. Subbiah interview.

<sup>32</sup> Mr. Bose Mandanna, of the Karnataka Planters' Association.

A bill to amend the Plantation Labour Act, 1951, was introduced in the Parliament in September 2009, "relate to changes in the definition of employer, family and worker". It also envisages protecting the interests of workers vis a vis occupational safety, health, women workers and child labour. The bill also proposes to regulate employment of women and children below 14 years for handling hazardous chemicals in plantations. The bill has since been passed by the Parliament during the last year and rules and guidelines for implementation are being evolved.

## 2.6.2 Social security provisioning for coffee workers

Plantations over 5 hectares are governed by the Plantation Labour Act, and therefore wages are much higher than other agricultural operations, and these wages are constantly revised through negations. Labour employed in large plantations are provided with amenities like living quarters, electricity, medical facilities, maternity benefits, benefits of winter and rain clothing etc apart from statutory benefits like provident fund, gratuity, leave allowances etc. There are also workers unions and other representatives of workers involved in negotiations along with labour department and planter representatives. While such provisions are applicable to large estates, small planters also have provided several of these benefits to workers as a strategy to retain them. There is a tradition of treating farm labour humanely since the 1950s, which is gradually giving way as many planters have started to withdraw such provisions in response to rising wages<sup>33</sup>. Given the inaccessible areas, public provisioning of social infrastructure is also limited. Consequently several of the coffee worker's colonies and villages are backward in terms of social and economic development. It is also reported that in some areas, the wages are insufficient for their livelihood. Alcoholism among workers is repeatedly identified as a major reason for the backwardness of workers. Overall, on balance labour costs, such as

<sup>33</sup> Personal Interviews of the author with small planters.

housing, water and fuel are increasing and it creates more problems for growers.  $^{\rm 34}$ 

#### 2.7 Coffee Board

The Coffee Board is a statutory organization constituted under the Coffee Act, 1942 and functions under the Administrative control of the Ministry of Commerce and Industry, Government of India. The Board comprises of 33 Members including the Chairman, who is the Chief Executive. The remaining 32 Members representing the various interests are appointed as per provisions of Section 4(2) of the Coffee Act read with Rule 3 of the Coffee Rules, 1955. Till 1995, the Coffee Board had a pool (controlled) marketing system of coffee in India. However, the winds of liberalization swept the Indian coffee industry and since 1995, marketing of coffee is strictly a private sector activity. In fact the Coffee Board went through a massive downsizing and two-thirds of its employees were retired under a voluntary retirement scheme.

The Coffee Board is mainly engaged in the areas of Research, Extension, Development, Quality Up-gradation, Economic & Market Intelligence, External and Internal Promotion of Coffees of India and Labour Welfare. The Board has a Central Coffee Research Institute at Balehonnur (Karnataka) and Regional Coffee Research Stations at Chettalli (Karnataka), Chundale (Kerala), Thandigudi (Tamil Nadu), R.V. Nagar (Andhra Pradesh), Diphu (Assam) and Bio-technology Centre at Mysore. There are also several Extension offices located at coffee growing areas of Karnataka, Kerala, Tamil Nadu, Andhra Pradesh, Orissa and North Eastern Region. The Coffee Board conducts basic and applied research on coffee and has 75 years of experience in coffee research. The Central Coffee Research Institute in the Chikmagalur District, Karnataka State has been in the forefront of coffee research over the years and continues to remain as one of the premier institutes of the world for coffee research.

<sup>34</sup> Interview with Mr. Mandanna, Karnataka Planters Associaton.

The Coffee Board has the mandate, and they are the authorized agency by the Government of India, to carry out work for the growth of the coffee sector at the national level, though state governments also have a critical role to play.

#### 2.7.1 Promotional Measures

The Board has mandate to initiate measures to encourage the consumption of coffee in India and abroad. Towards this end, the Board participates in Coffee-centric/ Food and Beverages exhibitions abroad. The Board also runs 12 India Coffee Houses/Depots in the country. The India Coffee House brand of coffee powder is well known in India for its quality and aroma. The Board has for long years worked on the quality of Coffee of India. The Board runs two quality control laboratories in Bangalore and Chikmagalur and one quality testing centre in Chettalli, which control and advise the industry on quality issues. The labs are equipped with the best roasting and brewing machines. The best cuptasters and quality evaluators keep a strict vigil on the pre and post harvest processes with a view to ensure that the quality of Indian coffee is maintained.

With regard to production, the Coffee board addresses issues at the research and extension level as well as support to planters. There are subsidy schemes for replantation, water augmentation and quality up gradation. These schemes are publicised and there appears to be very positive response from the planter community, as they avail such subsidies which range from 20 per cent to 40 per cent depending on the size of the holdings. Apart from this Coffee Board also facilitates support for establishment of processing units, formation of growers' collectives etc.

One of the most recent efforts to address production is the announcement of debt relief package for small growers (announced in 2010) which is being implemented through the Coffee Board. This scheme is expected to provide relief to the tune of Rs. 241 crores to small growers. State level bankers are expected to proactively engage in implementation of the scheme along with the Coffee Board.

## 2.7.2 Market Intelligence & Statistical Unit

The Board has a Market Intelligence & Statistical Unit functioning from its head office at Bangalore. The unit undertakes various activities related to market information & intelligence, market research studies, crop forecasting and coffee economics aspects. The unit also undertakes studies on research related to the coffee trade including WTO issues. Notable publications include the daily market intelligence report and a comprehensive database on coffee (bi-monthly). The periodical reports that are already completed include *Coffee Consumption in India* 2001, 2003, 2005 and 2008 and *Attitude towards coffee drinking* 2007. The unit has coordinated studies on (i) logistics and competitiveness of coffee producing countries (India, Vietnam & Brazil) (ii) MAI Scheme on promotion of Indian coffee exports to Russia and CIS countries and a manual on coffee retailing. The unit also coordinates the implementation of Price Stabilization Fund Scheme of the Govt. of India and Rainfall Insurance Scheme for Coffee growers.<sup>35</sup>

## 2.7.3 Services of the Coffee Board

The Research Department of Coffee Board plays a vital role in rendering necessary technical support to the coffee growers. The Coffee Board introduced a nominal charging system for the various technical and advisory services rendered by its Research Department, for the benefit of coffee planting community & others connected with coffee. The Research Department publishes various journals and periodicals. It also offers various services to growers and exporters. The services that are brought under charging system include a wide range of activities like supply of seeds of improved varieties, soil testing & fertilizer advisory, supply of bio-control agents against coffee pests & diseases, coffee

<sup>35</sup> The Coffee Board of India - http://indiacoffee.org/login.php

quality & analytical testing, extending training on various aspects of coffee cultivation & roasting & brewing, providing consultancy service to estates etc.

The Board also has a vast extension network spread over the three main producing states of Karnataka, Kerala and Tamil Nadu, as well as in the non-traditional areas of Andhra Pradesh, Orissa and the seven North-Eastern states. The extension set up provides the day- to- day link with the grower community and this wing facilitates the transfer of technology from lab to land. Overall, the Board serves as a friend, philosopher and guide of the coffee industry in India.

#### 3. Issues and Concerns

The previous section provided an analysis of situation of the coffee economy, from the perspective of production, marketing and trade, labour, promotional measures as well as the role of different stakeholders like the Coffee board. In this section, we identify issues and concerns related to the coffee economy in order to identify scope for policy suggestions and recommendations.

#### **3.1 Production related**

Growth in area under coffee emanates mainly from the new coffee growing areas. In the traditional coffee growing regions, area, production and productivity appear to have reached a platue. While an array of pest related set backs have been overcome, still vulnerability to climate and traditional farm practices remain major risks in the production system. Increasingly food safety issues and use of pesticides (though it is low in intensity) are contentious issues, especially in the context of growing consumer awareness as well as market dictated terms of production. Diversity in plantation crops is increasingly giving way for mono-crop with disappearance of citrus fruit bearing trees and other inter-crops. Removal of shade cover is also affecting the production system of vulnerable varieties like Arabica there by affecting the productivity. Labour markets factors are increasingly becoming a compromising factor vis a vis cost competitiveness of coffee production.

## **Coffee and Diversity**

An important feature in Coffee cultivation in India is that it is always grown as multi-crop, with pepper, citrus fruit bearing trees, Arcanut, cardamom, vanilla, etc, that provide critical secondary sources of incomes for planters. It is reported that about 60 per cent of pepper in India is produced as an intercrop with coffee (Raghuramulu 2007). It is estimated in some studies that such inter-cropping of citrus fruits in Tamil Nadu plantations account for over 19 per cent of income for planter households. Pepper contributes about 29 per cent of net income in Kodagu district. There is a concern that such diversity is disappearing.

## 3.2 Technology and Labour related

Given the labour shortage, mechanisation has been increasingly seen as an option to retain the level of productivity and production. However, there are inherent limitations like uneven planting and small size of the holdings. Increasingly the Coffee Board is providing incentives in terms of credit support for mechanisation, though cost factors appear to be deterrents for such a move. Poor infrastructure in terms of development of roads and communication is also a factor that affects labour supply and it continues to be a problem. Even after partial mechanisation, labour continues to be a critical factor in the production.

From the production point of view, there have been improvements in the varieties (both Arabica and Robusta) and the Coffee Board is a major player in introducing new varieties and the extension services appear to be better compared to the traditional agriculture department. There is also a culture of adoption of practices and new technology through feedback from the traditional familial and kinship networks of planters. Coffee pests such as white stem borer (in Arabica coffee) and berry borer (in Robusta coffee), although not completely eradicated, are under control due to better agronomic practices. Higher coffee price realization during the past three to four years has prompted coffee growers to apply more farm inputs and follow better agronomic practices, supporting higher production.

A related factor is the need to balance man-animal conflict in ecologically sensitive coffee growing regions within the Coffee districts. Shrinking forest cover appears to have resulted in wild animals (elephants) straying into the coffee growing areas, which results in substantial losses for the small and marginal growers (to the tune of over 20 per cent of production in some cases). Mechanisms for addressing such sensitive issues are not in place and currently they become polarized emotional debates among conservationists on one side and those affected small growers on the other side. What is required perhaps is a mechanism of accounting and compensating for such losses and creating institutional structures to address conservation and livelihoods.

With increased off-farm employment opportunities, coffee planters have started experiencing shortages of skilled labor, which could become a major problem during the coming years. Higher price realization for coffee is now helping growers to mitigate the higher labor cost to some extent.

While technological innovations may help improving labour productivity, there are certain specific features of Coffee in India which are not sufficiently highlighted for marketing purposes. For example, most of the coffee in India is 'hand-picked'; and introduction of coffee harvesting equipment may infact lead to losing such uniqueness which unfortunately has not been sufficiently marketed as a value addition of Indian Coffees.

With regard to plantation labour act and medium and large coffee planters, it appears that there is a need to rethink social security provisioning for workers. While post retirement benefits and statutory social security provisions are non-negotiable, it is suggested that some of the social costs be met by the government as there is an overall improvement in social infrastructure in rural areas. This demand comes from the medium and large planters as the improved connectivity and mobility of workers lead to accessing such services provided by the government itself (it is argued that most of the medium and large planters pay tax on the plantation income and hence they expect that social costs of labour are met by the government!). Such a provisioning perhaps would enable reducing the input costs, especially that of labour.

## 3.3 Marketing related

Most small growers feel that the current marketing systems are not conducive for the small grower to benefit from coffee cultivation. Historically, it has been a buyers market. Given the de-regulation, several players have come to the market and small growers without having withstanding capacity are forced to part with their produce at the farm gate. There are no collective cooperative systems in place to have better bargaining power. Further, inability of the small growers to form producer's cooperatives for quality improvement and creating niche markets for speciality coffee is an issue. Except for large brands, most of the produce from small growers is sold in bulk to the exporters with no specific geographical identification or quality specifications that are locally specific.

The market for traders is very competitive, with the margin being very thin.<sup>36</sup> Given the high concentration of buyers' market most of the agents working in different towns are increasingly finding it difficult to cope up with the specifications of quality as well as liquidity fronts as the large traders do not provide any advances to the small traders.

<sup>36</sup> Interview with Mr Kabir planter.

Earlier coffee was sold as commodity, and as the market economy opened up, growers have been provided with the opportunity to showcase their special coffee to the world (location specific coffee).<sup>37</sup> Yet, in comparison with other countries, India has not done much in promoting coffee.<sup>38</sup> Opportunities for innovative marketing strategies and demand generation from domestic consumers are repeatedly identified as major areas that need further exploration. There are few initial efforts towards this end by both the Coffee Board and some of the non profit organisations.

## **TechnoServe and Coffee**

TechnoServe a non-profit organization is working to support rural businesses in the developing world. In its search for solutions in how to achieve a sustainable impact, there are three distinct ways highlighted, a) Promote coffee consumption in producing countries and emerging markets, b) Support specialty coffee producers to secure market premiums, and c) Encourage diversification for marginal coffee producers with the potential to supply "specialty" or niche markets.<sup>39</sup>

## 3.4 Credit related

Historically, small growers depend on credit for their operations. In several districts scheduled commercial banks and cooperatives are active in providing institutional credit. However, given the fluctuating fortunes of Coffee growers, mechanisms of credit based support appear to have limited impact in the sense of achieving sustainability. Insurance based support mechanisms have not yet taken roots. At the same time, it

<sup>37</sup> Interview with Mr. Mandanna.

<sup>38</sup> Ibid.

<sup>39</sup> Scholer, M., 2004. Bitter or Better Future for Coffee Producers? [Online] International Trade Forum Issue 2/2004. P. 11 Available at: http:// www.intracen.org/mds/coffee\_profile\_eng.pdf [Accessed 30 May 2010].

is to be underscored that credit institutions in the districts are extremely proactive and to a larger extent they are able to arrest the downslide of the small growers. There have been no reports of diminishing credit outlays by public sector banks and cooperatives.

Several schemes announced by the Coffee Board and government (including loan wavier) appear to have reasonable reach among small growers, though there have been complaints that measurements to arrive at estimates vis a vis crop losses (rainfall related) and other adversities are not sufficiently transparent including those price stabilization fund related operations. There are also concerns on the high interest rate charged by the commercial banks (over 10 per cent).

There has been sufficient support given by the government, through development schemes, in relation to expansion, consolidation, replanting, infrastructure facilities, godown facilities and Water Augmentation Schemes (WAS).<sup>40</sup> However, price fluctuations are not managed enough by the Government of India and that planters are not receiving enough finance for investment as required for the long term development.

Cooperative Banks in Coorg confirmed that the Coffee Debt Relief Package 2010 by the government to waiver loans has not yet been received, though knowledge of the package by growers has meant they have abandoned all responsibility to pay back any amount of interest on their loans.<sup>41</sup> In a report by the Global Agricultural Information Network, it highlights how Indian coffee growers have faced long standing financial problems due to the drop in coffee price which occurred between 2000 and 2004<sup>42</sup>. Despite various relief packages

<sup>40</sup> Interview with Mr. Hunumantha op cit.

<sup>41</sup> Interview with Mr. Guruswami.

A. Govindan - India Coffee Annual 2010. USDA Foreign Agricultural Service. Global Agricultural Information Network Report (No. IN1038). Dated April 5<sup>th</sup> 2010.

announced by the government earlier, a large number of affected growers did not benefit during that period.

## Loan waiver scheme

On April 29, 2010, the Finance Minister announced a new Debt Relief Package in Parliament, intended mainly for small coffee growers. Accordingly, 50 percent of the pre-2002 term loans taken by coffee growers will be waived, subject to a maximum of Rs. 500,000 (\$14,925) per farmer. An additional 25 percent will be waived by banks and the remaining 25 percent will be rescheduled. The loan waiver package also envisages a 20 percent liability waiver for Crop Loans to be equally borne by the GOI and the banks, subject to a maximum of Rs. 100,000. For post-2002 Term Loans, 10 percent of the total liability will be waived subject to a maximum of Rs. 100,000. The package also provides relief to medium and large farmers who will be permitted to reschedule their loans. Total financial outgo for the government for this package is estimated at Rs. 2.4 billion (\$54 million) and the benefit to coffee growers is placed at Rs. 3.6 billion (\$81 million) $^{43}$ .

# **Producers' Cooperative**

Efforts towards sustaining producers' cooperatives appear to have mixed results with respect to Coffee, especially in Kodagu district. Experience of Kodagu District Coffee Growers Cooperative Federation, (KDCGCF) a 8000 member based organisation during the past ten years reflect the conundrums of free trade regime. At one point, this organisation has held premium position vis a vis Coffee trade, processing and exports. It worked as a major procurement and outreach unit for the Coffee Board. It has also acquired substantial asset base and recorded profits and disbursed dividends. Fortunes of these producers cooperative appear to have nosedived with the advent of free trade regime. Coupled with price fluctuations, inability to reorient itself to the changing situation has resulted in accumulating losses and currently the organisation is in dire need of infusion of capital as well as professional management and technical inputs. The leadership of the Cooperative has recently requested support from the Government to tide over the accumulated losses as the organisation has shown operating profits during the past two years. Still it retains a premier position in terms of dictating price at the local level. It is important at this juncture to note that such producer's cooperatives have tremendous potential to enter into premium markets and speciality coffees provided they are backed up by adequate capital as well as managerial inputs. Several civil society groups including international NGOs identify such a route as viable alternative to create sustainable production and marketing by small growers. The need of the hour is support from government and the other bodies to sustain such institutional structures.

#### 3.5 Sustainability and Fair Trade

Increasingly issues related to environmental sustainability are coming into debate within the production system of the small growers. Schemes like payment for environment services (PES), certified and organic coffees have limited off-take in coffee growing areas as several planters feel the certification regimes associated with such systems are not context specific, cost intensive and small growers would not be in a position to comply with. There are limited experiences of popularising such schemes in coffee growing districts among small growers though the reality is that the entire coffee growing community is contributing to the environmental conservation in a substantial way. Lack of information dissemination, marketing strategies and support and capacity building for improved practices seem to be major constraints in promoting such sustainable practices. Planters are also sceptic as they feel such global private initiatives do not consider local contexts and price premiums are often not made available for various reasons including strict guidelines. It is perceived that powerful interests of roasters and retailers in pursuing audit-based environmental accountability schemes appear to have inspired several certification mechanisms which are not context specific to the local geography of coffee production.

Another stream of market based certification mechanisms are also making way into coffee production system subsuming the notions of environmental conservation within the overall business strategy, mainly through the route of corporate social responsibility (CSR)<sup>44</sup>. Protecting environment, improving working conditions and transferring value to the upstream producers, compliance to ethical codes and practices are some of the features of such corporate initiated certification processes. Corporate citizenship and seeking to preserve reputational capital are also factors that result in ethical sourcing by the global coffee roasters and retailers. Such initiatives, it is argued, are inspired by western models of conservation and consumer consciousness. On balance, there is a need to develop locally relevant indicators of sustainability and practices that would be contextual to the local geography and relate such practices to the certification mechanisms. There is also a need to engage in research on participatory models of certification which would meet the interests of the local communities. On a small scale such initiatives are available in some of the coffee growing areas of Tamil Nadu which need to be studied and replicated elsewhere with appropriate modifications.

<sup>44</sup> It is to be noted that large producers like Tata Coffee markets all its coffee as Utz certified coffee. There are also several medium and large estates that are into certification and organic cultivation. Efforts to engage small growers into such systems are the point of discussion here.

Certification programmes inspired by international development NGOs are in vogue in some parts of the coffee growing districts. But their scale and coverage is limited. For example, Solidaridad facilitates certification process among few medium and large growers in Karnataka. Similarly, small growers undergo certification process in Wayanad district, facilitated by some of the for-profit certification and marketing agencies like 'Elements'. However, most small growers feel that certification is an additional cost imposed on them by the international buyers.

## **3.6 Domestic Consumption**

As mentioned earlier, the Coffee Board encourages the consumption of coffee in India and abroad.<sup>45</sup> As can be seen from Table 5, over the years, domestic consumption has increased quite significantly compared to mid 1995, and is now around 80,000 tonnes of coffee. However, there is still a lot more opportunity for growth, as is evident through the creation of more and more coffee shops in India.<sup>46</sup> It can be seen that the rate of growth of consumption appear to be a steady at five to six per cent for over past five years.

There is scope to increase domestic consumption, mostly in North India, as customers in a cooler climate are the best to target for marketing purposes, and reduce dependency on exports. An optimistic scenario is presented by the Coffee Board vis a vis speciality coffee consumption within India as several brands have projected expansion plans. There is also scope for expanding consumption with major establishments encouraging coffee consumption like those related to the defense forces, railways, and transportation etc. <sup>47</sup>

<sup>45</sup> www.indiacoffee.org viewed on June 11<sup>th</sup> 2010.

<sup>46</sup> Interview with Mr. Kaveriappa.

<sup>47</sup> Interview with Mr. Kushalappa and other growers.

| Year | Quantity(MT) | Year to Year % change |
|------|--------------|-----------------------|
| 1995 | 50000        |                       |
| 1996 | 50000        |                       |
| 1997 | 50000        |                       |
| 1998 | 50000        |                       |
| 1999 | 55000        | 10.00                 |
| 2000 | 60000        | 9.09                  |
| 2001 | 64000        | 6.67                  |
| 2002 | 68000        | 6.25                  |
| 2003 | 70000        | 2.94                  |
| 2004 | 75000        | 7.14                  |
| 2005 | 80200        | 6.93                  |
| 2006 | 85000        | 5.99                  |
| 2007 | 90000        | 5.88                  |
| 2008 | 94400        | 4.89                  |

Table 6: Estimated Domestic Consumption and its Growth

Source: The Coffee Board

# 4. Specific roles of key stakeholders and expectations from Coffee Growers

## 4.1. Government

Planters have identified several specific support mechanisms that they expect from the government. Though the role of Coffee Board has diminished in the marketing front, several areas of interventions were sought for enhancing conservation, production and productivity. First and foremost, the planters feel that the Government should enhance their interaction with the grower community and perhaps turn to a more incentive-driven production. It was argued by the planters' community, perhaps rightly, that Government should shift from giving out subsidies to providing incentives for better quality, and production of coffee. For example, it was suggested that incentives should be given every year to growers depending on the number, size and diversity of trees grown and the conservation practices.<sup>48</sup> Similarly, there should be incentives offered to planters, for planting new trees.<sup>49</sup> Markets for carbon trading may be facilitated by the government as that would factor into the positive externalities created by planters. Such incentive based solutions may be facilitated by Government led initiatives. State governments also can play an important role in such endeavors. There are also issues related to taxation on the semi processed coffee, which may be reviewed in enhancing the scope for vertical integration and generating more value at the producer's front.

Research and development in the Coffee sector is generally encouraging; however the need for enhanced extension services is underscored by the planters. Investment in pest management, creating certification and quality assurance mechanisms can also be undertaken by the Government. A comparative analysis of government initiatives and supports in Coffee growers across the countries may be undertaken in order to learn from others experiences.

Improving social infrastructure (education and health facilities) and reducing the social security burden on the private sector is one of the suggestions that came in for scrutiny. It was argued that given the social development scenario and investments by the government, there is a need to review social security provisioning for plantation workers and a new set of rules and principles may be brought in. Increased wage cost itself is an issue that planters are grappling with at the moment.

Regulation on trading was advocated by some planters, who feared that price volatility in an unregulated environment might enhance vulnerability of small growers. Government intervention, through cooperatives was also advocated as one option that could be exercised.

<sup>48</sup> Interview with Mr. Kushalappa.

<sup>49</sup> Interview with Mr. Pramood.

## 4.2. The Coffee Board

While an exposition of the Coffee board has been made in the previous section, it is imperative here to acknowledge its evolving role in responding to the challenges. Several promotional schemes (linked to Banks for credit support) are devised by the Coffee Board as part of promoting and sustaining small growers' production. Schemes for enhancing infrastructure at the plantation level (with subsidy link) are ushered in which are found to be attractive to the growers. The Board has also facilitated SHGs of small growers and through the support to SHGs, to enhance local infrastructure facilities like common drying platforms, equipment, machinery, water conservation measures etc.

One important and widely acknowledged support is that of provision of the day- to- day link with the grower community and the transfer of technology from lab to land.<sup>50</sup> Planters feel that the Coffee Board should further enhance their dialogue with the grower community, and make them feel more involved in the research process, perhaps through more information dissemination and participatory research processes. Its website is most widely used by the community as well as researchers which features rich information and databases.

## CAFNET

The Coffee Board in collaboration with the Forestry College, and French Institute in Pondicherry, have joined in the global project 'CAFNET' (Coffee Agro-Forestry Network) with the EU's support, in valuing ecosystem services, and looking at ways of how these services can return a good profit. CAFNET is a platform for research, exchange of ideas, and on the steering committee, there are representatives of all stakeholders within the coffee sector. There is a need to disseminate such research findings and create platforms for planters to share and learn.

<sup>50</sup> www.indiacoffee.org viewed on June 11<sup>th</sup> 2010.

It is important to develop mechanisms that promote innovation. Various practices and innovations may require nurturing and Coffee Board may come up with an innovation fund that supports individual planters in addressing some of the issues and try out solutions that are innovative.

# 4.3.Associations

The primary role of Associations in the Coffee sector is aimed at enhancing their dialogue with the grower community and other stakeholders of the coffee industry at the policy level. Matters related to taxation, price stabilization, incentives were often represented by the industry associations. UPASI, Coorg Planters' Association and Karnataka Planters' Association have played historical role in facilitating such processes. However, representation of small growers in these three institutions is somewhat limited due to their low clout and interest as well. Karnataka Growers Federation represents small growers as an apex body of associations representing over 5000 members. Several of these apex associations bring out their newsletters and information material which are primary sources of exchange of information and ideas. Planters value such material very highly. There are very few Growers Cooperatives (for example Kodagu District Coffee Growers Cooperative Society Ltd) and they are also not in good financial health. However, historically they played critical role in market interventions and bench marking prices. The need is to identify such institutions and revive them through professionalization so that sustainability of small growers can be achieved.

Presence of NGOs and international agencies is a new phenomenon in coffee sector. Historically, there have been NGOs working in the area of conservation and environment. However, over the past decade or so, international agencies evinced interest in addressing issues of production and sustainability; which coincided with the growth of movements related to fair trade and environmental sustainability. There appears to be an overall reluctance among the grower community, especially among the small growers on some of the efforts towards certification and addressing issues of sustainability and environmental conservation. It stems from a deep rooted suspicion on the efforts of international agencies and their purported (buyers) agenda of imposing western models of conservation ignoring the realities and local contexts. There is a need to work with grower communities to set out models and bench marks of conservation and sustainability that would suit the local contexts and balances the livelihoods and conservation. Action research in this direction is urgently felt by several growers and it is here role of NGOs is identified most critical.

It is also suggested that apex associations have to take a more proactive role in information dissemination and resolving issues. Research and dissemination, man-animal conflict (linked to sustainability and livelihoods), futures trading and lobbying for better infrastructure, credit facilities etc are some of the areas of intervention sought from apex associations of planters.

## 5. Summary and Recommendations

1. Coffee cultivation in India is closely linked to the livelihoods of a million workers and over 200,000 small growers, who contribute over 60 per cent of the production. It is also grown in ecologically fragile zones of India and hence it warrants special attention in terms of environmental sustainability and livelihood sustainability of the people. A delicate balance hence needs to be maintained in addressing issues related to coffee production. Given the fact that over 80 per cent of operational holdings are below 2 hectares, economic viability of coffee cultivation by small growers assumes great importance. Mechanisms for supporting such groups of planters become an important goal for ensuring sustainability of production and livelihoods. Coffee still remains as an important commodity in the export basket of the country.

2. Given the nature of the commodity and the production dynamics, Coffee cultivation is mired with cycles of boom and busts. There are several risks and vulnerabilities from the production and trade fronts. Global concentration of trade left very little scope for the producers to respond and price volatility has created ripples in the livelihoods of the small growers. While international price movements are determined by various factors including weather, more importantly 'financialisation' of commodity trade is attributed to be one of the factors for price instability. Given that production would not be in a position to adjust to demand in the short run, it is the speculators, traders and large planters who may have gained during periods of boom. The Global Value Chain (GVC) is highly concentrated and several privately monitored quality control and certification processes that are in place put enormous pressure on the producers and that in fact may affect negatively on the returns for the small producers. There is a need to address some of the structural issues at the ICO level through multi country agreements on sustainability and some amount of regulatory norms on market operations.

3. Coffee Production in traditional coffee growing areas appears to have reached threshold in several aspects. Coffee in new areas is supported by the Coffee Board and other institutions and there need to reach productivity to satisfactory levels. Conservation and coffee production practices are increasingly coming under strain in several parts of coffee producing districts. *A delicate balance need to be maintained in order to protect environment as well as livelihoods*.

4. Land tenure system and related issues in districts like Kodagu play a critical role in conservation and livelihoods of people. There is a need to comprehensively study and understand the issues in depth. *Time bound intervention of judiciary and administration would help in resolving outstanding issues vis a vis land tenure and land use policies (this is specifically applicable to Kodagu district) and conservation.* 

This aspect is specific to each of the Coffee growing states and appropriate mechanisms need to be built by the governments.

5. Coffee Trade is heavily concentrated and there are several limitations for the small growers to engage in post-harvest processing and value addition. Given the inter-locking of markets and long term relations that are built between producers and local market agents, small growers more often than not opt for farm gate sale of the produce (as parchment or dry). While the commodity accommodates the scope for initial processing and value addition, there are several constraints that prevent small growers to engage in those processes. They are capital intensive and the staying power of the small grower is often tested in such cases (lack of storage facilities, credit support, machinery and equipment for pulping, hulling, curing etc). Governmental promotional and proactive measures are necessary for small growers to engage in post harvest value addition processes. This would be only way out for the small growers to remain in coffee production in the medium and long term. There is in fact a need to study and understand conditions for such post-harvest processing and feasibility. Group approach in this respect may be explored.

It is in this context, realigning the role and mandate of apex level promotional institutions like the Coffee Board becomes necessary so that they would become more contextual.

6. In the Coffee value chain, farmers capture not more than 20 per cent of the end value. Other Intermediaries and traders (local and international) and roasters gain substantially. It is estimated that roasters alone will retain about 30 per cent of the value, and brands also play an important role in the value chain. Given that it is a buyers market, there are always efforts to reduce the value for the primary producers. Mechanisms like certification are aimed at allowing fair margins at the producer level but often they become counter productive due to host of reasons identified in this paper.

There is a need to develop action research on locally contextual certification mechanisms that would actually benefit the small producers. Technology transfer and extension services need to be aligned with the structural changes that are occurring in the Industry. Focus on promotion of speciality coffees by small growers, group approach to marketing, developing locally relevant and contextual quality norms, piloting certification mechanisms based on local quality norms etc would be useful areas of work for the Coffee Board. A well coordinated innovation fund may be necessary.

International agencies engaged in trade and development and socially responsible private sector may also identify such opportunities and support them.

7. Price discovery is primarily through comparison with respect to International markets and planters are abreast with such information through media and new ICT related interventions like online trading platforms. However, there is lukewarm response to participate in auctions (online) and futures trade as planters. While at one level planters are not exposed to price movements through forward sale contracts, they also feel that farm gate sale would provide them with spot price. *Awareness building on the pros and cons of futures market may help small growers to take informed decision regarding these aspects*.

8. Market led insurance based mechanisms for hedging the production risks are not widely available in the coffee growing region. They are also costly for small growers. While efforts towards rainfall index based (weather) insurance is being operationalised recently, the off take has not been encouraging as planters complain of lack of transparency and consistency and local relevance of the indicators identified for rain fall based insurance. *There is a need to develop locally acceptable mechanisms for production risks through insurance may need to be developed*.

9. Labour shortage and limited scope for introducing technology (labour saving) is repeatedly identified as one of the production constraints. It is estimated that labour component accounts for almost 65 per cent of the cost of production. Increased connectivity, urbanisation and opportunities elsewhere lure younger generation away from plantations. Ageing labour is also affecting labour productivity. *Innovative mechanisms for retaining the labour, inducting fresh labour (from outside), training and professionalism in plantation work may be developed. Here government's proactive role has to be emphasised.* 

10. Given the constraints of wage bill, there appears to be withdrawal of some of the informal social security measures provided to plantation workers, especially by the small growers. Provisioning for education, health and shelter are being increasingly withdrawn. While small planters do not come under Plantation Labour Act and hence are not obliged to provide these facilities which were hitherto given on informal basis, withdrawal of these facilities is acting as a dis-incentive. Increasing feminisation of labour is also leading to strain on women workers when their men go out to work in near by towns and in cities like Bangalore. *There is a need to study social security systems for plantation workers and suggest reforms in the existing practices and identify the roles of government and planters in the changed context.* 

11. At the moment, planters outbid each other for securing available labour. Mechanisation and attracting labour to plantation work (providing respectability and formal training) need to be devised with the support of the planters' community. *Pooling of labour on collective basis and rotating labour across the neighbourhood plantations are some of the options that can be explored. Seeking labour from elsewhere (north east and east India) is also being experimented, however such labour would require training and also social implications of such long distance migration (to remote areas) need to be studied further.*  12. There are several emerging issues that merit detailed studies. They range from strategies for improving production and productivity, diversification, marketing and product diversification to identify the scope for domestic consumption. Such studies need to be facilitated by the Coffee Board, research institutions, INGOs and private sector.

Some broader areas for research include:

- Scope for participation of small growers in vertical integration viz., post harvest production and value addition
- Technological changes, mechanisation and implications for cost competitiveness of coffee production
- Cost structure of production and comparative analysis across coffee growing countries
- Labour market conditions and social protection reforms vis a vis plantation labour
- Diversification of small growers in to speciality coffees and promotional measures and inter-cropping of other commodities/ crops
- Development and promotion of local context based certification mechanisms including participatory certification processes
- Incentive based conservation and sustainable production
- Promotion of domestic consumption, markets and the potential and support to brand building
- Taxation policies and implications for cost of production and competitiveness

13. In summary this analysis points out that vertical integration of small producers becomes important in order to enhance value for the primary producers so that they remain in production. Improving quality and productivity becomes necessary and cost competitiveness needs to be achieved not by reducing wage cost (which is not possible due to labour shortage) but by improving quality and partial mechanisation. Participation in global value chain (GVC) in an effective way would require producers to adopt quality improvement and product diversification (superior coffees). Efforts towards improving domestic markets (and consumption) would also play an important role in achieving price stability and improving market share of small growers. Social security reforms and realigning the role of Coffee Board are envisaged as important steps in order to facilitate sustainable production and marketing.

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Appendix

Table 1: Coffee Area, Production and Productivity - India

| lect                 | Overall | 204     | 567     | 814     | 624     | 571     | 891     | 563     | 972     | 534     | 759     | 805     | 758     | 936     | 788     | 921     |
|----------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Productivity Kg/hect | Robusta | 136     | 577     | 943     | 623     | 473     | 964     | 531     | 1066    | 493     | 795     | 797     | 837     | 964     | 843     | 982     |
| Produ                | Arabica | 229     | 559     | 725     | 625     | 667     | 820     | 595     | 874     | 577     | 722     | 814     | 674     | 906     | 728     | 860     |
|                      | Total   | 18893   | 68169   | 110231  | 118646  | 122450  | 192094  | 122713  | 214715  | 118053  | 169726  | 180000  | 169395  | 212000  | 180100  | 223000  |
| Production           | Robusta | 3382    | 28643   | 51883   | 57384   | 50139   | 103119  | 58157   | 119934  | 55481   | 91415   | 91680   | 96275   | 113700  | 101100  | 119750  |
|                      | Arabica | 15511   | 39526   | 58348   | 61262   | 72311   | 88975   | 64556   | 94781   | 62572   | 78311   | 88320   | 73120   | 98300   | 79000   | 103250  |
|                      | Total   | 92523   | 120321  | 135463  | 190076  | 214476  | 215500  | 218000  | 221000  | 221000  | 221000  | 223500  | 223500  | 226500  | 228500  | 242000  |
| Area                 | Robusta | 24910   | 49672   | 55030   | 92071   | 106000  | 107000  | 109500  | 112500  | 112500  | 112500  | 115000  | 115000  | 118000  | 120000  | 121900  |
|                      | Arabica | 67613   | 70649   | 80433   | 98005   | 108476  | 108500  | 108500  | 108500  | 108500  | 108500  | 108500  | 108500  | 108500  | 108500  | 120100  |
| Season               |         | 1950-51 | 1960-61 | 1970-71 | 1980-81 | 1985-86 | 1986-87 | 1987-88 | 1988-89 | 1989-90 | 1990-91 | 1991-92 | 1992-93 | 1993-94 | 1994-95 | 1995-96 |

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cont'd....

| -        | 125017 | 126267 | 251284 | 90450  | 114550 | 205000  | 724 | 206  | 816 |
|----------|--------|--------|--------|--------|--------|---------|-----|------|-----|
| 130664   | 64     | 154988 | 285652 | 99300  | 129000 | 228300  | 760 | 832  | 799 |
| 43       | 143007 | 159227 | 302234 | 97000  | 168000 | 265000  | 678 | 1055 | 877 |
| 46       | 146052 | 162381 | 308433 | 119000 | 173000 | 292000  | 815 | 1065 | 947 |
| 4        | 146052 | 167432 | 313484 | 104400 | 196800 | 3011200 | 713 | 1175 | 959 |
| 4        | 149056 | 171681 | 320737 | 121050 | 179550 | 300600  | 812 | 1046 | 937 |
| 4        | 146780 | 173835 | 320615 | 102125 | 173150 | 275275  | 696 | 966  | 859 |
| $\nabla$ | 148389 | 176735 | 325124 | 101950 | 168550 | 270500  | 687 | 954  | 832 |
| 41       | 153280 | 180058 | 333338 | 103400 | 172100 | 275500  | 675 | 956  | 826 |
| 14.      | 151547 | 189804 | 341351 | 94000  | 180000 | 274000  | 620 | 948  | 803 |
| 141      | 151861 | 191179 | 343040 | 00266  | 188300 | 288000  | 657 | 985  | 840 |
| 41       | 151013 | 193495 | 344508 | 92500  | 169500 | 262000  | 613 | 876  | 761 |
| 41       | 156421 | 194079 | 350500 | 79500  | 182800 | 262300  | 508 | 942  | 748 |
| ~ /      | 156421 | 194079 | 350500 | 94600  | 195000 | 289600  | 605 | 1005 | 826 |
|          |        |        |        |        |        |         |     |      |     |

Source: Coffee Board reports

#### References

Arun Iyer., 2010. A Brand Push for Coffee. The Economic Times.

- Carroll J., 2000. India Coffee Coffee Voluntary 2000. Foreign Agricultural Service GAIN Report, pp.1-4.
- D. Narayana, 1994, Government Intervention in Commodity Trade: An analysis of the Coffee Trade in India, WP 256.
- Ephraim C., Andrew D., and Jonathan K., 2007. Reforming the Smallholder Coffee Sector in Malawi: A Case Study of Smallholder Commercialisation. *The Future of Agricultures Consortium*, pp.1-25.
- Govindan, A., 2010. India Coffee Annual 2010. A report prepared by Global Agriculture Information Network. IN1038, pp.1-9.
- Hartmann M., and Akasha B.M., Emerging Challenges for Farm Labour in the Indian Coffee Sector. *Humboldt-UniversitätzuBerlin*, *Department of Agricultural Economics*, Division of Development Planning and Project Management, p 1.
- Neilson Jeff & Pritchard Bill (2009): Value Chain Struggles: Institutions and Governance in the Plantation Districts of South India.
- RGS-IBG Book Series, Wiely Blackwell.
- Pay E., 2009. The Market for Organic and Fair-trade Coffee. A *Study* prepared in the framework of FAO project GCP/RAF/404/GER, pp.1-19.
- The Economic & Market Intelligence Unit of the Coffee Board., 2010. Database on Coffee. pp.1-51.
- The International Coffee Organization., 2009. Opportunities and Challenges for the World Coffee Sector. *Multi-Stakeholder Consultation on Coffee of the Secretary-General of UNCTAD*, pp.1-12.

Venkatachalam, Lakshmi (2005): Perspectives on sustainability and globalization and the challenges for the coffee sector, Ms. Lakshmi Venkatachalam, Former Chairperson, Coffee Board of India, presentation at the 2nd World Coffee Conference, Salvador, Bahia, Brazil - 23-25 September 2005.

## Websites consulted

- Café Femenino Foundation. 2010. *The Story of Café Femenino Foundation* [Online] Available at: <u>http://www.coffeecan.org/?</u> action=about cff\_story [Accessed 27May 2010].
- India Coffee Organization. 2010. *Coffee Regions-India* [Online] Available at: <u>http://indiacoffee.org/indiacoffee.php?page=</u> <u>CoffeeRegionsIndia</u> [Accessed 22 May 2010].
- International Coffee Organization. 2010. *The History of the International Coffee Organization*. [Online] Available at: <u>http://www.ico.org/history.asp</u> [Accessed 22 May 2010].
- International Coffee Organization. 2004. Lessons from the World Coffee Crisis. A Serious Problem for Sustainable Development.
- [Online] Available at www.ico.org [Accessed 7 June 2010].
- International Coffee Organization. 2002. *The Global Coffee Crisis: A Threat to Sustainable Development. [Online]* Available at <u>www.ico.org</u> [Accessed 7 June 2010].
- TechnoServe. 2010. *Business Solutions to Poverty* [Online] Available at: <u>http://www.technoserve.org/</u> [Accessed 28 May 2010].
- The Coffee Quality Institute. 2010. *The Q Coffee System* [Online] Available at: <u>http://www.coffeeinstitute.org/the-q-coffee-</u> <u>system.html [Accessed 27May 2010].</u>
- Elan Organic Coffees. 2010. *Certified Organic Broker and Trader* [Online] Available at: <u>http://www.elanorganic.com/aboutus/</u> <u>ourresponsibility/certifications</u> [Accessed 13 June 2010].

Another Coffee. 2010. *Description of Coffees* [Online] Available at: <u>www.anothercoffee.co.uk</u> [Accessed on 11 June 2010].

#### Publications available from websites:

- CTA's Executive Brief, 2008. Coffee: Trade issues for the ACP. [Online] also in CTA's Agritrade: ACP-EU Trade Issues (2009 Compendium). Available at: <u>http://agritrade.cta.int/en</u> [Accessed 4 June 2010].
- Scholer, M., 2008. Women in Coffee [Online] International Trade Forum Issue 3-4/2008. Available at: <u>http://www.tradeforum.org/news/</u> <u>fullstory.php/aid/1367/Women\_in\_Coffee\_.html [Accessed\_30 May 2010].</u>
- Scholer, M., 2004. Bitter or Better Future for Coffee Producers? [Online] International Trade Forum Issue 2/2004. Available at: <u>http://www.intracen.org/mds/coffee\_profile\_eng.pdf</u>[Accessed 30 May 2010].