

SECTORAL ACTIVITIES PROGRAMME

Working Paper

Coffee in Kenya: Some challenges for decent work

by Leopold P. Mureithi

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to stimulate discussion and obtain comments

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Preface

Achieving decent work in global production systems usually requires some degree of economic and social upgrading of the production and trade processes of a commodity. Such upgrading may in turn entail costs along the entire spectrum, from investments, supply chain management, and sensitization of the social partners to the need to improve productivity in order to compete globally, and labour costs since consumers are increasingly demanding fair trade practices in commodities.

The study which follows was conducted as part of a general ILO search for more policy coherence – the commodity selected was coffee, and the countries Viet Nam, Costa Rica and Kenya. Not only are the key challenges facing the coffee sector in Kenya outlined, but the study shows that Kenya is poised today to respond to the challenge of applying decent work policies and practices in the sector since the opportunities to effect change are clearly defined and attainable if supported by political will. However, ongoing and effective broad social dialogue, combined with good governance, are prerequisites if decent work principles are to be applied to all who depend on the coffee sector for their income. We hope that this modest effort will help to foster such dialogue among all the actors involved and lead the way to higher levels of decent work in Kenya's coffee sector.

Elizabeth Tinoco
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1. Background

The coffee sector in Kenya is an important economic activity in terms of income generation, employment creation, foreign exchange earnings and tax revenue. Over the years, the economic performance of coffee has had repercussions on all spheres of life, both upstream affecting farm input suppliers and downstream the transport sector; on savings and investment intermediation; consumption of goods; and households' ability to pay for education, health and other services. Even politics at all levels cannot ignore or be ignored by coffee, not least in the race for well-paying jobs, sinecures, and contracts in the various institutions that serve as gravy trains in the coffee sector cash cow.

The main focus of this paper is to shed some light on how the coffee sector in Kenya has fared over the years, see which aspects need improving, and propose how to effect such improvement with specific measures. More specifically, the objectives of the paper are to:

- document the economic and social trends in the coffee sector in Kenya;
- highlight the magnitudes of “earnings” and factor shares by the various actors/stakeholders in the value chain;
- assess the technology in the production process from the farm level through pulping and milling;
- record gender and age stratification in employment and earnings;
- verify decent work status and prospects for improvement;
- identify economic upgrading and value addition strategies; and
- make policy recommendations to address the issues identified.

Data and information to enable analyses of the problems were gathered mostly from secondary sources, mainly the publications of the Coffee Board of Kenya (CBK), the Central Bureau of Statistics and the government printer. Some data were collected from brief field visits and the author's knowledge of the sector.

The first section of the paper provides a brief history of coffee in Kenya, and its dispersion and production structure. An industry overview follows in sections three and four which cover production and trade respectively. Section five focuses on the supply chain, its magnitude and the distribution of value among the various players. Section six presents employment and decent work issues in the sector, while section seven discusses the opportunities for improvements, upgrading prospects, and value addition strategies. The paper ends with policy recommendations in section eight.

2. Introduction

2.1. Historical backdrop

Kenya produces some of the best coffee in the world. Being the more flavourful *Coffea Arabica* rather than *Coffea Canephora* (Robusta), the “fully washed mild” belongs to the top quality group called “Colombian milds”.¹ This is attributed to the well-distributed rainfall; high altitude (1,500–2,000 metres above sea level) and therefore moderate temperatures (averaging 20° centigrade Celsius), with characteristically high equatorial ultraviolet sunlight diffusing through thick clouds; and deep red volcanic soils.

Coffea originated in the Kaffa region of Ethiopia where it grows naturally. It became an item of trade with Yemen in the fifteenth century and by 1700 the ports of Aden and Mocha were sources of what became Arabica coffee seeds. French missionaries planted some in Bourbon (now Reunion) Island in 1708, and by 1817 about 3,000 tons were being produced annually.

The Bourbon seeds were brought to mainland Tanzania (notably Bagamoyo and Morogoro) in 1863 by the Holy Ghost Fathers of the French Catholic Church who eventually proceeded to plant it at Bura near Taita Hills in Kenya in the early 1890s. At this time, the Protestant Scottish missionaries were experimenting with Mocha seedlings at their various stations in Kenya, including Kibwezi (1893) and Kikuyu.

In 1897, Brother Zolanus Zipper of the Holy Ghost missionaries brought seed from Morogoro to plant at the Nairobi mission (St. Austin’s Muthangari), added 100 seedlings from Bura the following year and got an acre (less than a half hectare) of flowering crop by 1900. This crop represented varieties of Mocha, with a bronze leaf tip, and Bourbon, with a dark green leaf tip. Due to their cultivation over the years under different conditions, the various coffee varieties seem to have hybridized into a special variety of coffee that was christened “French Mission” coffee. By 1904, the Muthangari station had 5,000 mature trees, 15,000 by 1910 and 52,000 by 1914. The station supplied seeds and seedlings to other early coffee growers in the country.

2.2. Coffee varieties and growers

Over time, research, selection and breeding processes – to address issues of coffee berry disease, drought resistance, flavour, leaf rust, mealy bug and other pests and diseases – have led to the development of two popular super strains/varieties developed before independence in 1963; namely Scot Laboratory (SL) 28 which is Mocha-dominated, not particularly high yielding, drought resistant and superior in taste than SL 34 which is a high yielder across a variety of altitudes and climate. These two account for over 90 per cent of Kenya’s coffee. Other varieties are Blue Mountain, introduced in Western Kenya from Jamaica in 1913 due to its resistance to coffee berry disease; Bourbon grown in the Solai area of the Rift Valley; Kent (K) variety K7, and K20 planted in Meru in 1934, with the former being resistant to leaf rust but of poor flavour and the latter which is very susceptible to coffee berry disease; and Ruiru 11 released in 1986. Ruiru 11 is resistant to coffee berry disease and leaf rust, but its robusta genes has resulted in a taste that is inferior to the SL varieties.

¹ See Jeremy Block and Rand Pearson, with Chris Tomlinson: *Kahawa: Kenya’s Black Gold*, Nairobi, C. Dorman Ltd, 2005.

Today, coffee is grown in the highland districts of Kenya: Kiambu, Muranga, Nyeri, Thika, and Kirinyaga in Central Province; Meru North, Meru Central, Meru South, Embu, Machakos and Kitui in Eastern Province; Nakuru, West Pokot, Kajiado, Baringo, Kericho, Nandi, Laikipia, Transnzoia, Uasin-Gishu, Keiyo, Marakwet and Kajiado in Rift Valley Province; Bungoma, Kakamega, and Busia in Western Province; Kisii, Siaya, Kisumu, and South Nyanza in Nyanza Province; and Taita in Coast Province. The high production zone is a triangle formed by Mt. Kenya, the Aberdare Range and Machakos Town – essentially the Central and Eastern Provinces which account for about 70 per cent of Kenya's coffee production (see the coffee map of Kenya in appendix figure 1).

Coffee producing areas contain about 45 per cent of Kenya's population, estimated at 36.4 million.² Since some of these people are as much as 40 per cent income-dependent on coffee, their lives revolve around the fate of coffee. Kenya coffee sector is composed of two categories of farms: the plantation sub-sector comprising of about 3,300 farms of which 300 are greater than 25 hectares; and the cooperative sub-sector of some 523 cooperative unions with about 700,000 smallholders cultivating about 120,000 hectares of coffee, equivalent to about 0.2 hectares apiece. It is estimated that a total of 170,000 hectares³ are under coffee and that 75 per cent of that total is organized around smallholder cooperatives.

² *Economic Survey*, Central Bureau of Statistics, 2006, Nairobi, Kenya.

³ *ibid.*, table 8.3, p. 147. There is a dire need to conduct a ground verification of this statistic on acreage, since its constancy in official statistics since 2000 is suspect. The field offices operated by the Coffee Board of Kenya would facilitate this task.

3. Coffee in agriculture

Land-farming agriculture constitutes some 24 per cent of Kenya's gross domestic product (GDP). This includes growing of crops, horticulture, animal husbandry, and forestry and logging. Trends in these activities reveal that the value of cereals (maize, wheat, barley, rice and others) doubled between 1999 and 2005; horticulture (cut flowers, vegetables, and fruits) almost tripled during the same period; and showed strong upward climb for temporary industrial crops (pyrethrum, sugarcane, cotton and tobacco), permanent crops (coffee, sisal and tea), and livestock products (meat, eggs, wool, dairy products, hides and skins).

But this aggregation masks significant downward trends in pulses, potatoes, tobacco, and coffee (see appendix table 1). Pulses, over the years, have come to be considered as minor crops in Kenya. As a result, little research and development attention have been devoted to such traditional crops as peas, dolichis lab lab, green grams, etc. Potatoes have been left to rot and be potato-blight smitten owing to the decay of decline of the former robust research and extension programme. As for tobacco, the fall in production is simply a response to tobacco control policies arising from the increasing evidence that smoking is dangerous to the primary as well as secondary/involuntary/passive smokers.⁴

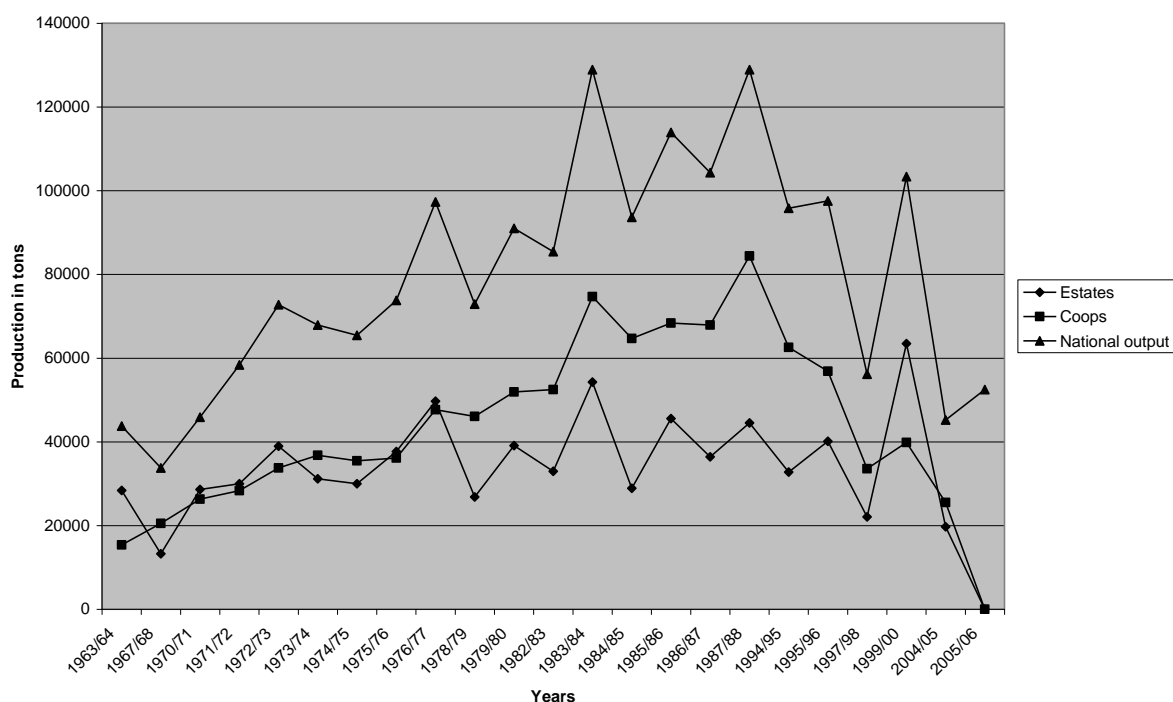
While other crops are not directly the subject of this paper, it is worth noting that coffee has lost to them over time. Coffee's share in the agricultural GDP fell from 14 per cent in 1999 to 6.7 per cent in 2005. This loss in relative value gravity for coffee seems to be due to a decline in production, productivity and price. These issues will later be examined in detail.

⁴ See L. Mureithi: "Tobacco-related issues in Kenya", in *Economic, Social and Health Issues in Tobacco Control*, WHO, Kobe, 2003.

4. Coffee production

Kenya coffee production increased rapidly in ripples in the two decades after independence. As shown in the appendix table 2 and figure 1, total production for both estates and cooperative sub-sectors rose from 43,778 tons in 1963–64 to 128,941 tons in 1983–84. Since then, however, the coffee industry has been on a downward trend except for a brief spell in 1999–2000. As a result, coffee's contribution to incomes, employment creation and foreign exchange earnings has declined.

Figure 1. Coffee production trends, 1963–2006



Source: *Task Force Report on Coffee Marketing*, Ministry of Agriculture August 2003, p. 158; *Economic Survey, 2006*, Government of Kenya; and *The Coffee Quarterly*, Kenya Coffee Traders' Association, No. 2/2006, p. 9.

Table 1 shows the tonnage and value of coffee marketed as well as the average gross output prices to farmers for the period 2000–05.

Table 1. Prices and value of coffee 2000–05

Year	Coffee sold (tons)	Value of sales (thousand KES)	Average gross farm prices (KES/kg)
2000	98 000	1 128 200	11.51
2001	54 600	642 420	11.76
2002	45 500	544 110	11.96
2003	61 200	595 670	9.73
2004	49 900	728 450	14.60
2005*	45 000	680 000	15.11

*Estimate.

N.B.: Amount sold may differ from amount produced in a particular year due to carry-over stocks.

Source: *Economic Survey*, Central Bureau of Statistics, various years.

The following observations are evident on the recent trends in the coffee sector:

- Tonnage of coffee sold has nosedived from 98,000 tons in 2000 to 45,000 in 2005.
- Value of sales plummeted from 1.1 billion to 0.7 billion Kenyan shillings (KES) during the same period.
- Between 1975 and 1986, coffees constituted over 40 per cent of Kenya's total exports; but this value dropped to 9 per cent by 1992 and to 4 per cent in 2004.⁵ Tourism, horticulture and tea have taken over.
- Similarly, prices of coffee declined from KES12 per kg in 2000 to 10 in 2003, but have since bounced back to 22 per kg.

So why has coffee production not picked up as a result of the price increase? First, owing in part to the rather long gestation period between the planting of the coffee seedling to the harvest of cherries, since the first harvest for a newly planted coffee tree usually takes place after two years, and optimal yields are reached two to three years later.⁶ Taking a cue from the latter, most of the older trees, at any rate, may have reached the stage of diminishing returns. Could it be also that the farmers feel discouraged by production costs and marketing constraints which show up at the farm-gate in the net price received and the domestic terms of trade? This would lead to neglect of the coffee bushes and substitution of the crop with other economic activities in some areas. To get to the root of this issue, we need to look at how the value added is shared by the various stakeholders/actors in the Kenya coffee sector.

⁵ *Economic Survey*, op. cit., various issues.

⁶ See B. Daviron and S. Ponte: *The Coffee Paradox. Global Markets, Commodity Trade and the Elusive Promise of Development*, Zed Books, London, 2005, p. 51.

5. Coffee supply value chain

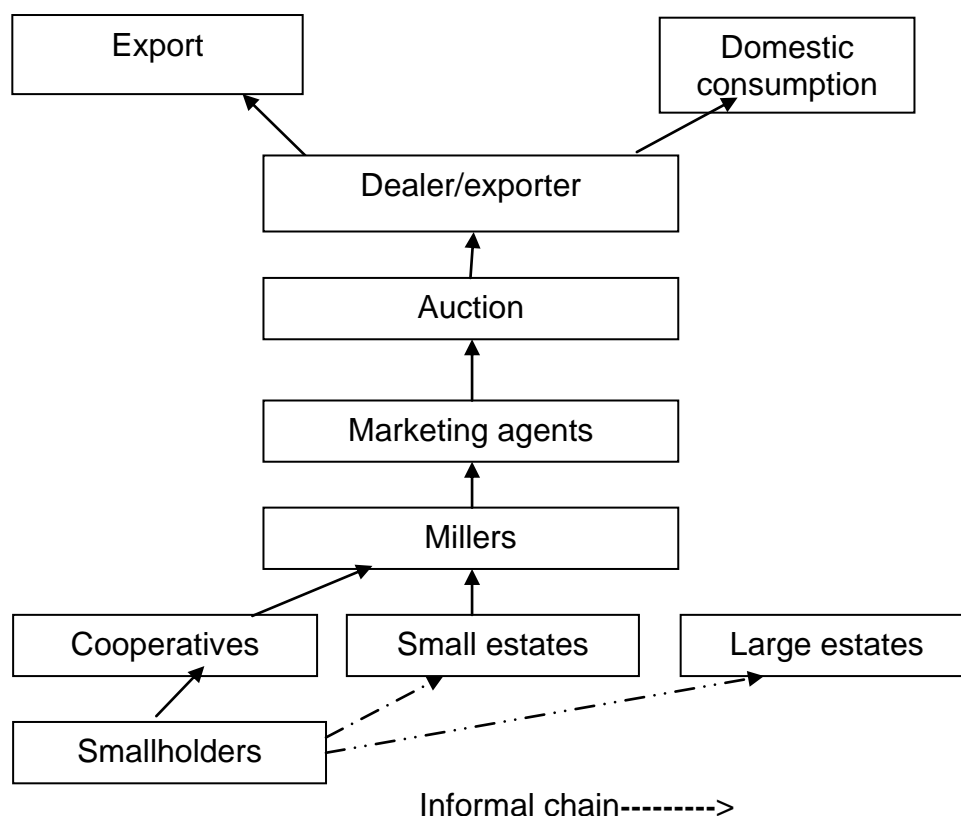
5.1. From seed to sale

The value chain in coffee production involves the following steps:

- nursery operations to produce seedlings;
- farm-level operations (planting, weeding, fertilizing, pruning, spraying, picking/harvesting of red cherry);
- transportation of cherries to the pulper/coffee factory;
- coffee factory primary processing: pulping, fermenting, washing and drying to produce parchment coffee, either at a cooperative facility or in a farm-based pulper;
- curing operations (removing parchment/peeling, cleaning and polishing the beans to produce green coffee beans), by a miller;
- milling plant operations: hulling, cleaning/polishing, sorting, grading, bagging, e.g. by Kenya Planters Cooperative Union (KPCU) and Thika Coffee Mills;
- auctioning at the Nairobi Coffee Exchange (NCE) where dealers, roasters, marketers and exporters buy various grades of green coffee;
- roasting, grinding, blending and packing/packaging by roasters and marketing agents, e.g. C. Dormans and Nairobi Java House. Can be done locally or in the importing country; and
- marketing and selling: locally, regionally, globally – packed or even in bulk – by dealers, roasters, marketers and exporters to supply coffee to consumers.

Figure 2 illustrates this value chain of the transformation of coffee from production to consumption.

Figure 2. The coffee value chain



Source: *Final report on assessment of the value-adding opportunities in the Kenyan coffee industry*, European Commission, April 2004.

5.2. Distribution of value

Total income generated in a coffee value chain is equal to the total expenditure by the consumers of the coffee. The average coffee price per kilogram becomes an indicator of the value of what is to be shared by all the agents involved in the production, processing, distribution and marketing of that unit weight. Table 2 gives the Kenya coffee value chain for 2001–02, the year for which formal calculation has been done. It is indicative of the relative magnitudes of the values.

Table 2. Kenya coffee value chain

	Quantity	Unit	\$/kg clean coffee	FOB price %
FOB			1.73	
Shipping/clearing	1.50	\$/50 kg	0.03	
Transport port	0.40	\$/50 kg	0.01	
Insurance	0.5%		0.01	
Bank charges/interest	1.0%		0.02	
Exporters margin	1.5%		0.03	
Transport to Mombasa seaport	1.00	\$/50 kg	0.02	
Exporter's warehouse	1.50	\$/50 kg	0.03	
Picking/bulking	2.50	\$/50 kg	0.05	
Transport auction to warehouse	1.00	\$/50 kg	0.02	
Auction price			1.55	90

	Quantity	Unit	\$/kg clean coffee	FOB price %
Coffee Board of Kenya cess	1.0%		0.02	
Coffee Research Foundation cess	2.0%		0.03	
County Council cess	1.0%		0.02	
Auction fees	0.2%		0.00	
Marketing agent's commission	72.00	\$/ton	0.07	
Ex-mill price			1.41	82
Milling/quality analysis/handling	70.00	\$/parchment	0.08	
Transport to mill	50.00	KES per bag/ parchment	0.01	
Ex-primary processing price			1.32	76
Primary processing costs	20%	Auction price	0.31	
Available grower price			1.01	58
Grower price (KES/kg/cherry)			12.08	

Source: *Final Report on Assessment of the Value-Adding Opportunities in the Kenyan Coffee Industry*, European Commission, April 2004, table 1.2, p. 43.

It reveals that only 58 per cent of the free-on-board (FOB) export price of coffee reaches the grower and that 42 per cent is taken up by local intermediaries by way of transport, insurance, warehousing and shipping: exporters/dealers (10 per cent), levies/cesses (4 per cent), marketing agents (4 per cent), millers (6 per cent) and primary processing/cooperative/factory (18 per cent). Currently, a government directive requires that payout to farmers be applied at the rate of 80 per cent of the FOB price.⁷ Its implementation has yet to be evaluated.

The many agents⁸ and tax/cess⁹ collectors at every node of the value chain who share the gains all along the chain further depress the grower price. In addition, production costs have to be netted. These costs are indicated in table 3 on the basis of a sustainable output of 400 kg of green coffee per hectare.

⁷ For a statement that the Ministry of Cooperatives is keen to ensure that at least 80 per cent of proceeds from coffee sales go to the farmers, see *Daily Nation* newspaper, 22 Mar. 2007, p. 29.

⁸ In 2004–05, the following were licensed under various categories: five (5) millers, three (3) marketing agents, five (5) auctioneers, forty-eight (48) dealers, eleven (11) roasters, eleven (11) packers and twenty-four (24) warehousemen. By early 2007, there were 32 grower marketing agents and 11 commercial ones.

⁹ Kenya Roads Board earns 0.5 per cent of coffee earnings for its mandate to build and maintain rural access roads.

Table 3. Coffee production costs

Item	KES/hectare	KES/ton
Materials costs		
Fertilizer	2 200	5 500
Manure	500	1 250
Fungicides	1 000	250
Insecticide	3 000	750
Total materials costs	6 700	16 750
Labour costs		
Weeding	4 400	11 000
Pruning	550	1 375
Fertilizer application	440	1 100
Fungicide/insecticide application	660	1 650
Manuring	880	2 200
Harvesting	8 250	20 625
Total labour costs	15 180	37 950
Total costs	21 880	54 700
Per kg/cherry (KES)	7.29	

Source: *Final Report on Assessment of the Value-Adding Opportunities in the Kenyan Coffee Industry*, European Commission, April 2004, table 3.4, p. 63.

Further assumptions are that 100 kg of fertilizers are required, that pesticides are sprayed two or three times during the growing season, and that 107 days of labour are required as input at a wage of KES110 per day. This regime of optimal application of required inputs and proper crop husbandry would yield a gross margin of $\text{KES}(12.08 - 7.29) = \text{KES}5.89$ per kilogram of cherry, or KES2,356 per hectare per annum.

The average small farmer, with 0.2 hectares would earn KES471 in income from coffee per year. With the more realistic yield of 200–250 kg per hectare, the small farmer cannot even approximate this “ideal”. For a 25 hectare estate, the farmer’s annual earnings would amount to KES58,900.

Whether these earnings are sufficient to cover the opportunity cost of the coffee farmer or not; or whether the farmer will be able to obtain the required funds to acquire the inputs needed up front to “invest” in this income-generating venture, are dire issues. With regard to opportunity cost, farmers lament low payments which, to make matters worse, are often delayed for as long as a year or more. It is not surprising, therefore, that many coffee farmers are in debt on loans borrowed from savings and credit cooperatives (SACCOs), the Cooperative Bank of Kenya, and other commercial banks. They total an estimated KES13 billion. Of these loans, 60 per cent are non-performing or unserviceable debts.¹⁰

It is common knowledge that within the cooperative sector, this debt overhang has prompted some farmers to dodge by migrating to “other” financial institutions for purposes of receiving payments for their coffee and leaving the debt in the “old” cooperative

¹⁰ *Kenya Coffee Sector. Poverty and Social Impact Analysis*, Bell Consulting Ltd, 2006, p. 69.

account unserviced, thus incurring penalty on their loans and increasing the financial strain on the credit cooperatives. There is also evidence that some farmers avoid the banks and the cooperative societies altogether and sell their coffee for spot cash to private traders who bulk and sell to private factories. This illegal informal chain is not well established.

Amid all this agony, the irony is that the CBK owes farmers KES641 million outstanding from coffee sales since 2002 and that KES250 million was contributed for the abortive Coffee Bank. The resolution of these debts would go a long way to assist farmers and boost confidence in the sector, as would the proposed Coffee Development Fund (CDF) on condition that it does not impose an undue burden on the farmers. There is clearly a need for debt rescheduling and relief as well as developing and enforcement of a service delivery charter.

Quality service and proper management of cooperative societies are of utmost importance. Since those societies apportion themselves as much as 18 per cent of the value (while this percentage should not normally exceed 10 per cent), they should deliver more value for money. Many cooperatives employ managers who are not well qualified, leading to general mismanagement. The main causes of the problem are:

- *Corrupt practices by management committees.* In most cases, management committee members reward themselves over and above the stipulated requirements they are legally allowed.
- *Poor management skills.* Most officials of the management committee are poorly educated and lack skills for running societies, e.g. understanding financial management statements.
- *Nepotism.* Leaders are selected on the basis of family or clan connections rather than for qualities to ensure achieving a common economic goal. As a result, members in opposition team up according to clan or political groupings, and the upshot is unstable leadership.¹¹

Cost overruns by cooperatives are recovered from members who end up obtaining very low net payout.

Less than 1 per cent of Kenya's coffee is roasted and consumed locally; hence, prices of exports and foreign exchange macroeconomic management affect farmer earnings. The recent appreciation of the Kenya shilling against major foreign currencies¹² is an implicit tax on coffee earnings since it impinges on value addition. This needs to be computed in addition to the general loss in relative purchasing power arising from the deterioration of domestic terms of trade between agriculture and other sectors of the Kenya economy,¹³ meaning that what agriculture purchases as input from the other sectors is relatively high. It is not surprising to note, therefore, that the cost of coffee production in Kenya is higher than in the competing countries. It is estimated that a kilogram of coffee (FOB) costs

¹¹ Hezron O. Nyangito: *Policy and Legal Framework for the Coffee Sub-sector and the Impact of Liberalization in Kenya*, Kenya Institute for Public Policy Research and Analysis (KIPPRA), Discussion Paper, No. 2, Jan. 2001, pp. 31–32.

¹² The value of the United States dollar fell from KES79 to KES 69 in the course of about two years, i.e. exporters lost about KES10 for every dollar earned.

¹³ Eric Ronge; Bernadette Wanjala; James Njeru; Douglas Ojwang'I: *Implicit Taxation of the Agricultural Sector in Kenya*, Kenya Institute for Public Policy Research and Analysis (KIPPRA), Discussion Paper, No. 52, Dec. 2005, p. 32.

US\$1.73 in Kenya compared to US\$1.30 in Colombia and US\$1.38 in Costa Rica.¹⁴ The high costs of production in Kenya are attributed to poor and costly infrastructure, high processing costs, and internal market inefficiencies. As a result, the net price received by many growers is not sufficient to sustain production but only to continue producing through cross-subsidies or by incurring losses. Improving the net return to the growers must, therefore, be a main thrust in coffee industry revival.

¹⁴ European Union: *Value adding opportunities report*, op. cit., p. 4.

6. Decent work issues

There are four pillars¹⁵ that support the objective of decent work, namely:

- fundamental rights and principles at work;
- employment promotion;
- social protection; and
- social dialogue.

This section of the paper examines the application of these basic decent work principles to the Kenya coffee sector.

6.1. Employment trends

In spite of the many challenges faced by the sector as outlined in the foregoing sections, coffee has remained a major employer in Kenya. Between 2001 and 2005, the estate sub-sector accounted for an average of 61,000 employees in any one year,¹⁶ equivalent to 19 per cent of total employment in agriculture and forestry activities and about 4 per cent of total employment in Kenya. In terms of gender, 75 per cent of total employment in this commodity chain are males and 25 per cent females. Casuals and part-timers constitute 21 per cent of the total, of whom 20 per cent are men and 24 per cent women.

To the 61,000 employed in the coffee estate sub-sector should be added the persons working in coffee activities either for pay, profit or family gain in the small coffee farm/cooperative sub-sector either as regular workers or on a seasonal or casual basis. Such activities cover weeding, spraying, harvesting/picking, sorting and transporting coffee to the pulper. Other workers are employed in coffee factories, milling, marketing and allied activities. As for the smallest units among the smallholders, some 700,000 are self-employed coffee growers. When all are accounted for, close to a million people depend on the coffee sector for their living, employed at some stage in the commodity chain.

The following section analyses the status of labour relations and the quality of jobs in the context of farm-level activities but does not deal with the agro-industrial aspects of the coffee chain.

6.2. Social dialogue

Social dialogue includes all types of negotiation, consultation or simply exchange of information between representatives of governments, employers and workers, on issues of common interest relating to economic and social policy. The ILO recognizes that the definition and the concept of social dialogue varies from country to country and over time.

¹⁵ “Decent work in the global economy”, statement by the Director-General of the ILO, Moscow, 16 July 2002.

¹⁶ *Statistical Abstract 2006*, p. 253 and *Economic Survey 2006*, Kenya, p. 69.

It consists of negotiations between an employer, a group of employers or employers' representatives and workers' representatives to determine the issues related to wages and conditions of employment.¹⁷

Box

Respect for freedom of association

First and foremost, social dialogue is built on respect for and implementation of freedom of association.

Freedom of association is a multi-faceted concept, and includes:

- the right of workers and employers to form and join organizations of their own choosing, and to do so without prior authorization;
- the free functioning of those organizations;
- the right to elect representatives in full freedom;
- the right of organizations to organize their internal administration;
- the right of organizations freely to organize their activities and to formulate their programmes;
- the right to strike;
- the right to form federations and confederations and affiliate to international organizations of workers and employers;
- protection against anti-union discrimination; and
- protection against acts of interference.

Where there is an absence of full respect for freedom of association, the social dialogue process will lack legitimacy, and hence cannot be sustainable. If, for example, workers and employers are not able to freely choose their organizations, the organizations involved in the social dialogue process cannot truly be representative; or if there is inadequate protection against anti-union discrimination, frank and transparent consultations or negotiations will not be possible.

Source: *Key features of national social dialogue: A social dialogue resource book*, Junko Ishikawa, ILO, Geneva, 2003.

The Government plays a critical role in enacting appropriate national laws and regulations as well as in enforcing them effectively. It should ensure the protection of independence and fundamental rights of employers and workers and their organizations, and promote social dialogue as an actor or a facilitator.

If quality of life were to be considered an overriding national objective, quality of work would necessarily be a major component, and decent work the tool to achieve that goal. Decent work means “productive work, in conditions of freedom, equity, security and human dignity”.¹⁸ It refers to both adequate opportunities and remuneration for work (in cash or kind), safety in work and healthy working conditions, social security and protection against risks of loss of income.¹⁹

¹⁷ See Junko Ishikawa: *Key features of national social dialogue: A social dialogue resource book*, ILO, Geneva, 2003.

¹⁸ *Decent work*: Report of the Director-General, ILO, Geneva, 1999.

¹⁹ See Dharam Ghai: *Decent work: Concepts, models and indicators*, p. 3, International Institute for Labour Studies, Geneva, July 2002.

6.3. Industrial relations

All Kenyans enjoy constitutional guarantees of freedom of association and the right to form or join labour or employer unions. Kenya has also ratified the Right to Organize and Collective Bargaining Convention, 1949 (No. 98) but not the related Freedom of Association and Protection of the Right to Organize Convention, 1948 (No. 87). Representation in social dialogue for coffee sector workers is channelled through the Kenya Union of Plantation and Agricultural Workers (KPAWU) whose book membership stands at around 40,000. The major employers belong to the Federation of Kenya Employers through the Kenya Coffee Growers' and Employers' Association (KCGEA) whose mandate is "to coordinate the activities ... in negotiations with their trade unions".²⁰ Hence a legal and institutional framework exists for the purposes of collective bargaining.

Other relevant statutes which define conditions of employment and establish minimum standards for working conditions in the country are:

- The Employment Act, Chapter 226 of the Laws of Kenya, 1976, last revised 1984.
- Regulation of Wages and Conditions of Employment Act, Chapter 229 of the Laws of Kenya, 1951, last revised 1989.
- The Trade Disputes Act, Chapter 234 of the Laws of Kenya, 1965, last revised 1991.
- The Industrial Training Act, Chapter 237 of the Laws of Kenya, 1960, last revised 1983.
- The Workmen's Compensation Act, Chapter 236 of the Laws of Kenya, 1949, last revised 1988.
- The Factories and other Places of Work Act, Chapter 514, first enacted 1951, last revised 1972.
- The National Hospital Insurance Act, Chapter 225, 1966, last revised 1977.
- The National Social Security Fund Act, 1965, last revised 1989.

Since May 2001 Kenya's labour laws have been under extensive review. Among the objectives of the review process is to ensure that legislative measures are in place to give effect to ILO core labour standards.²¹

6.4. Terms of service

The most recent collective bargaining agreement (CBA) between KPAWU and KCGEA was signed on 17 December 2004 and contains provisions on pay rates (including rates for overtime and for work on public holidays or rest days); hours of work, leave (including annual leave with transport allowance, compassionate leave, leave for trade union business, maternity leave, and sick leave), acting allowance, housing, and burial expenses. In addition, all have detailed provisions covering probation, the warning system

²⁰ *Annual Report & Financial Statements 2005*, KKE, p. 12.

²¹ Kenya has ratified seven of the eight core international labour Conventions, namely Nos 29, 98, 100, 105, 111, 138 and 182.

with regard to disciplinary action, termination of contract, redundancy, severance pay, and “gratuity” or service pay upon retirement. The negotiated terms and conditions with regard to basic pay rates and the period of sick leave provided exceed the legal minimum requirements. For example, permanent employees are paid KES3,390 per month or KES130.65²² per day which is higher than the KES2,985 set as the minimum wage for a general agricultural worker in the Wage Order.

Table 4. Ratifications by Kenya of fundamental international labour Conventions as of 15 May 2008

Freedom of association and collective bargaining		Freedom of association and collective bargaining		Elimination of discrimination in respect of employment and occupation		Abolition of child labour	
Con. No. 87	Con. No. 98	Con. No. 29	Con. No. 105	Con. No. 100	Con. No. 111	Con. No. 138	Con. No. 182
Not ratified	13.01.1964	13.01.1964	13.01.1964	07.05.2001	07.05.2001	09.04.1979	07.05.2001

A large number of coffee farm workers are seasonal or casual, hired as the need arises to work during the peak weeding and harvesting seasons. Casualization is encouraged by, among other factors, unpredictable weather conditions, unstable market demand for produce, and labour laws which require that certain benefits, such as notice pay, leave allowances, and medical attention, be provided both to seasonal and permanent employees. For casual workers, piece-rate payment is often applied at KES30 per 20-litre tin of coffee picked.

6.5. Conditions of work

Quality of employment is not only determined by pay levels but by a complex array of factors such as working conditions and other benefits that accrue to an employee. While these should be related to the economic position of the enterprise, they should be at least adequate to satisfy the basic needs of the workers and their families.

6.5.1. Hours of work and rest

The standard working week in Kenya is set at 40 hours. However, the CBA under reference provides for 46 hours spread over a six-day work week for all workers except watchmen whose working hours are 70 for a six-day week, after which, for all categories of workers, overtime pay of one-and-a-half times the hourly rate is applied for ordinary days but doubles for public holidays and rest days. There is provision for at least one rest day per week.

6.5.2. Leave

The minimum statutory paid annual leave in Kenya is 21 working days. The CBA provides for between 24 and 28 working days and provides for annual leave transport allowance to cover or defray the travel costs of the employee and the family. The CBA also provides paid pro-rata leave for seasonal workers after two months of continuous employment. Compassionate leave, which employees might use in the event of

²² Memorandum of Agreement between the Kenya Coffee Growers and Employers Association and the Plantation and Agricultural Workers Union, dated 17 December 2004, normally valid for two years, i.e. until December 2006.

bereavement in the family, is included. Compassionate leave is deducted from annual leave entitlement and a pay advance could be provided for any days worked but not paid.

According to Kenyan legislation, agricultural workers are entitled to 30 days of sick leave per year at full pay and 30 days at half pay. In the CBA an employee is entitled, in any period of 12 months, to full pay for the first 50 days of absence from work due to sickness and 52 days with half pay, subject to producing a medical certificate signed by a recognized medical authority, and an additional unpaid 65 days of absence without loss of past service. A woman employee, however, is entitled to two months of paid maternity leave provided that she relinquishes her right to paid annual leave in that year. These provisions are in accordance with Kenyan legislation. The CBA specifies the woman's right to three nursing breaks for a limited period following her return to work.

The collective agreement provides for paid leave for trade union representatives to attend to union affairs, subject to prior arrangement.

6.5.3. Housing

Since the establishment of plantations in Kenya, provision of housing and essential facilities for employees has been considered indispensable. Recruiting and retaining labour on the estates depend to a large degree on the kind of living conditions the estates offer, but in view of the heavy investments required to house workers in this labour-intensive sector, it has been a challenge for plantations to provide adequate accommodation for their employees. The quality of housing varies greatly from one estate to another and living conditions on some plantations are very poor. Trade union representatives cited housing problems as one of the major concerns facing agricultural workers in Kenya.

Section 9 of the Employment Act, Chapter 226 of the Laws of Kenya, provides that "every employer shall at all times, at his own expense, provide reasonable housing accommodation for each of his employees either at or near the place of employment or shall pay to the employee such sufficient sum as rent in addition to wages or salary as will enable such employee to obtain reasonable accommodation; provided that, if by reason of the conditions of employment and wages payable, any person is placed at a disadvantage by the application of this section, the minister may by a notice in the Gazette exclude the application of this section to such person and such person shall instead be dealt with as shall be specified in the notice".

A legal notice was subsequently issued to the effect that where an employer pays a consolidated wage to an employee, i.e. a wage which includes a component of housing allowance, such an employer would not be expected to provide the employee with housing facilities or pay the employee a separate "sufficient sum as rent in addition" to the employee's wages.

Employers are obliged by law to provide housing or a housing allowance to employees. Because most permanent workers reside on their respective plantations, their lives and work are inseparable. Considerations with regard to the workers' health, safety and well-being therefore extend beyond the field and factory to include the home and the services provided for workers and their families.

In most plantation estates in Kenya, the type and size of housing provided to an employee are conditioned by the grade of the employee. In certain cases, housing facilities are provided for the workers themselves but no arrangements are made for their families. In addition, the nature of the housing provided may vary according to the marital status of the worker.

Housing facilities on a number of plantations appeared to be in need of repairs and upgrading to improve the living standards of workers; some houses put up before the independence of Kenya in 1963 should simply be replaced. Workers in some estates are housed in rows of brick built quarters with shared toilet facilities and water points, whereas in others, grass-thatched mud houses are still common.

In some of the estates visited, sanitation was a cause for serious concern among the residents. Workers complained of poor or non-existent sanitation made worse by congestion in the living quarters. In the lower grade housing estates, one pit latrine was shared by several families while drainage systems were non-existent in a majority of the cases. In some instances, employees had to draw water from nearby rivers and streams due to the absence of piped water. Cases of waterborne diseases were cited quite frequently among the employees living in such situations.

Only a small portion of workers are housed. Many have to travel long distances to work, and at the time of the field visits housing allowances of KES650 per month²³ were lower than going local rents. Matters revolving around housing and sanitation remain crucial to their economic success and social development, given the close relationship between housing conditions and workers' health.

6.5.4. Medical benefits

Due to the hazardous nature of agricultural occupations and the often remote location of plantations, access to medical care is a critical employment benefit for plantation workers. Employers have traditionally provided basic medical care on the plantations, in the form of dispensaries or clinics to treat minor illnesses or injury. Referral cases are handled in better equipped government and private hospitals. The employer is responsible for providing transportation to the hospital.

The CBA contains provisions concerning medical treatment for employees. With regard to occupational injuries, the Workmen's Compensation Act applies. The collective agreement covered medical care only for employees. Family members are not entitled to medical treatment under the terms of the agreements, although those residing on the plantations are entitled to transportation to hospital in the event of illness or injury.

6.6. Child labour

Article 1 of the ILO Minimum Age Convention, 1973 (No. 138), ratified by Kenya in 1979, states that ratifying Members shall undertake to "pursue a national policy designed to ensure the effective abolition of child labour and to raise progressively the minimum age for admission to employment or work to a level consistent with the fullest physical and mental development of young persons". At the time of ratification, Kenya declared 16 years to be the minimum age for admission to employment or work. Internationally, however, "children" are defined as persons aged below 18 years of age and "child labourers" are children engaged in occupational activities in lieu of schooling and personal development.

A decade or so ago, a significant portion of casual workers in commercial agriculture were below the legal age for employment. A 1996 case study found that child wage labour was found predominantly on commercial agricultural plantations where children were

²³ CBA, clause 6(b).

estimated to account for 20 to 30 per cent of the casual labour force. During the peak harvest season, for example, up to 30 per cent of the coffee pickers were under 15.²⁴

The factors²⁵ that seem to cause child labour in the districts include:

- instigation by parents (40.2 per cent);
- felt needs of the child to become self-reliant (33 per cent);
- desire to augment household income (21.3 per cent);
- peer pressure (4.9 per cent); and
- others (0.6 per cent).

Most child labourers work to augment their household income as the majority of working children come from low-income groups and poor families. A small portion of child labourers tend to drop out of school because their parents think that education is irrelevant.

However, in recent years, employers have been particularly sensitized to the need for the elimination of child labour. Many coffee growers have policies against child labour, require a national identity card as proof of age at the time of recruitment and they post notices at convenient points to the effect that they do not hire under age youth at all. Trade union representatives confirmed that child labour was not a major problem in large estates²⁶ but that certain types of payment systems were seen to encourage child labour, for example, payment upon completion of a task unit, wherein the task unit was at the limit or beyond the capacity of a single adult worker to achieve within a working day. When payment was based on the weight of produce harvested or the number of linear metres weeded or planted, adult workers might be tempted to use the labour of family members, including children, to augment the family earnings. Employers should “look beyond the contract” to see how the job was being done.

The major factor that has stopped even the “lorrying”²⁷ of children from villages and shopping centres to pick coffee in plantations is the provision of free primary education by the Government since 2003. The provincial administration is also on the lookout for parents who do not send their children to school.

²⁴ *Child labour in commercial agriculture in Africa*, IPEC Technical Workshop on Child Labour in Commercial Agriculture in Africa, Dar es Salaam, United Republic of Tanzania, 27–30 Aug. 1996, ILO, p. 9.

²⁵ *Baseline survey on child labour in commercial agriculture in Kenya*, ILO/IPEC, Final report, 2004.

²⁶ In family-run farms, one sees child engagement more in the form of child work as opposed to the strict definition of child labour. Child work is what all children do as an essential part of growing up; but child labour is the work that damages children either by exposing them to unacceptable physical or moral hazards, or by depriving them of education, or both.

²⁷ This refers to the practice by some contractors of recruiting some casual labourers – most of them children – and ferry them in lorries to and from coffee estates for hire in parts of Ruiru, Thika and Kiambu districts.

6.7. Occupational safety and health

Agriculture is a hazardous occupation carried out in difficult, and sometimes dangerous, working conditions. The main areas of concern in occupational safety and health (OSH) include injuries from machinery and equipment; unsafe handling of and exposure to chemicals for crop protection; and injuries from the crops themselves, especially during harvesting. Other common hazards include long daily and weekly hours of physically strenuous work, the repeated shouldering of heavy loads, falls, insect and snake bites, and adverse weather conditions. The injury rate is high in agriculture as is the risk of illness or death due to exposure to toxic chemicals, biological agents and transmissible animal diseases, to say nothing of the HIV/AIDS pandemic.

Responsible employers ensure that enterprise practices meet the requirements of the law – for example, the employer is required to provide protective clothing for workers. However, to be fully effective, focus should be on instilling a safety culture in the workforce.²⁸ Collective agreements offer the opportunity to raise awareness within the workforce as a whole of the important mutual benefits to be derived from joint efforts to implement safe work practices. This opportunity appears not to have yet been used to its full potential in the plantation sector.

The CBA contains provisions regarding the employer's obligation to provide protective clothing.²⁹ It does not, however, signal an obligation on the part of workers to use the protective equipment provided. It should even go further to state that failure to use the protective equipment supplied would constitute a disciplinary offence and would result in a written warning. Functioning health and safety committees with equal representation of the union and management in accordance with the Factories and Other Places of Work Act should be part of the landscape, providing awareness in occupation hazards and training workers in preventive measures.

The CBA contains provisions regarding compensation for occupational injuries in accordance with the Workmen's Compensation Act. However, the employer shall be responsible for any medical expenses incurred only in a hospital provided by an employer and to which an employee may be referred by a qualified medical doctor approved by the employer. Presumably, if an employer does not provide a health facility (which applies in the majority of cases), one has no medical coverage at the workplace.

Considering the close relationship between occupational safety and health and productivity, and the growing awareness among workers' representatives of the hazards of agricultural work, ensuring safe and healthy work practices through joint efforts would appear to be an area of potential collaboration between employers and trade unions. Much is to be gained in terms of workers' well-being and enterprise productivity. A voluntary code of conduct on good corporate citizenship and guidelines on social responsibility would represent a further step on the way to achieving the objective of decent work.

6.8. Conclusions on decent work

Living conditions in coffee growing areas have deteriorated as the fortunes of the crop have diminished. There are many coffee owners who are unable to pay their workers, least of all decent wages. Some of the tasks, such as picking, weeding, spraying and

²⁸ See *Guidelines on occupational safety and health management systems*, ILO, Geneva, 2001.

²⁹ CBA, section 16.

transportation, expose people to pesticides and other chemical substances, snakes' and spiders' bites as well as ergonomic hardships. Besides, many employers do not provide their workers with appropriate personal protective equipment and education on use/handling of chemicals. Trade unions are also too poorly represented in terms of human resources on the ground to make much impact.

There is a clear need to adopt policies that increase employment opportunities and raise labour standards, taking into account the requirement for security of employment and the long-term development of coffee enterprises. This is even so in situations where employment may be intermittent and livelihoods precarious. The bottom line is that the employers must have the ability to pay. One of the most enduring means to achieve this ability is to adopt upgrading and value addition strategies as discussed in the following section.

7. Upgrading possibilities and value addition strategies

The objective of upgrading in any economic sector is to augment the value of the coffee supply chain by developing a sustainable coffee economy in keeping with the United Nations Millennium Development Goal of poverty eradication within a framework of sustainable development. We proceed to examine, stage by stage, what steps can be taken to achieve this Goal but at the same time improve earnings, especially the payout to the farmer. The value chain analysis carries the advantage that it aims to optimize the use of the resources at each stage. A scan of the coffee industry in Kenya highlights certain key strategic options as outlined.

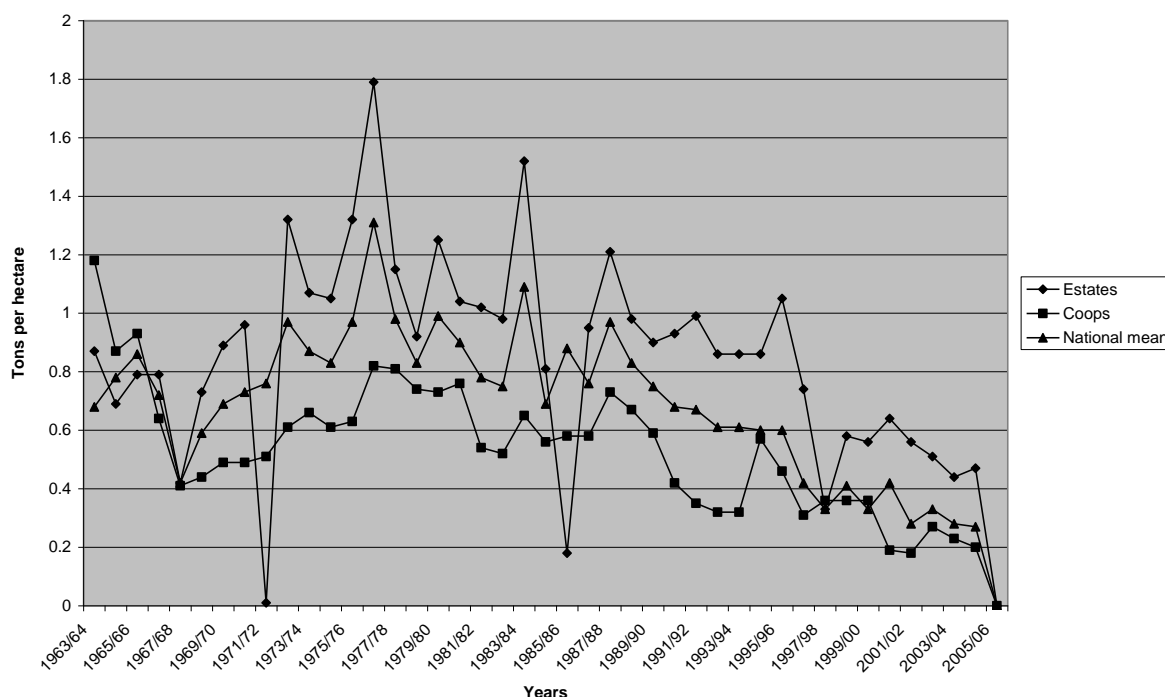
7.1. Coffee seed and seedling quality

Coffee seeds, first and foremost, must be of the best quality available to produce a strong crop. As the saying goes, good beginning makes good ending. The CBK is responsible for inspecting the same to ensure compliance with good seed source (e.g. high yielding healthy trees); seed handling (pulped and fermented beans mixed with wood ash should be shade-dried to 15–18 per cent parchment moisture content). Seeds must be sown in a nursery/seedbed immediately after drying with parchment attached. Seedlings can also be developed from cuttings for vegetative propagation or through grafting. Good seedbed husbandry is a sound foundation for coffee crop output and productivity of land and other resources.

7.2. Farm-level agronomic practices

In the field, proper agronomic practice should be the norm: land preparation; optimal plant spacing; mulching; weeding; pruning; manuring; correct use of fertilizers, chemicals and pesticides; and picking only the perfectly red ripe cherries – avoiding the overripe and under ripe berries that end up as *mbuni* (coffee berry dried in its skin, usually hulled, roasted and ground to produce coffee) or hard arabica. These practices would enhance quality and the downward trend in output per area planted with coffee would be reversed. As annex table 2 and figure 3 illustrate, productivity fell from 0.68 tons per hectare in 1963 to 0.35 tons per hectare in 2006. For large-scale farms, this dropped by about half from 0.87 to 0.47 tons per hectare; and was more dramatic in the cooperative sector which experienced an 80 per cent drop from 1.18 tons to 0.20 tons per hectare. Price and other incentives will payoff in increased productivity.

Figure 3. Coffee land productivity



Source: *Task Force Report on Coffee Marketing*, Ministry of Agriculture, August 2003, p. 158; *Economic Survey*, 2006, Government of Kenya; and *The Coffee Quarterly*, Kenya Coffee Traders' Association, No.2/2006, p. 9.

Farm-level operations would be greatly assisted by the development of coffee varietals that are resistant to pests (such as mealy bugs, leaf miners and thrips), diseases (especially coffee berry disease), bacterial blight and leaf rust. Care should be taken, however, to ensure that the cup quality of which Kenya coffee is known worldwide is not compromised. This would involve producing crosses that might require the use of advanced biotechnology. An example of such a product so far is Ruiru 11 which requires less chemical input than the traditional SL varieties.³⁰ The Coffee Research Foundation (CRF) used more than 1,400 plants, representing 739 genotypes, to produce it; but it took 15 years to produce the result and its taste is inferior. The CRF would be well advised to review its approach to honour the 2 per cent levy which farmers pay as an expression of trust in the institution.

With minimal support and assurance of policy direction, small-scale producers can raise their yields from the current low level of less than 2 kgs per tree to about 3 kgs per tree by 2008 and to 6 kgs after year 2012, increasing national coffee production to about 78,400 tons in 2009 and 229,200 tons by 2020.

7.3. Primary processing

The method of converting cherry to parchment is wet processing at the pulper which uses eleven distinct operations (annex figure 2). Rotating discs remove the outer skin of the coffee beans which are then channelled by sieving into separate fermentation tanks for heavy (heavies) and light (lights) ones. Fermentation removes the slippery sugary mucus

³⁰ *Kahawa: Kenya's Black Gold*, op. cit., p. 46.

covering the beans which are then washed and dried in the sun. This parchment (so-called due to the pale papery skin left on the bean) coffee is stored as conditioned beans ready for milling.

The quality of coffee is favourably affected by:

- a high proportion of heavies;
- immediate processing of cherries after picking, but delay can be compensated by pre-pulping soaking to halt fermenting;
- post-pulping fermentation duration (12–72 hours depending on temperature), the longer the better to remove the “sugars” and allow the bean to acquire a gritty consistency;
- the duration of sun-drying, depending on the weather, to keep moisture content at 13–16 per cent; avoid re-wetting;
- conditioning to drive down moisture to 10–12 per cent;
- proper storage of parchment for not more than three months to reduce post-harvest quality deterioration – a well ventilated store with wooden batten raised 15 cm from the floor and walls.

Hence the quality of pulper management is crucial to quality outcome.

Coffee factories need to address the issue of cost; particularly so in the cooperative sub-sector in view of the fact that factory expenses for cooperatives are nearly double those for estate producers as shown in table 5.

Table 5. Primary processing costs from cherry to parchment coffee

Sector	Unit	Labour	Fuel/power	Maintenance	Packing	Transport	Other	Total
Cooperatives	%	28.80	21.50	12.60	4.50	14.60	18.00	100.00
	Shs/kg	1.34	1.00	0.59	0.21	0.68	0.84	4.67
Estates	%	32.80	30.50	13.50	3.50	9.70	10.00	100.00
	Shs/kg	0.66	0.61	0.27	0.07	0.19	0.20	2.00

Source: *Kenya Coffee Sector, Poverty and Social Impact Analysis*, Bell Consulting Ltd, 2006, p. 23.

There is a need to put in place management systems that are businesslike, use cost-effective methods, and work within a budget. Any management committee that does not meet this criteria should be surcharged by the Ministry of Cooperative Development.

To overcome capacity constraints, factories need to be modernized, for example by provision of adequate water supply, electricity, and building required structures so as not to compromise quality at the factory stage. Society officials should be literate and receive training regularly on leadership and management skills to improve efficiency.

7.4. Milling operations ³¹

Currently three commercial millers operate in Kenya – Kenya Planters Union (KPCU), Socfinaf, and Thika Coffee Mills – in addition to a few private millers who hull/peel off the shell/parchment by machinery to produce clean green coffee. The three have a combined capacity of 300,000 tons, utilized at under 20 per cent capacity. Millers are appointed and contracted by farmers to classify the coffee by bean size, to mill and grade it according to cup quality, and dispatch it to the marketer in readiness for auction to roasters and blenders. Millers set their own fees which for all three main millers hover around US\$70 per ton of parchment. The cost can, however, be considerably higher than indicated depending on other services that may be provided such as drying, colour sorting, etc. Kenya's milling charges are substantially higher than in comparable countries.

Farmers' organizations should use their evident bargaining power to obtain lower prices and better services from millers. Since they have excess capacity, it is in the interest of an individual miller to process some coffee and meet at least part of the fixed cost rather than stay idle. At the very least, growers should insist on transparency in milling operations on the part of all millers, e.g. declaration of sweepings for credit of the growers.

Even small gestures like these on the part of intermediate institutions can go a long way in eliciting greater effort from coffee farmers. Currently, less than 20 per cent of Kenya's coffee reaches class 1-3. Most of Kenya's coffee (65 per cent) is classified at 4-6. To sustain buyer interest, Kenya farmers must improve cup quality, which in turn will also assure them of premium prices. Quality improvement from class 4-6 to 1-3 can improve gross grower prices per kilogram of cherry, equivalent to an increase from KES19.33 to KES24.17, or 25 per cent, even when the market is depressed.

7.5. The marketing system

Under the Coffee Act 2001, growers are required to appoint a marketing agent with whom they sign a contract for a minimum period of one year to market their coffee. These marketers are licensed by the CBK. The marketing function entails four main tasks:

- receiving the milled coffee from millers and preparing a catalogue for the auction;
- ensuring proper warehousing of the coffee to be auctioned at the NCE;
- providing samples of the coffee to be sold to dealers; and
- collecting payment from buyers and remitting proceeds to growers/cooperative societies.

The current functions of marketing agents are, therefore, essentially logistics management rather than optimizing the grower's earnings. Since marketing agents receive a captive fee of US\$50 per ton, they have no incentive to promote the price received by the grower. This is an area that needs to be improved by relating the marketing fee to the actual prices realized at the auction. In this way, marketing agents will have an interest in promoting coffee prices for the growers. The growers, too, should insist that they be paid within two weeks of a sale by a marketing agent.

³¹ The next section of this paper relies heavily on a Kenya Government consultancy report by Bell Consulting Ltd: *Kenya Coffee Sector, Poverty and Social Impact Analysis*, 2006.

The second window, the direct sales window introduced by the 2006 Coffee Rules as an alternative marketing channel, allows estate growers, cooperative societies and cooperative unions to become marketing agents of their coffee. It is advantageous to the farmers because they would be able to see and know how much their coffee costs to the final buyer, giving prices transparency. The direct sales window will expand the coffee market since it opens up opportunities for local roasters and therefore makes it possible to expand local consumption and add value. At the producers' level, some misunderstanding has crept in with regard to the extent of liberalization. Many small-scale farmers had been misinformed that direct sales meant farm-gate sales. They were opposed to farm-gate sales due to a likely increase in theft of coffee at the farm and emergence of social problems. Most farmers, however, welcomed liberalization at clean coffee stage since they expected that such a step would:

- reduce the time-lag between processing cherry and payment for their parchment;
- improve their cash flow and hence reduce credit requirements;
- enable them to enter into supply contracts with buyers and hence protect them from extreme fluctuations in prices;
- break the information asymmetry which, in the auction system, operates in favour of dealers/exporters;
- lead to more transparency, unlike the auction system which was exclusive and not sufficiently transparent;
- remove manipulative practices by millers and related marketers with regard to determining the quality of their coffee;
- improve prices for their coffee as dealers at auction compete with buyers on the direct sales window; and
- net earnings to farmers would improve as some of the payments to middlemen would cease, e.g. those previously to marketing agents, auctioneers and the NCE.

CBK, however, should exercise care in licensing new applicants for the coffee marketing agency to ensure they all meet acceptable standards, including elements of: (a) expertise required; (b) integrity; (c) disclosure of resource base; (d) raising a substantial security bond; and (e) personnel available for performance of the job, withdrawing licenses of erring agents as appropriate.

There is a need to build marketing capacity in the cooperative sub-sector; but even if they do not eventually participate in direct sale, auction prices will rise due to the cross influence of direct sales on the auction prices, resulting in overall gain.

Roasting and grinding coffee should be liberalized for grass-roots consumption and marketing if Kenya is to gain ground in the local consumption of coffee, thus expanding coffee's outlet and domestic value added. This practice is widespread in Ethiopia which consumes half of the coffee it grows. Sales promotion on a sector like coffee is a worthwhile effort that could well stimulate the setting up of small pulperies as has been the case in Colombia and Brazil, creating more employment.

7.6. Establishment of a coffee exchange

Alternative marketing channels are needed to take advantage of all global market segments and to improve overall liquidity in the industry. Kenya should therefore move towards establishing a coffee exchange with a central depository and settlement system as a first step towards development of a fully fledged commodity exchange. This commodity exchange can borrow an operational model from the already successful Nairobi Stock Exchange (NSE). Establishment of a coffee exchange would provide farmers and the nation with several benefits which include, among others:

- opening up the coffee market to all interested buyers and sellers globally which provides the best mechanism for price discovery;
- improving liquidity of the coffee industry as farmers would receive payments for their coffee promptly from brokers; and
- enabling the development of a futures market – a major problem in the coffee industry today is price instability and lack of a mechanism to insure farmers against such developments. With a futures market, farmers would produce their coffee with an assured price.

The exchange, if well managed, could become a regional commodity exchange and thereby bring substantial financial resources to Kenya.

7.7. Value addition opportunities

Only about 6–7 per cent of the retail price of the coffee cup accrues to the growers. The rest is absorbed by intermediaries in the value chain. The challenge Kenya faces is how to increase the share of the cup value internally and externally in favour of the growers. Value addition therefore needs to be considered at all the stages of the supply chain. So far in this paper, supply value chain has been analysed in an input–output version, a kind of quality production journey from farm to cup; but value addition simply means delivering to consumers the product they want, in the form they want it, or even better, where they want it and when they want it. Value may be added to a product or service through branding, certification, total quality management (TQM), attractive packaging, niche positioning and other creative marketing practices.

The CBK has a role in the development of a new coffee classification system to suit the new marketing outlets. It should also, with the Coffee Research Foundation and liquorers, map Kenya into appellation zones for specialty, single origin and branded coffees.

Examples of value addition initiatives are provided by the Kenya Planters' Cooperative Union (KPCU) and Sasini Tea and Coffee Company (Sasini). KPCU has experimented with some single origin brands of green coffee with positive responses from roasters in Tokyo, Japan, and Seattle, United States. Their Kahawa Yetu (Our Coffee) blend is receiving good responses locally, regionally and abroad.³² Sasini value addition (blending, roasting, milling, packaging and branding) to coffee has paid off;

³² See S.K. Odhiambo: "Value Addition in the Coffee Sub-Sector," in *Farmer's Guide*, Oct./Nov. 2006, p. 15.

e.g. AA *Tajiri*³³ coffee, Aberdare, Gulmarg, and other brands are selling at prices at least 10 per cent more than the bulk sales of yesteryears.³⁴ By milling its own coffee, Sasini is saving \$80 a ton which it formerly paid to Socfinaf for milling its coffee. Its board announced a five-to-one share split which saw its share price at the NSE shoot to a high of KES190 before easing to KES142 as of 21 December 2006. Sasini has gone even further by winning the certification of Utz Kapeh Foundation of Holland that it is a responsible coffee producer.

Apart from Utz Kapeh, other certification programmes can be sought by enterprising individual farms, cooperatives, roasters, and marketers for Organic product, Shade-grown coffee, and Fair Trade labelling, etc. These focus on environmental and socio-economic preoccupations on the description of coffee. In 2004, world coffee industry stakeholders came up with a code of conduct for the sustainability of the coffee market. Dubbed the Common Code for the Coffee Community (4C), it is based on three dimensions:³⁵

- (1) *Social*. Calls for decent working and living conditions for farmers and their families as well as employees.
- (2) *Environmental*. Aims at protecting primary forests and conserving natural resources in production and post-harvest operations.
- (3) *Economic*. Is the product economically viable, providing reasonable earnings for all in the coffee chain, free access to markets and sustainable livelihoods?

To supplement such initiatives, preferred supplier status and niche creation can be achieved by an ideal mix of:

- physical transformation of material attributes – these are embedded in the product, are intrinsic, objective and measurable attributes;
- symbolic quality by way of trademarks, indication of geographical origin (IGO) and labelling, in many cases resulting in a customized product;
- in-person service quality attributes, largely creating non-material value perceptions such as ambiance and social positioning which are transitory nature. This is coffee decommodification due to the immateriality of consumption. It may arise from the hedonistic aspect of consumption.

This “approaches to quality”³⁶ product management requires skills on the part of strategic problem solvers and problem identifiers. Capacity in these areas need to be created to move value addition to a higher level in Kenya.

³³ *Tajiri* is a Kiswahili word meaning a rich person, thus appealing to many people’s aspiration. See Thorstein Veblen: *Theory of the Leisure Class*, 1899.

³⁴ *Daily Nation* newspaper, Smart Company section, 13 Mar. 2007, p. 4.

³⁵ See Daviron and Ponte, *The Coffee Paradox*, op. cit., p. 196.

³⁶ *ibid.*, pp. 30–45.

8. Conclusions and recommendations

This paper set out to shed some light on how the Kenya coffee sector has fared over the years to find out how to improve the economic performance of the sector and at the same time safeguard the creation of decent work in the sector.

It has been established that the coffee sector is an important economic activity in Kenya in terms of income generation, employment creation and foreign exchange earnings. Over the years, the impact of coffee has been felt in all spheres of life; examples are backward linkages with farm input suppliers, forward linkages with the transport sector, savings and investment intermediation, consumption of goods, and whether or not workers earn sufficient revenue to pay for education, health and other services. Even in the sphere of politics, the interests and performance of the coffee sector may well determine the outcome of elections of various coffee factory committees or sponsorship of candidates for local government councils or even Parliament.

The most visible recent trends in the coffee sector have been the following:

- tonnage of coffee sold has nosedived from 98,000 tons in 2000 to 45,000 in 2005;
- value of sales plummeted from KES1.1 billion to 0.7 billion during the same period;
- between 1975 and 1986, coffees constituted over 40 per cent of Kenya's total exports; but this value dropped to 9 per cent by 1992 and even 4 per cent in 2004,³⁷ ceding place to tourism, horticulture and tea; and
- similarly, prices of coffee started declining from KES12 per kilogram in 2000 to KES10 in 2003, but bounced back to KES22 per kilogram by April 2007.

Many agents collect fees and commissions, and several institutions collect taxes/cess at every node of the coffee value chain, resulting in depressed grower prices. In addition, coffee farmers owe an estimate of KES13 billion – 60 per cent of which is non-performing/unserviceable – on loans borrowed from savings and credit cooperatives (SACCOs), the Cooperative Bank of Kenya, and other commercial banks. The farmers in turn are owed KES641 million by the CBK, outstanding from coffee sales since 2002, in addition to KES250 million which they contributed to the abortive Coffee Bank.

Many cooperative societies are not well managed: cost overruns by cooperatives are recovered from members who end up receiving very low net payout.

As a result of the constraints enumerated so far, attaining decent work standards in the sector poses a major challenge. However, the infrastructure for decent work is in place and delivering where possible. Representation and voice in social dialogue for coffee sector workers are channelled via the Kenya Union of Plantation and Agricultural Workers (KPAW) whose book membership stands at around 40,000. The major employers belong to the Federation of Kenya Employers through the Kenya Coffee Growers and Employers Association (KCGEA) which coordinates the activities in negotiations with the trade union.

A large number of coffee farm workers are seasonal or casual, hired as the need arises to work during the peak weeding and harvesting seasons. As seen earlier, housing and

³⁷ *Economic Survey*, op. cit., various issues.

medical facilities are inadequate. Overt child labour, though, is almost non-existent due to the free primary education provided by the Government. However, occupational safety and health standards are low since adequate preventive measures are not in place.

The bottom line is that the coffee growers must have the ability to pay. Payout to them must be high enough to make coffee production worth it and encourage proper farming management methods. One of the most enduring means to achieve this ability is to adopt upgrading and value addition strategies. To achieve this, it is recommended that:

- Coffee seeds and seedlings must be of the best appropriate cultivar quality there is so as to start with a strong crop.
- Farm-level agronomic practices and methods need to be improved. There is a dire need to rehabilitate neglected coffee bushes and replant areas uprooted over the years.
- Quality of pulper management must be addressed.
- Farmers organizations should use their evident bargaining power to get lower prices and better services from millers. At the very least, growers should insist on transparency in milling operations by all the millers, e. g. declaration of sweepings for credit of the growers.
- Marketing fees should be related to the actual price realized, not fixed. In this way, marketing agents will have an interest in promoting coffee prices for the growers. The growers also should insist that they be paid within two weeks of a sale by a marketing agent.
- The second window, the direct sales window introduced by the 2006 Coffee Rules as an alternative marketing channel, is advantageous to the farmers because they would be able to see and know how much their coffee is worth to the final buyer – thus giving prices transparency. The direct sales window will expand the coffee market since it opens opportunity for local roasters and therefore makes it possible to expand local consumption and value addition. Even growers do not get to participate in direct sale, auction prices will rise due to the cross influence of direct sales on the auction prices, resulting in overall gain.
- A coffee exchange should be established as an alternative marketing channel to take advantage of all market segments and to improve overall liquidity in the industry. With a central depository and settlement system, the exchange would be a first step towards development of a fully fledged commodity exchange. This commodity exchange can borrow operation model from the already successful NSE.
- The problem of debt overhang to coffee farmers must be resolved to give them a fresh start. Selective write-offs should be part of the tools to address the issue.
- Credit should be availed through a coffee credit window in participating financial institutions and by operationalizing the proposed Coffee Development Fund.
- Grass-roots trade in cherries, *mbuni* (coffee berry dried in its skin, usually hulled, roasted and ground to produce coffee) and roasted coffee should be legalized in order to formalize the illegal chain, increase liquidity to smallholders and encourage the growth of micro pulpers and hullers.

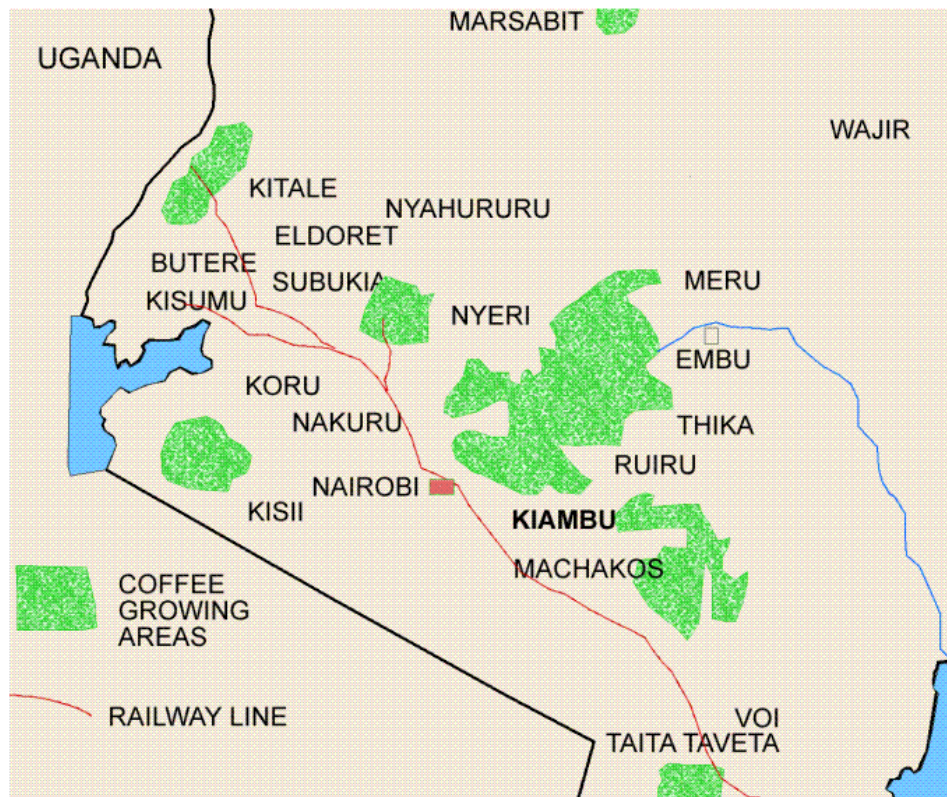
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- Given the importance of rapid transit of coffee, the Roads Board and local government authorities should open rural access roads all-weather by murraming,³⁸ building bridges and culverting. After all, they earn 0.5 per cent and 2 per cent, respectively, from coffee revenue, presumably for maintaining road access. Consideration should be given to transferring these funds to the Coffee Development Fund to implement a specific project which would benefit the sector.
 - Quality and productivity improvement must be addressed at all levels, including research. In this spirit, cooperatives must be managed as commercial businesses, with sanctions applied to failed management boards who do not practice proper corporate governance. Some pulperies could also be transformed into share-capital-based companies.
 - Kenya should go full throttle for value addition through branding, certification, total quality management, attractive packaging, niche positioning and other creative marketing strategies, taking into consideration that the paradox of the coffee global market is the oversupply of low-quality coffee and shortage of high-quality coffee.
 - There is a need to demarcate clearly the roles of the different players in the market so as to create firewalls which preclude conflict of interest; e.g. a coffee marketing agent should not be licenced to be a buyer or be related to a buyer; otherwise the agent could sell to itself as a buyer at depressed prices. Such measures would minimize self-dealing.
 - In tandem with the reforms and improvements indicated above, the social partners, with the active support of the Government, should strengthen social dialogue and support collective bargaining to make decent work a permanent reality in the Kenya coffee sector scene. The importance of an integrated approach to economic and social upgrading should be kept in sight since social protection underpins productivity and innovation.

These recommendations may be a tall order and their implementation may be resisted for all sorts of reasons, not least of which is that they fly against vested interests in the coffee industry by established millers, agents, roasters and marketers. But, surely, a system that puts farmers at the bottom of the pile and makes them bear most if not all the risks in the value chain, would be killing the goose that lays the proverbial golden egg. Tables must be turned to put the last first. The farmer must be empowered to gain from his or her own produce, coffee, by instituting enabling governance arrangements.

³⁸ In ferruginous tropical soils and ferralites, much iron released in weathering is often redeposited in the form of gravelly concretions locally termed “murram”.

Appendices

Annex figure 1. Coffee map of Kenya



Source: Coffee Board of Kenya.

Annex table 1. Agriculture and livestock gross production, 1999–2005 (thousand KES)

Year	1999	2000	2001	2002	2003	2004	2005
Cereals							
Maize	3 098.00	2 915.40	6 141.60	4 451.35	3 336.51	6 880.54	6 342.40
Wheat	1 006.00	1 132.90	1 429.40	987.52	1 375.30	1 864.00	2 232.32
Barley	747.40	1 091.01	806.50	688.99	569.84	495.79	1 132.50
Rice	511.80	427.18	303.30	221.84	319.83	685.32	1 089.40
Other cereals	52.00	50.16	79.72	48.58	74.83	87.42	110.80
Total cereals	5 415.20	5 617.11	8 760.52	6 398.28	5 676.31	10 013.07	10 907.40
Horticulture							
Cut flowers		7 327.00	10 627.00	14 791.00	16 496.00	18 720.00	22 896.80
Vegetables		5 474.00	8 035.00	10 470.00	10 591.00	12 068.00	13 891.40
Fruits		1 089.00	1 560.00	1 461.00	1 753.00	1 083.00	2 049.90
Total horticulture		13 890.00	20 222.00	26 722.00	28 840.00	32 591.00	38 838.10
Temporary industrial crops (TICs)							
Pyrethrum	405.80	729.30	769.10	1 271.54	781.90	305.70	158.10
Sugarcane	7 639.40	7 942.20	7 154.85	9 070.25	7 567.30	8 389.80	9 169.60
Cotton	13.60	9.70	9.63	19.30	35.36	48.05	52.00
Tobacco	833.60	724.50	806.19	491.84	677.16	596.54	807.00
Total TICs	8 892.40	9 405.70	8 739.77	10 852.93	9 061.72	9 340.09	10 186.70
Other temporary crops (TCs)							
Pulses	85.60	26.04	32.20	27.73	29.39	28.00	39.72
Potatoes	218.40	110.89	112.50	44.29	48.41	68.15	184.58
Other TCs	218.60	109.21	123.40	92.94	85.74	86.74	86.74
Total TCs	522.60	246.14	268.10	164.96	163.54	182.89	311.04
Permanent crops (PCs)							
Coffee	10 050.40	11 282.00	6 424.19	5 441.09	5 956.71	7 284.50	8 999.10
Sisal	874.80	809.80	956.94	938.15	1 060.73	1 275.40	1 289.20
Tea	31 087.60	35 969.80	38 564.54	33 414.69	34 631.13	41 212.20	38 829.90
Total PCs	42 012.80	48 061.60	45 945.67	39 793.93	41 648.57	49 772.10	49 118.20
Total crops	56 843.00	77 220.55	83 936.06	83 932.10	85 390.14	101 889.15	109 361.44
Livestock and related products							
Cattle and calves for slaughter	8 873.76	8 039.84	9 078.64	11 823.84	11 476.08	11 282.81	13 063.49
Sheep, goats and lambs for slaughter	1 090.22	1 395.04	1 457.35	2 469.42	2 396.79	2 151.65	2 507.86
Pigs for slaughter	434.27	340.30	317.45	299.90	388.70	451.99	459.12
Poultry and eggs	1 431.42	1 539.97	2 074.58	1 624.47	1 690.45	1 705.70	1 901.47
Wool	0.42	10.36	11.73	19.87	19.94	22.20	21.17
Hides and skins	506.52	533.87	608.40	632.98	614.36	765.40	992.57
Dairy products	2 693.67	2 051.23	1 919.63	2 469.22	2 846.14	4 384.96	5 313.24
Total livestock	15 030.28	13 910.61	15 467.78	19 339.78	19 432.46	20 766.70	24 258.92
Grand total	71 873.28	91 131.17	99 403.84	103 271.88	104 822.60	122 665.85	133 620.36

Source: *Statistical Abstract 2006*, table 60(a), p. 115.**Annex table 2. Coffee production and land productivity, 1963–2006**

Year	Production in tons			Tons per hectare		
	Estates	Coops	National output	Estates	Coops	National mean
1963-64	28 405	15 373	43 778	0.87	1.18	0.68
1964-65	22 393	14 774	37 167	0.69	0.87	0.78
1965-66	25 683	25 523	51 206	0.79	0.93	0.86
1966-67	25 231	27 558	52 789	0.79	0.64	0.72
1967-68	13 246	20 515	33 761	0.42	0.41	0.42
1968-69	22 342	23 264	45 606	0.73	0.44	0.59
1969-70	26 521	26 275	52 796	0.89	0.49	0.69
1970-71	28 600	26 302	45 902	0.96	0.49	0.73
1971-72	29 984	28 362	58 364	0.01	0.51	0.76
1972-73	38 956	33 783	72 739	1.32	0.61	0.97
1973-74	31 152	36 767	67 919	1.07	0.66	0.87
1974-75	29 985	35 464	65 449	1.05	0.61	0.83
1975-76	37 675	36 135	73 810	1.32	0.63	0.97
1976-77	49 685	47 660	97 345	1.79	0.82	1.31
1977-78	33 685	47 774	81 429	1.15	0.81	0.98
1978-79	26 809	46 079	72 888	0.92	0.74	0.83
1979-80	39 109	51 900	91 009	1.25	0.73	0.99
1980-81	34 044	64 007	98 751	1.04	0.76	0.90
1981-82	34 392	52 531	86 923	1.02	0.54	0.78
1982-83	32 981	52 469	85 450	0.98	0.52	0.75
1983-84	54 258	74 683	128 941	1.52	0.65	1.09
1984-85	28 922	64 717	93 639	0.81	0.56	0.69
1985-86	45 542	68 384	113 926	0.18	0.58	0.88
1986-87	36 381	67 907	104 288	0.95	0.58	0.76
1987-88	44 506	84 420	128 926	1.21	0.73	0.97
1988-89	38 632	78 337	116 969	0.98	0.67	0.83
1989-90	34 356	69 483	103 839	0.90	0.59	0.75
1990-91	35 160	51 411	86 571	0.93	0.42	0.68
1991-92	37 520	41 977	89 497	0.99	0.35	0.67
1992-93	32 781	42 426	75 207	0.86	0.32	0.61
1993-94	33 037	39 747	73 516	0.86	0.32	0.61
1994-95	32 795	62 567	95 806	0.86	0.57	0.60
1995-96	40 109	56 881	97 576	1.05	0.46	0.60
1996-97	29 737	38 261	68 678	0.74	0.31	0.42
1997-98	22 050	33 584	56 159	0.33	0.36	0.33
1998-99	28 555	39 850	68 406	0.58	0.36	0.41
1999-00	63 489	39 850	103 340	0.56	0.36	0.33
2000-01	26 798	24 619	51 417	0.64	0.19	0.42
2001-02	25 400	22 600	48 000	0.56	0.18	0.28
2002-03	21 400	34 000	55 400	0.51	0.27	0.33

Year	Production in tons			Tons per hectare		
	Estates	Coops	National output	Estates	Coops	National mean
2003–04	18 500	30 000	48 400	0.44	0.23	0.28
2004–05	19 700	25 500	45 200	0.47	0.20	0.27
2005–06	n.a.	n a.	52 462	n.a.	n.a.	0.35

n.a. signifies not available.

Sources: *Task Force Report on Coffee Marketing*, Ministry of Agriculture August 2003, p. 158; *Economic Survey, 2006*, Government of Kenya; and *The Coffee Quarterly*, Kenya Coffee Traders' Association, No. 2/2006, p. 9.

Annex figure 2. Coffee wet processing

Sectoral working papers ¹

	<i>Year</i>	<i>Reference</i>
The Warp and the Web Organized production and unorganized producers in the informal food-processing industry: Case studies of bakeries, savouries' establishments and fish processing in the city of Mumbai (Bombay) (Ritu Dewan)	2000	WP.156
Employment and poverty in Sri Lanka: Long-term perspectives (Vali Jamal)	2000	WP.157
Recruitment of educational personnel (Wouter Brandt and Rita Rymenans)	2000	WP.158
L'industrie du textile-habillement au Maroc: Les besoins des chefs d'entreprise et les conditions de travail des femmes dans les PME (Riad Meddeb)	2000	WP.159
L'évolution de la condition des personnels enseignants de l'enseignement supérieur (Thierry Chevaillier)	2000	WP.160
The changing conditions of higher education teaching personnel (Thierry Chevaillier)	2000	WP.161
Working time arrangements in the Australian mining industry: Trends and implications with particular reference to occupational health and safety (Kathryn Heiler, Richard Pickersgill, Chris Briggs)	2000	WP.162
Public participation in forestry in Europe and North America: Report of the Team of Specialists on Participation in Forestry	2000	WP.163
Decentralization and privatization in municipal services: The case of health services (Stephen Bach)	2000	WP.164
Social dialogue in postal services in Asia and the Pacific: Final report of the ILO-UPU Joint Regional Seminar, Bangkok, 23–26 May 2000 (edited by John Myers)	2000	WP.165
Democratic regulation: A guide to the control of privatized public services through social dialogue (G. Palast, J. Oppenheim, T. McGregor)	2000	WP.166
Worker safety in the shipbreaking industries: An issues paper (Sectoral Activities Department and InFocus Programme on Safety and Health at Work and the Environment)	2001	WP.167
Safety and health in small-scale surface mines – A handbook (Manfred Walle and Norman Jennings)	2001	WP.168

¹ Working Papers Nos 1–155 are not included on this list for reasons of space, but may be requested from the Sectoral Activities Branch (SECTOR), Social Dialogue, Labour Law, Labour Administration and Social Activities Department, Social Dialogue Sector, International Labour Office (ILO).

	<i>Year</i>	<i>Reference</i>
Le rôle des initiatives volontaires concertées dans la promotion et la dynamique du dialogue social dans les industries textiles, habillement, chaussures (Stéphanie Faure)	2001	WP.169
The role of joint voluntary initiatives in the promotion and momentum of social dialogue in the textile, clothing and footwear industries (Stéphanie Faure)	2001	WP.170
La situation sociale des artistes-interprètes de la musique en Asie, en Afrique et en Amérique latine (Jean Vincent)	2001	WP.171
The social situation of musical performers in Asia, Africa and Latin America (Jean Vincent)	2001	WP.172
Guide sur la sécurité et hygiène dans les petites mines à ciel ouvert (Manfred Walle and Norman Jennings)	2001	WP.173
Seguridad y salud en minas de superficie de pequeña escala: Manual (Manfred Walle and Norman Jennings)	2001	WP.174
Privatization of municipal services: Potential, limitations and challenges for the social partners (Brendan Martin)	2001	WP.175
Decentralization and privatization of municipal services: The perspective of consumers and their organizations (Robin Simpson)	2001	WP.176
Social and labour consequences of the decentralization and privatization of municipal services: The cases of Australia and New Zealand (Michael Paddon)	2001	WP.177
1st European Forest Entrepreneurs' Day, 16 September, 2000 (European Network of Forest Entrepreneurs ENFE)	2001	WP.178
The world tobacco industry: trends and prospects (Gijsbert van Liemt)	2002	WP.179
The construction industry in China: Its image, employment prospects and skill requirements (Lu You-Jie and Paul W. Fox)	2001	WP.180
The impact of 11 September on the aviation industry (Peter Spence Morrell and Fariba Alamdari)	2002	WP.181
The impact of 11 September on the civil aviation industry: Social and labour effects (Prof. Peter Turnbull and Geraint Harvey)	2002	WP.182
Employment trends in the tobacco sector in the United States: A study of five states (Maureen Kennedy)	2002	WP.183
Tobacco: An economic lifeline? The case of tobacco farming in the Kasungu Agricultural Development Division, Malawi (Michael Mwasikakata)	2002	WP.184
A study of the tobacco sector in selected provinces of Cambodia and China (Yongqing He, Yuko Maeda, Yunling Zhang)	2002	WP.185

	<i>Year</i>	<i>Reference</i>
Child performers working in the entertainment industry: An analysis of the problems faced (Katherine Sand)	2003	WP.186
Informal labour in the construction industry in Nepal (Kishore K. Jha)	2002	WP.187
The construction labour force in South Africa: A study of informal labour in the Western Cape (Jane English and Georg Mbuthia)	2002	WP.188
Social dialogue in health services – Case studies in Brazil, Canada, Chile, United Kingdom (Jane Lethbridge)	2002	WP.189
Teachers and new ICT in teaching and learning modes of introduction and implementation impact implications for teachers (Chris Duke)	2002	WP.190
Best practice in social dialogue in public service reform: A case study of the Norwegian Agency for Development Co-operation (NORAD) (Torunn Olsen)	2002	WP.191
Best practice in social dialogue in public service emergency services in South Africa (Bobby Mgijima)	2003	WP.192
Case studies in social dialogue in the public emergency services – Argentina (Laura El Halli Obeid and Liliana Beatriz Weisenberg)	2003	WP.193
Employment trends in the tobacco sector: Selected provinces of Bulgaria and Turkey (Roska Ivanovna Petkova and Nurettin Yildirak)	2003	WP.194
How to prevent accidents on small construction sites (Illustrated by Rita Walle)	2003	WP.195
Sectoral trends: A survey (Katherine A. Hagen)	2003	WP.196
The impact of the restructuring of civil aviation on employment and social practices (Bert Essenberg)	2003	WP.197
Raising awareness of forests and forestry. Report of the FAO/ECE/ILO Team of Specialists on Participation in Forestry and the FAO/ECE Forest Communicators Network	2003	WP.198
Teaching and the use of ICT in Hungary (Eva Tót)	2003	WP.199
Violence and stress at work in the postal sector (Sabir I. Giga, Helge Hoel and Cary L. Cooper)	2003	WP.200
Violence and stress at work in the performing arts and in journalism (Sabir I. Giga, Helge Hoel and Cary L. Cooper)	2003	WP.201
Making ends meet: Bidi workers in India today: A study of four states	2003	WP.202
Civil aviation: The worst crisis ever? (Bert Essenberg)	2003	WP.203

	<i>Year</i>	<i>Reference</i>
Informal labour in the construction industry in Kenya: A case study of Nairobi (Winnie V. Mitullah and Isabella Njeri Wachira)	2003	WP.204
Violence and stress at work in the transport sector (Bert Essenberg)	2003	WP.205
The impact of Severe Acute Respiratory Syndrome (SARS) on health personnel (Christiane Wiskow)	2003	WP.206
How we work and live. Forest workers talk about themselves (Bernt Strehlke)	2003	WP.207
Workplace violence in service industries with implications for the education sector: Issues, solutions and resources (Richard Verdugo and Anamaria Vere)	2003	WP.208
International migration of health workers: Labour and social issues (Stephen Bach)	2003	WP.209
Violence and stress at work in financial services (Sabir I. Giga, Helge Hoel and Cary L. Cooper)	2003	WP.210
Violence and stress in hotels, catering and tourism sector (Helge Hoel and Ståle Einarsen)	2003	WP.211
Employment and human resources in the tourist industry in Asia and the Pacific (Travel Research International, London)	2003	WP.212
Democracy and public-private partnerships (Jerrold Oppenheim and Theo MacGregor)	2003	WP.213
Social dialogue in the public emergency services in a changing environment (Bulgaria) (Pavlina Popova)	2003	WP.214
Training of machine operators for mechanized wood harvesting. A study carried out under the EU-funded ERGOWOOD project (Bernt Strehlke and Kristin Warngren)	2004	WP.215
Social dialogue in public emergency services: A case study in Kenya (Leopold P. Mureithi)	2004	WP.216
Public emergency services: Social dialogue in a changing environment: A study on Japan (Minawa Ebisui)	2004	WP.217
Academic tenure and its functional equivalent in post secondary education (Donald C. Savage)	2004	WP.218
Study of the Kerala Construction Labour Welfare Fund (R.P. Nair)	2004	WP.219
The Joint FAO/ECE/ILO Committee: Fifty years of international cooperation in forestry (T.J. Peck and E.G. Richards)	2004	WP.220
La permanence et son équivalent fonctionnel dans l'enseignement postsecondaire (Donald C. Savage)	2004	WP.221

	<i>Year</i>	<i>Reference</i>
Academic employment structures in higher education: The Argentine case and the academic profession in Latin America (Garcia de Fanelli)	2004	WP.222
An introduction to labour statistics in tourism (Dirk Belau)	2004	WP.223
Labour implications of the textiles and clothing quota phase-out (Hildegunn Kyvik Nordas)	2005	WP.224
Baseline study of labour practices on large construction sites in Tanzania (coordinated by the National Construction Council, Dar es Salaam)	2005	WP.225
Informal construction workers in Dar es Salaam, Tanzania (Arthur Jason)	2005	WP.226
Prospects for micro, small and medium enterprises in the food and drink industries in Guyana (Abdul Rahim Forde)	2005	WP.227
Alimentation et boisson au Burkina Faso: au delà de la survie (Dié Martin Sow)	2005	WP.228
Social dialogue in education in Latin America: A regional survey (Marcela Gajardo and Francisca Gómez)	2005	WP.229
Good industrial relations in the oil industry in the United Kingdom (Dr Chris Forde, Dr Rob MacKenzie, Dr Mark Stuart, Dr Rob Perrett)	2005	WP.230
The future of civil aviation in Africa: Restructuring and social dialogue (Bert Essenberg)	2005	WP.231
The issues of fatigue and working time in the road transport sector	2005	WP.232
Privatization of energy in the Argentine Republic	2005	WP.233
Social dialogue in the health sector: Case study Ghana (Dr Delanyo Y. Dovlo)	2005	WP.234
Social dialogue in the health sector: Case study Bulgaria (Dr L. Tomev, Dr N. Daskalova, Ms. T. Mihailova)	2005	WP.235
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